NUVELO INC
Form S-4
October 30, 2008
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As filed with the U.S. Securities and Exchange Commission on October 30, 2008

Registration No. 333-

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form S-4

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

Nuvelo, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**2835**	**36-3855489**
(State or other jurisdiction of incorporation or organization)	**(Primary Standard Industrial Classification Code Number)**	**(I.R.S. Employer Identification No.)**

201 Industrial Road, Suite 310

San Carlos, CA 94070-6211

(650) 517-8000

(Address, including zip code, and telephone number, including area code, of registrant s principal executive offices)

Ted W. Love

Chairman of the Board and Chief Executive Officer

Nuvelo, Inc.

201 Industrial Road, Suite 310

San Carlos, CA 94070-6211

(650) 517-8000

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

John M. Geschke, Esq.	**Richard B. Brewer**	**Alan L. Dye, Esq.**
Cooley Godward Kronish LLP	**President and Chief Executive Officer**	**Michael J. Silver, Esq.**
Five Palo Alto Square	**ARCA biopharma, Inc.**	**Hogan & Hartson L.L.P.**
3000 El Camino Real	**8001 Arista Place, Suite 200**	**555 Thirteenth Street, N.W.**
Palo Alto, CA 94306	**Broomfield, CO 80021**	**Washington, D.C. 20004**
(650) 843-5757	**(720) 940-2200**	**(202) 637-5600**

Approximate date of commencement of proposed sale of the securities to the public: As soon as practicable after the effectiveness of this registration statement and the satisfaction or waiver of all other conditions under the merger agreement described herein.

If the securities being registered on this form are being offered in connection with the formation of a holding company and there is compliance with General Instruction G, check the following box. ¨

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ¨

If this form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ¨

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a small reporting company. See the definitions of large accelerated filer, accelerated filer and small reporting company in Rule 12b-2 of the Exchange Act.

Large accelerated filer ¨ Accelerated filer x
Non-accelerated filer ¨ Smaller reporting company ¨
(do not check if a smaller reporting company)

CALCULATION OF REGISTRATION FEE

Title of Securities to be Registered	Amount to be Registered(1)	Proposed Maximum Offering Price per Share	Proposed Maximum Aggregate Offering Price(2)	Amount of Registration Fee
Common Stock, $.001 par value	115,000,000	N/A	$11,639.37	$0.46

(1) This registration statement covers the maximum number of shares of common stock, $0.001 par value per share, of Nuvelo, Inc. (Nuvelo) issuable as part of the proposed merger described herein to holders of ARCA biopharma, Inc. s (ARCA) common stock, $0.001 par value per share (including those shares of ARCA common stock issuable upon conversion of ARCA s 6% Convertible Promissory Notes due March 31, 2009), holders of ARCA s Series A preferred stock, $0.001 par value per share, holders of ARCA s Series B-1 preferred stock, $0.001 par value per share, holders of ARCA s Series B-2 preferred stock, $0.001 par value per share, and to holders of ARCA s outstanding options and warrants to acquire ARCA common stock and preferred stock, which options and warrants will be assumed by Nuvelo as part of the merger. All of Nuvelo s common stock covered by this registration statement will be reclassified and combined by a reverse stock split into a lesser amount of Nuvelo s common stock, and the amount of undistributed common stock covered by this registration statement shall be proportionately reduced.

(2) Estimated solely for the purpose of calculating the registration fee required by Section 6(b) of the Securities Act of 1933, as amended, and computed pursuant to Rule 457(f)(2), based on the par value ($0.001 per share) of the up to approximately 34,918,121 shares of ARCA common stock and preferred stock to be exchanged in the proposed merger.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

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The information in this proxy statement/prospectus/consent solicitation is not complete and may be changed. Nuvelo may not sell its securities pursuant to the proposed transaction until the Registration Statement filed with the Securities and Exchange Commission is effective. This proxy statement/prospectus/consent solicitation is not an offer to sell these securities and it is not soliciting an offer to buy any securities in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED OCTOBER 30, 2008

Nuvelo, Inc.,	**ARCA biopharma, Inc.,**
a Delaware corporation	**a Delaware corporation**
Proxy Statement/Prospectus	**Consent Solicitation**

For a Special Meeting of Stockholders

to be held on , 200

Shares of Common Stock

We are furnishing this proxy statement/prospectus/consent solicitation to the holders of Nuvelo Inc. s common stock and to holders of ARCA biopharma, Inc. s common stock, Series A preferred stock, Series B-1 preferred stock and Series B-2 preferred stock.

Nuvelo is soliciting proxies for use at a special meeting of its stockholders to consider and vote upon (i) a proposal to approve the issuance of Nuvelo common stock pursuant to a merger transaction with ARCA, (ii) a proposal to approve an amendment to Nuvelo s amended and restated certificate of incorporation to effect a reverse stock split of the issued and outstanding shares of Nuvelo s common stock, (iii) a proposal to approve an amendment to Nuvelo s amended and restated certificate of incorporation to increase the number of authorized shares of Nuvelo common stock to 250 million, and (iv) an adjournment of the special meeting, if necessary, if a quorum is present, to solicit additional parties if there are not sufficient votes in favor of Proposals No. 1 and No. 2.

ARCA is soliciting written consents from its stockholders to consider and vote on a proposal to adopt the merger agreement with Nuvelo and approve the merger and other transactions contemplated thereby.

Pursuant to the merger, ARCA security holders will be entitled to receive shares of Nuvelo common stock representing approximately 67% of the shares of outstanding common stock of the combined company after giving effect to issuance of shares pursuant to ARCA s outstanding options and warrants primarily on a treasury method basis, and without giving effect to any shares issuable pursuant to Nuvelo s outstanding options and warrants. The actual number of shares of Nuvelo common stock to be issued in respect of each share of common stock of ARCA will be determined by dividing an aggregate of 109,009,278 shares of Nuvelo common stock by the number of shares of ARCA common stock outstanding and deemed outstanding pursuant to the formula set forth in the merger agreement and described in this proxy statement/prospectus/consent solicitation under the heading, The Merger.

Nuvelo s common stock is traded on the Nasdaq Global Market under the symbol NUVO and on , 2008, the last trading day prior to the date of this proxy statement/prospectus/consent solicitation, the closing sale price of Nuvelo common stock was $ per share. Following the merger, the combined company is expected to be renamed ARCA biopharma, Inc. and to change its symbol for trading on the Nasdaq Global Market. ARCA has reserved the symbol ARCB for this purpose.

FOR A DISCUSSION OF SIGNIFICANT MATTERS THAT SHOULD BE CONSIDERED IN EVALUATING THE MERGER AND THE PROPOSALS SET FORTH HEREIN, SEE RISK FACTORS BEGINNING ON PAGE 28.

This proxy statement/prospectus/consent solicitation is dated , 2008, and is first being mailed to stockholders of Nuvelo and ARCA on or about , 2008.

This proxy statement/prospectus/consent solicitation incorporates or refers to important business and financial information about Nuvelo and ARCA that is not included in or delivered with this proxy statement/prospectus/consent solicitation. Such information is available without charge stockholders of Nuvelo and ARCA upon written or oral request at the following addresses: For information concerning Nuvelo, Nuvelo, Inc., Attn: Investor Relations, 201 Industrial Road, Suite 310, San Carlos, CA or by telephone at (650) 517-8000 and for information concerning ARCA, ARCA biopharma, Inc., Attn: General Counsel, 8001 Arista Place, Suite 200, Broomfield, CO 80021 or by telephone at (720) 940-2200. To obtain timely delivery, Nuvelo stockholders must request the information no later than five business days before the date of the special meeting of Nuvelo stockholders, or no later than , 2008, and ARCA stockholders must request the information before delivering their signed written consent, which must be delivered to us no later than , 2008.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THE MERGER OR THE NUVELO COMMON STOCK TO BE ISSUED IN THE MERGER OR DETERMINED IF THIS PROXY STATEMENT/PROSPECTUS/CONSENT SOLICITATION IS TRUTHFUL OR COMPLETE. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

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To the Stockholders of Nuvelo, Inc.:

On September 24, 2008, Nuvelo, Inc., or Nuvelo, and ARCA biopharma, Inc., or ARCA, entered into an agreement and plan of merger and reorganization, which the parties amended on October 28, 2008, and which, as amended, unless otherwise indicated, we refer to as the merger agreement, pursuant to which Nuvelo and ARCA and a wholly-owned subsidiary of Nuvelo, Dawn Acquisition Sub, Inc., or the merger sub, will merge with and into ARCA, with ARCA continuing after the merger as the surviving corporation and a wholly owned subsidiary of Nuvelo. At the effective time of the merger, each share of ARCA capital stock issued and outstanding immediately prior to the merger (other than shares held by any wholly-owned subsidiary of ARCA, or by Nuvelo, merger sub or any other subsidiary of Nuvelo) will be automatically converted into the right to receive that number of shares of Nuvelo common stock as determined pursuant to the exchange ratio described in the merger agreement. In addition, Nuvelo will assume options and warrants to purchase shares of ARCA capital stock.

Following the merger, and subject to adjustment in accordance with the merger agreement, current stockholders of Nuvelo are expected to own approximately 33% of the combined company, and current ARCA stockholders are expected to own approximately 67% of the combined company, after giving effect to the issuance of shares pursuant to ARCA s outstanding options and warrants primarily on a treasury-method basis, and without giving effect to any shares issuable pursuant to Nuvelo s outstanding options and warrants. The actual number of shares of Nuvelo common stock to be issued in respect of each share of capital stock of ARCA will be determined by dividing an aggregate of 109,009,278 shares of Nuvelo common stock by the number of shares of ARCA common stock outstanding and deemed outstanding pursuant to the formula set forth in the merger agreement and described herein under The Merger Agreement. The exact exchange ratio per share of ARCA s capital stock will depend upon the number of shares of ARCA s capital stock outstanding or issuable pursuant to ARCA s outstanding convertible notes, options and warrants immediately prior to the effective time of the merger and the closing price per share of Nuvelo s common stock for the five consecutive days immediately proceeding the effective time of the merger and will not be calculated until that time.

Nuvelo s common stock is traded on the Nasdaq Global Market under the symbol NUVO and on , 2008, the last trading day prior to the date of this proxy statement/prospectus/consent solicitation, the closing sale price of Nuvelo common stock was $ per share. Following the merger, the combined company is expected to be renamed ARCA biopharma, Inc. and to change its symbol for trading on the Nasdaq Global Market. ARCA has reserved the symbol ARCB for this purpose.

At Nuvelo s special meeting of stockholders, stockholders of Nuvelo will be asked to approve, among other proposals, the issuance of shares of Nuvelo common stock to the stockholders of ARCA and certain amendments to Nuvelo s certificate of incorporation. The date, time and place of the Nuvelo special meeting are as follows:

, 200

9:00 a.m., Pacific Standard Time (PST)

Nuvelo, Inc.

201 Industrial Road, Suite 310

San Carlos, CA 94070-6211

This proxy statement/prospectus/consent solicitation provides you with information about Nuvelo, ARCA and the proposed merger. **We encourage you to read carefully the entire proxy statement/prospectus/consent solicitation. In particular, you should carefully consider the matters discussed under Risk Factors beginning on page 28.**

Ted W. Love
Chairman of the Board and Chief Executive Officer

San Carlos, California

, 2008

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THE MERGER OR THE NUVELO COMMON STOCK TO BE ISSUED IN THE MERGER OR DETERMINED IF THIS PROXY STATEMENT/PROSPECTUS/CONSENT SOLICITATION IS TRUTHFUL OR COMPLETE. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

This proxy statement/prospectus/consent solicitation is dated , 2008, and is first being mailed to stockholders of Nuvelo on or about , 2008.

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NOTICE OF SPECIAL MEETING OF STOCKHOLDERS

TO BE HELD ON , 200

To the Stockholders of Nuvelo, Inc.:

A special meeting of stockholders of Nuvelo will be held on , 200 at 9:00 a.m. PST, at Nuvelo, Inc., 201 Industrial Road, Suite 310, San Carlos, California, for the following purposes:

1. To consider and vote upon a proposal to approve the issuance of Nuvelo common stock pursuant to the Agreement and Plan of Merger and Reorganization, dated September 24, 2008, by and among Nuvelo, Inc., Dawn Acquisition Sub, Inc., and ARCA biopharma, Inc., as amended by that Amendment No. 1 to Agreement and Plan of Merger and Reorganization, dated October 28, 2008, by and among Nuvelo, Inc., Dawn Acquisition Sub, Inc., and ARCA biopharma, Inc., as described in the attached proxy statement/prospectus/consent solicitation. A copy of the Agreement and Plan of Merger and Reorganization is attached as *Annex A* to the accompanying proxy statement/prospectus/consent solicitation and a copy of Amendment No. 1 to Agreement and Plan of Merger and Reorganization is attached as *Annex B* to the accompanying proxy statement/prospectus/consent solicitation.

2. To approve an amendment to Nuvelo s amended and restated certificate of incorporation in order to effect a reverse stock split of the issued and outstanding shares of Nuvelo s common stock. A copy of the amendment to Nuvelo s amended and restated certificate of incorporation to effect the reverse stock split is attached as *Annex E* to the accompanying proxy statement/prospectus/consent solicitation.

3. To approve an amendment to Nuvelo s amended and restated certificate of incorporation in order to increase the number of authorized shares of Nuvelo common stock to 250 million. A copy of the amendment to Nuvelo s amended and restated certificate of incorporation to increase the number of authorized shares of Nuvelo common stock to 250 million is attached as *Annex F* to the accompanying proxy statement/prospectus/consent solicitation.

4. To consider and vote upon an adjournment of the special meeting, if necessary, if a quorum is present, to solicit additional parties if there are not sufficient votes in favor of Proposals No. 1 and No. 2.

5. To transact such other business as may properly come before the special meeting or any adjournment or postponement thereof.

The board of directors of Nuvelo has fixed , 200 as the record date for the determination of stockholders entitled to notice of, and to vote at, the special meeting and any adjournment or postponement thereof. Only holders of record of shares of Nuvelo common stock at the close of business on the record date are entitled to notice of, and to vote at, the special meeting. At the close of business on the filing date of this proxy, Nuvelo had shares of common stock outstanding and entitled to vote.

Your vote is important. The affirmative vote of the holders of a majority of the votes cast in person or by proxy at the Nuvelo special meeting is required for approval of Proposals No. 1 and No. 4 above and the affirmative vote of at least a majority of Nuvelo s issued and outstanding shares of common stock is required for approval of Proposals No. 2 and No. 3 above. Even if you plan to attend the special meeting in person, please sign and return the enclosed proxy and thus ensure that your shares will be represented at the special meeting if you are unable to attend. If you sign, date and mail your proxy card without indicating how you wish to vote, your proxy will be counted as a vote in favor of Proposal No. 1, No. 2, No. 3 and No. 4. If you fail to return your proxy card, the effect will be that your shares will not be counted for purposes of determining whether a quorum is present at the special meeting. You may revoke your proxy in the manner described in this document before it has been voted at the special meeting. If you decide to attend the Nuvelo special meeting, you may withdraw your proxy and vote in person.

By Order of the Board of Directors,

By:

Lee Bendekgey
Secretary

San Carlos, California

, 2008

THE NUVELO BOARD OF DIRECTORS HAS DETERMINED AND BELIEVES THAT EACH OF THE PROPOSALS OUTLINED ABOVE IS ADVISABLE, AND IN THE BEST INTERESTS OF, NUVELO AND ITS STOCKHOLDERS AND HAS APPROVED EACH SUCH PROPOSAL. THE NUVELO BOARD OF DIRECTORS RECOMMENDS THAT NUVELO STOCKHOLDERS VOTE FOR EACH SUCH PROPOSAL.

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To the Stockholders of ARCA biopharma, Inc.:

On September 24, 2008, ARCA biopharma, Inc. and Nuvelo, Inc. entered into an agreement and plan of merger and reorganization, which was amended on October 28, 2008. Under the merger agreement, a wholly-owned subsidiary of Nuvelo, Dawn Acquisition Sub, Inc., will merge with and into ARCA, with ARCA continuing after the merger as the surviving corporation and a wholly owned subsidiary of Nuvelo. At the effective time of the merger, each share of ARCA capital stock issued and outstanding immediately prior to the merger (other than shares held by any wholly-owned subsidiary of ARCA, or by Nuvelo, merger sub or any other subsidiary of Nuvelo) will automatically convert into the right to receive a number of shares of Nuvelo common stock determined according to the exchange ratio described in the merger agreement. In addition, Nuvelo will assume options and warrants to purchase shares of ARCA capital stock.

Following the merger, and subject to adjustment in accordance with the merger agreement, current stockholders of Nuvelo are expected to own approximately 33% of the combined company, and current ARCA stockholders are expected to own approximately 67% of the combined company. These percentages give effect to the issuance of shares pursuant to ARCA s outstanding options and warrants primarily on a treasury-method basis, and do not give effect to any shares issuable pursuant to Nuvelo s outstanding options and warrants. The actual number of shares of Nuvelo common stock to be issued in respect of each share of capital stock of ARCA will be determined by dividing an aggregate of 109,009,278 shares of Nuvelo common stock by the number of shares of ARCA common stock outstanding and deemed outstanding pursuant to the formula set forth in the merger agreement and described herein under The Merger Agreement. The exact exchange ratio per share of ARCA s capital stock will depend upon the number of shares of ARCA s capital stock outstanding or issuable pursuant to ARCA s outstanding convertible notes, options and warrants immediately prior to the effective time of the merger and the closing price per share of Nuvelo s common stock for the five consecutive days immediately proceeding the effective time of the merger and will not be calculated until that time.

Nuvelo s common stock is traded on the Nasdaq Global Market under the symbol NUVO and on , 2008, the last trading day prior to the date of this proxy statement/prospectus/consent solicitation, the closing sale price of Nuvelo common stock was $ per share. Following the merger, the combined company is expected to be renamed ARCA biopharma, Inc. and to change its symbol for trading on the Nasdaq Global Market. ARCA has reserved the symbol ARCB for this purpose.

As described in this proxy statement/prospectus/consent solicitation, Nuvelo is holding a special meeting of its stockholders in order to obtain its stockholder approvals necessary to complete the merger. ARCA is soliciting written consents in order to obtain the stockholder approval of ARCA necessary to complete the merger.

This proxy statement/prospectus/consent solicitation provides you with information about Nuvelo, ARCA and the proposed merger. **We encourage you to read carefully the entire proxy statement/prospectus/consent solicitation. In particular, you should carefully consider the matters discussed under Risk Factors beginning on page 28.**

Richard B. Brewer
President and Chief Executive Officer

Broomfield, Colorado

, 2008

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THE MERGER OR THE NUVELO COMMON STOCK TO BE ISSUED IN THE MERGER OR DETERMINED IF THIS PROXY STATEMENT/PROSPECTUS/CONSENT SOLICITATION IS TRUTHFUL OR COMPLETE. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

This proxy statement/prospectus/consent solicitation is dated , 200 , and is being first mailed to stockholders of ARCA on or about , 200 .

THIS PROXY STATEMENT/PROSPECTUS/CONSENT SOLICITATION IS NOT AN OFFER TO SELL ANY SECURITIES AND IT IS NOT SOLICITING AN OFFER TO BUY ANY SECURITIES IN ANY JURISDICTION WHERE THE OFFER OR SALE IS NOT

PERMITTED.

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SOLICITATION OF WRITTEN CONSENT IN LIEU OF A MEETING

OF THE STOCKHOLDERS OF ARCA BIOPHARMA, INC. ON , 200

To the Stockholders of ARCA biopharma, Inc.:

The purpose of this solicitation of written consent in lieu of a meeting of ARCA stockholders is to adopt and approve the Agreement and Plan of Merger and Reorganization dated as of September 24, 2008, by and among Nuvelo, Inc., a Delaware corporation, Dawn Acquisition Sub, Inc., a Delaware corporation and wholly-owned subsidiary of Nuvelo, and ARCA, as amended by that Amendment No. 1 to Agreement and Plan of Merger and Reorganization, dated October 28, 2008, by and among Nuvelo, Inc., Dawn Acquisition Sub, Inc., and ARCA, and to approve the merger and the transactions contemplated thereby. A copy of the Agreement and Plan of Merger and Reorganization is attached as *Annex A* to the accompanying proxy statement/prospectus/consent solicitation and a copy of Amendment No.1 to Agreement and Plan of Merger and Reorganization is attached as *Annex B* to the accompanying proxy statement/prospectus/consent solicitation. In addition, by consenting to the adoption of the merger agreement and approving the merger and transactions contemplated thereby, each ARCA stockholder is acknowledging that (i) such stockholder s consent to the adoption of the merger agreement and approval of the merger is irrevocable; (ii) such stockholder is aware of its rights to demand appraisal for its shares pursuant to Section 262 of the Delaware General Corporation Law, which we refer to as the DGCL, and that such stockholder has received and read a copy of Section 262 of the DGCL; and (iii) such stockholder is not entitled to appraisal rights with respect to its shares in connection with the merger and that the stockholder hereby waives any rights to receive payment of the fair value of ARCA capital stock under the DGCL.

ARCA s board of directors has fixed , 200 as the record date for determination of the holders of ARCA common stock and ARCA preferred stock entitled to vote by written consent. Only holders of record of shares of ARCA common stock and ARCA preferred stock at the close of business on the record date are entitled to vote by written consent. At the close of business on the filing date of this proxy statement/prospectus/consent solicitation, ARCA had 5,713,818 shares of common stock and 15,677,836 shares of preferred stock, consisting of 9,222,257 shares of Series A preferred stock, 3,688,902 shares of Series B-1 preferred stock and 2,766,677 shares of Series B-2 preferred stock, outstanding and entitled to vote.

Your consent is important. The affirmative consent of the holders of (a) a majority of the shares of ARCA common stock and ARCA preferred stock, voting together as a single class, with holders of ARCA preferred stock voting on an as-converted basis and (b) a majority of the following ARCA stockholders, who we refer to as the Principal Series Preferred Stockholders : Atlas Venture Fund VII, L.P. and its affiliates, Boulder Ventures IV, L.P. and Boulder Ventures IV (Annex), L.P. and their respective affiliates, Skyline Venture Partners Qualified Purchaser Fund IV, L.P. and its affiliates, and InterWest Partners IX, L.P. and its affiliates is required to approve the proposal. If you fail to return your signed written consent, the effect will be that your shares will counted as votes against the proposal. Once you return your signed written consent, you may not revoke it. As described more fully under the heading Written Consent of ARCA Stockholders below, all written consents to ARCA proposals must be received at ARCA s executive offices no later than .

Pursuant to certain voting agreements with ARCA, the holders of approximately 84.97% of ARCA s outstanding capital stock including approximately 92.11% of ARCA s outstanding preferred stock, on an as converted basis, and all of the Principal Series Preferred Stockholders, have agreed to consent to the proposal.

Under the DGCL, holders of ARCA s capital stock who do not execute a written consent to the adoption of the proposal will have the right to seek appraisal of the fair value of their shares as determined by the Delaware Court of Chancery if the merger is completed, but only if they submit a written demand for an appraisal within 20 days after the mailing of notice by ARCA that the merger was approved by written consent of the ARCA stockholders and they comply with the other procedures under the DGCL explained in the accompanying proxy statement/prospectus/consent solicitation. See The Merger Appraisal Rights beginning on page 101 of the accompanying proxy statement/prospectus/consent solicitation.

Your consent is important. Please complete, sign, date and return your consent in the enclosed envelope promptly. Please do not send any ARCA stock certificates at this time. After the merger is completed, you will receive written instructions for receiving your Nuvelo stock certificates.

By Order of ARCA s Board of Directors,

Richard B. Brewer
President and Chief Executive Officer

Broomfield, Colorado

, 200

THE ARCA BOARD OF DIRECTORS HAS DETERMINED AND BELIEVES THAT THE PROPOSAL OUTLINED ABOVE IS ADVISABLE TO, AND IN THE BEST INTERESTS OF, ARCA AND ITS STOCKHOLDERS AND HAS APPROVED SUCH PROPOSAL. THE ARCA BOARD OF DIRECTORS RECOMMENDS THAT ARCA STOCKHOLDERS CONSENT TO SUCH PROPOSAL.

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Nuvelo was incorporated as Hyseq, Inc. in Illinois in 1992 and reincorporated in Nevada in 1993. On January 31, 2003, Hyseq merged with Variagenics, Inc., a publicly traded Delaware corporation based in Massachusetts, and, in connection with the merger, changed its name to Nuvelo, Inc. On March 25, 2004, Nuvelo reincorporated from Nevada to Delaware. Nuvelo s principal executive offices are located at 201 Industrial Road, Suite 310, San Carlos, California 94070.

Nuvelo files its annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 electronically with the Securities and Exchange Commission, or SEC. The public may read or copy any materials Nuvelo files with the SEC at the SEC s Public Reference Rooms at 100 F Street, N.E., Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC. The address of that site is http://www.sec.gov.

You may obtain a free copy of Nuvelo s annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports on the day of filing with the SEC on Nuvelo s website, on the Internet at http://www.nuvelo.com or by contacting the Investor Relations Department at Nuvelo s corporate office by calling (650) 517-8000 or sending an e-mail message to ir@nuvelo.com. Information found on Nuvelo s website is not incorporated by reference into this proxy statement/prospectus/consent solicitation.

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QUESTIONS AND ANSWERS ABOUT THE MERGER, THE NUVELO SPECIAL MEETING AND THE ARCA CONSENT SOLICITATION

The following section provides answers to frequently asked questions about the merger, the effect of the merger on holders of Nuvelo common stock and ARCA common stock and preferred stock, the Nuvelo special meeting and the ARCA consent solicitation. This section, however, only provides summary information. Nuvelo and ARCA urge you to read carefully the remainder of this proxy statement/prospectus/consent solicitation, including the annexes to this proxy statement/prospectus/consent solicitation, because the information in this section does not provide all the information that might be important to you regarding the merger and the other matters being considered at Nuvelo s special meeting and in the ARCA consent solicitation.

As used in this proxy statement/prospectus/consent solicitation, references to Nuvelo, refer collectively to Nuvelo, Inc. and all of its subsidiaries unless the context requires otherwise and references to ARCA refer to ARCA biopharma, Inc.

Q: What is the merger?

A: Nuvelo, ARCA, and Dawn Acquisition Sub, Inc., a Delaware corporation and wholly-owned subsidiary of Nuvelo, have entered into an Agreement and Plan of Merger dated as of September 24, 2008, as amended by that Amendment No. 1 to Agreement and Plan of Merger and Reorganization, dated October 28, 2008, by and among Nuvelo, Dawn Acquisition Sub, Inc. and ARCA, which, as amended, is referred to in this proxy statement/prospectus/consent solicitation as the merger agreement, that contains the terms and conditions of the proposed business combination of Nuvelo and ARCA. Pursuant to the merger agreement, on the terms and conditions set forth therein, Dawn Acquisition Sub, Inc. will be merged with and into ARCA, with ARCA surviving the merger as a wholly-owned subsidiary of Nuvelo.

Q: What will ARCA s stockholders receive in the merger?

A: Nuvelo has agreed to issue, and holders of ARCA capital stock will receive, shares of Nuvelo common stock such that following the consummation of the transactions contemplated by the merger agreement, current stockholders of Nuvelo are expected to own approximately 33% of the common stock of the combined company, and current ARCA stockholders are expected to own or have the right to acquire approximately 67% of the combined company, after giving effect to the shares issuable pursuant to ARCA s outstanding options and warrants, primarily on a treasury method basis, and without giving effect to any shares issuable pursuant to Nuvelo s outstanding options and warrants. Immediately prior to the effective time of the merger, all outstanding shares of ARCA preferred stock will convert automatically into shares of ARCA common stock at the then applicable conversion rate, and the outstanding principal and accrued interest under ARCA s 6% convertible promissory notes dated October 10, 2008 will convert automatically into shares of ARCA common stock at the conversion price stated in the notes. The actual number of shares of Nuvelo common stock to be issued in respect of each share of capital stock of ARCA will be determined by dividing an aggregate of 109,009,278 shares of Nuvelo common stock by the number of shares of ARCA common stock outstanding and deemed outstanding pursuant to the formula set forth in the merger agreement and described herein and under The Merger Agreement. The exact exchange ratio per share of ARCA s capital stock will depend upon the number of shares of ARCA s common stock outstanding or issuable pursuant to the conversion of ARCA s outstanding preferred stock and convertible notes and the exercise of ARCA s outstanding options and warrants immediately prior to the effective time of the merger and the closing price per share of Nuvelo s common stock for the five consecutive days immediately proceeding the effective time of the merger and will not be calculated until that time.

Q: Why are the two companies proposing to merge?

A: Nuvelo and ARCA believe that the combined company resulting from the merger will have a number of potential advantages, including the increased scale of a larger cardiovascular focused biotechnology company with a near term commercial opportunity represented by ARCA s product candidate, Gencaro, and

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longer term product development opportunities represented by Nuvelo s product candidate, NU172, more secure capitalization to support product candidates and other significant potential management and business synergies and cost savings that Nuvelo and ARCA believe can be achieved by consolidating the infrastructures of the two companies and allowing management to fully leverage the combined research, development and administrative capabilities across multiple potential product candidates.

Q: What is the reverse stock split and why is it necessary?

A: Immediately prior to the effective time of the merger, the outstanding shares of Nuvelo s common stock will be reclassified and combined into a lesser number of shares to be determined by Nuvelo s board of directors prior to the effective time and publicly announced by Nuvelo. The merger constitutes a reverse merger under applicable marketplace rules established by Nasdaq, which requires the combined company to comply with the initial listing standards of the applicable Nasdaq market to continue to be listed on such market following the merger. The Nasdaq Global Select Market s and Nasdaq Global Market s initial listing standards require a company to have, among other things, a $5.00 per share minimum bid price and the Nasdaq Capital Market s initial listing standards require a company to have, among other things, a $4.00 per share minimum bid price. Because Nuvelo s common stock is required to be listed on any of the Nasdaq Global Select Market, the Nasdaq Global Market or the Nasdaq Capital Market as a condition to closing the merger and the current price of Nuvelo common stock is less than the minimum bid prices required by any of these markets, the reverse stock split is necessary to consummate the merger.

Q: Why am I receiving this proxy statement/prospectus/consent solicitation?

A: You are receiving this proxy statement/prospectus/consent solicitation because you have been identified as a stockholder of Nuvelo or a stockholder of ARCA. This document serves as a proxy statement of Nuvelo, used to solicit proxies for the special meeting, and consent solicitation for ARCA, used to solicit the written consent of its stockholders, and a prospectus of Nuvelo, used to offer shares of Nuvelo common stock to ARCA stockholders in exchange for shares of ARCA common stock pursuant to the terms of the merger agreement and to offer shares of Nuvelo common stock to holders of warrants and options exercisable into shares of ARCA capital stock, which warrants and options are to be assumed by Nuvelo in the merger. If you are a stockholder of Nuvelo, you are entitled to vote at Nuvelo s special meeting. If you are a stockholder of ARCA, you are entitled to execute a written consent in lieu of a vote at a meeting. This document contains important information about the merger, the shares of Nuvelo common stock to be issued in the merger and the special meeting of Nuvelo stockholders, and you should read it carefully.

Q: What Nuvelo stockholder approvals are required to consummate the merger?

A: To consummate the merger, Nuvelo stockholders must approve:

- the issuance of shares of Nuvelo common stock in the merger, which requires the affirmative vote of holders of a majority of the votes cast in person or by proxy at the Nuvelo special meeting; and

- the amendments to Nuvelo s certificate of incorporation to effect the reverse stock split of the issued and outstanding shares of Nuvelo s common stock, which requires the affirmative vote of holders of a majority of the outstanding shares of Nuvelo common stock as of the record date for the special meeting.

Nuvelo s stockholders are also being asked to approve an amendment to Nuvelo s certificate of incorporation to increase the number of authorized shares of Nuvelo s common stock to 250 million, which requires the affirmative vote of holders of a majority of the outstanding shares of Nuvelo common stock as of the record date for the special meeting. While approval of this proposal is not required to consummate the merger, the Nuvelo board of directors has determined that the proposal is advisable, and in the best interests of, Nuvelo and its stockholders and recommends that you vote for this proposal.

In connection with the execution of the merger agreement, Ted W. Love and Lee Bendekgey, both officers of Nuvelo, and Mark Perry, a director of Nuvelo, entered into voting agreements with ARCA that provide, among other things, that they will vote in favor of the issuance of Nuvelo common stock pursuant to the

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merger agreement and the amendment of Nuvelo s amended and restated certificate of incorporation to effect the reverse stock split and grant to ARCA an irrevocable proxy to vote all of their shares of Nuvelo common stock in favor of such proposals and against any proposal made in opposition to, or in competition with, such proposals.

Q: What ARCA stockholder approvals are required to consummate the merger?

A: To consummate the merger, ARCA stockholders must adopt and approve the merger agreement and approve the merger and the transactions contemplated thereby, which requires the approval of the holders of a majority of (a) the shares of ARCA common stock and ARCA preferred stock, voting together as a single class, with holders of ARCA preferred stock voting on an as-converted basis and (b) the Principal Series Preferred Stockholders.

In connection with the execution of the merger agreement, the holders of approximately 84.97% of ARCA s outstanding common and preferred stock, including approximately 92.11% of ARCA s outstanding preferred stock, on an as converted basis, and all of the Principal Series Preferred Stockholders, have entered into voting agreements with Nuvelo that provide, among other things, that they will vote in favor of the merger and that grant to Nuvelo an irrevocable proxy to vote all of their shares of ARCA common stock and ARCA preferred stock in favor of the merger and against any proposal made in opposition to, or in competition with, the proposed merger. All of these stockholders are executive officers, directors, or entities controlled by such persons, or 5% stockholders, of ARCA, and include the Principal Series Preferred Stockholders.

Q: What other conditions must be satisfied to consummate the merger?

A: In addition to Nuvelo and ARCA obtaining stockholder approval, closing conditions include:

conditional approval for the listing of Nuvelo common stock to be issued in the merger on any of the Nasdaq Global Select Market, Nasdaq Global Market or Nasdaq Capital Market;

subject to certain exceptions, the absence of any effects, changes, events or circumstances that singularly or collectively has a material adverse effect on the business, financial condition, operations of results of operations of Nuvelo or ARCA or the ability of Nuvelo or ARCA to consummate the merger or perform their obligations under the merger agreement;

the accuracy of the representations and warranties provided by Nuvelo and ARCA pursuant to the merger agreement except where such inaccuracies do not constitute a material adverse effect;

the performance of the covenants and obligations of Nuvelo and ARCA pursuant to the merger agreement in all material respects;

the delivery of certain certifications and opinions by each party and the termination of certain stockholder and related agreements by ARCA and its stockholders; and

the absence of any injunction or order preventing the consummation of the merger or any legal proceeding in which a governmental body seeks to prohibit or restrain the consummation of the merger or otherwise materially impact the rights or operations of Nuvelo or ARCA following the consummation of the merger.

Q: What are the material U.S. federal income tax consequences of the merger to me?

A: The merger has been structured to qualify as a tax-free reorganization within the meaning of Section 368(a) of the Internal Revenue Code of 1986, as amended, or the Code, and Nuvelo and ARCA have agreed to use their commercially reasonable efforts in order to obtain the opinion of Nuvelo s counsel, Cooley Godward Kronish LLP, and ARCA s counsel, Hogan & Hartson, LLP, regarding such qualification. Assuming that the merger qualifies as a reorganization, ARCA stockholders will not recognize gain or loss for U.S. federal income tax purposes upon the exchange of shares of ARCA capital stock for shares of Nuvelo common stock, except with respect to cash received in lieu of fractional shares of Nuvelo common stock.

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Q: What risks should I consider in deciding whether to vote in favor of or consent to the proposals?

A: You should carefully review the section of this proxy statement/prospectus/consent solicitation entitled Risk Factors beginning on page 28, which sets forth certain risks and uncertainties related to the merger to which Nuvelo s and ARCA s businesses are and will be subject.

Q: When do you expect the merger to be consummated?

A: We anticipate that the merger will occur in the first quarter of 2009 as promptly as practicable after the Nuvelo special meeting and satisfaction or waiver of all closing conditions, but we cannot predict the exact timing.

Q: Am I entitled to appraisal rights?

A: Under Delaware General Corporation Law, or the DGCL, holders of Nuvelo common stock are not entitled to appraisal rights in connection with the merger or the proposals described in this proxy statement/prospectus/consent solicitation.

Under the DGCL, ARCA stockholders who do not consent to approve the merger and who comply with the procedural requirements of Section 262 of the DGCL may demand payment in cash of the fair value of their shares of ARCA capital stock in lieu of the merger consideration, if any. These rights are commonly known as dissenters rights. If the dissenting stockholder and surviving corporation do not agree on a fair value of the shares, a court of proper jurisdiction will determine the fair value upon the dissenting stockholder s petition, which could be more than, less than or equal to the value of the merger consideration. Dissenting stockholders lose their dissenters rights if they fail to follow all of the procedures required by Section 262 of the DGCL. See The Merger Appraisal Rights beginning on page 101 of this proxy statement/prospectus/consent solicitation.

Q: Should ARCA s and Nuvelo s stockholders send in their stock certificates now?

A: No. After the merger is consummated, ARCA s stockholders will receive written instructions from the exchange agent for exchanging their certificates representing shares of ARCA capital stock for certificates representing shares of Nuvelo s common stock. ARCA s stockholders will also receive a cash payment for any fractional shares. Nuvelo s stockholders are not required to tender or exchange their certificates as part of the merger.

Q: Who is paying for this proxy and consent solicitation?

A: Nuvelo and ARCA are conducting this proxy and consent solicitation and will each bear one-half of the costs of the proxy and consent solicitation, including the preparation, assembly, printing and mailing of this proxy statement/prospectus/consent solicitation, the proxy card and any additional information furnished to stockholders. Nuvelo and ARCA will each bear its own legal expenses. Nuvelo may also reimburse brokerage houses and other custodians, nominees and fiduciaries for their costs of forwarding proxy and solicitation materials to beneficial owners.

Q: Who can help answer my questions?

A: If you are a Nuvelo stockholder and would like additional copies, without charge, of this proxy statement/prospectus/consent solicitation or if you have questions about the proposals described herein, including the procedures for voting your shares, you should contact:

Nuvelo, Inc.

Attn: Investor Relations

201 Industrial Road, Suite 310

San Carlos, CA 94070-6211

(650) 517-8000

E-mail: ir@Nuvelo.com

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If you are an ARCA stockholder and would like additional copies, without charge, of this proxy statement/prospectus/consent solicitation, or if you have questions about the ARCA proposal described herein, including the procedures for voting your shares by written consent, you should contact:

ARCA biopharma, Inc.

Attn: General Counsel, Executive Vice President of Business Development

8001 Arista Place, Suite 200

Broomfield, CO 80021

(720) 940-2200

E-mail: Chris.Ozeroff@arcabiopharma.com

FOR NUVELO STOCKHOLDERS:

Q: Who is soliciting my proxy?

A: The proxy is being solicited of Nuvelo s stockholders by Nuvelo s board of directors.

Q: As a Nuvelo stockholder, how does Nuvelo s Board of Directors recommend that I vote?

A: After careful consideration, Nuvelo s board of directors recommends that Nuvelo stockholders vote:
FOR Proposal No. 1 to approve the issuance of shares of Nuvelo common stock in the merger; and

FOR Proposal No. 2 to approve the amendment to Nuvelo s amended and restated certificate of incorporation to effect a reverse stock split of the issued and outstanding shares of Nuvelo s common stock;

FOR Proposal No. 3 to approve the amendment to Nuvelo s amended and restated certificate of incorporation to increase the number of authorized shares of Nuvelo common stock to 250 million;

FOR Proposal No. 4 to consider and vote upon an adjournment of the special meeting, if necessary, if a quorum is present, to solicit additional parties if there are not sufficient votes in favor of Proposals No. 1 and No. 2.

Q: What do I need to do now?

A: We urge you to read this proxy statement/prospectus/consent solicitation carefully, including its annexes, and to consider how the merger affects you.
If your shares of Nuvelo stock are registered directly in your name, you may provide your proxy instructions in four different ways. First, you can mail your signed proxy card in the enclosed return envelope. Alternatively, you can provide your proxy instructions via the toll-free call center set up for this purpose at . You can also provide your proxy instructions via the Internet at . Finally, you can deliver your completed proxy card in person or by completing a ballot in person at the special meeting. Please provide your proxy instructions only once and as soon as possible so that your shares can be voted at the special meeting of Nuvelo stockholders.

If your Nuvelo shares are held in a brokerage account in street name or by another nominee, your broker will not be able to vote your shares of Nuvelo common stock without instructions from you. You should instruct your broker to vote your shares, following the procedure provided by your broker.

Q: What happens if I do not return a proxy card or otherwise provide proxy instructions?

A: If you do not submit a proxy card or vote at the special meeting, your shares will not be counted as present for the purpose of determining the presence of a quorum. Also, not submitting a proxy card or voting at the special meeting will have no effect on the approval of Proposals No. 1 or No. 4 but will have the same effect as voting against Proposals No. 2 and No. 3. Broker non-votes will similarly have no effect on the approval of Proposals No. 1 or No. 4, but will have the same effect as voting against Proposals No. 2 and No. 3. If you submit a proxy card and affirmatively elect to abstain from voting, your proxy will be counted as

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present for the purpose of determining the presence of a quorum but will not be voted at the meeting. As a result, your abstention will have no effect on the approval of Proposals No. 1 or No. 4, but will have the same effect as voting against Proposals No. 2 and No. 3.

Q: May I vote in person?

A: If your shares of Nuvelo common stock are registered directly in your name with Nuvelo s transfer agent you are considered, with respect to those shares, the stockholder of record, and the proxy materials and proxy card are being sent directly to you. If you are a Nuvelo stockholder of record as of , 2008, you may attend the special meeting of Nuvelo stockholders to be held on , 2008 and vote your shares in person, rather than signing and returning your proxy card or otherwise providing proxy instructions. However, we urge you to return your proxy card with your voting instructions in any event, just in case your plans should change.

If your shares of Nuvelo common stock are held in a brokerage account or by another nominee, you are considered the beneficial owner of shares held in street name, and the proxy materials are being forwarded to you together with a voting instruction card. As the beneficial owner, you are also invited to attend the special meeting of Nuvelo stockholders. Since a beneficial owner is not the stockholder of record, you may not vote these shares in person at the special meeting unless you obtain a legal proxy from the broker, trustee or nominee that holds your shares, giving you the right to vote the shares at the meeting.

Q: May I change my vote after I have provided proxy instructions?

A: Any stockholder of record, other than those stockholders who have executed voting agreements, has the right to revoke the proxy any time before its proxy is voted at the special meeting by sending a written notice stating that it would like to revoke the proxy, by submitting new proxy instructions either on a new proxy card, by telephone or via the Internet, or by attending the special meeting and voting in person. Attendance alone at the special meeting will not revoke your proxy. If a Nuvelo stockholder has instructed a broker to vote shares of Nuvelo common stock held in street name, the stockholder must follow directions received from the broker to change those instructions.

FOR ARCA STOCKHOLDERS:

Q: Who is soliciting my written consent?

A: The written consent is being solicited of ARCA stockholders by ARCA s board of directors.

Q: As an ARCA stockholder, how does ARCA s Board of Directors recommend that I vote?

A: After careful consideration, ARCA s board of directors recommends that ARCA stockholders affirmatively consent to adopt and approve the merger agreement and to approve the merger and the transactions contemplated thereby.

Q: What do I need to do now?

A: We urge you to read this proxy statement/prospectus/consent solicitation carefully, including its annexes, and to consider how the merger affects you. Then, please execute and deliver the written consent to ARCA in the enclosed envelope at ARCA biopharma, Inc., Attn: General Counsel, 8001 Arista Place, Suite 200, Broomfield, CO 80021. Please provide your signed written consent as soon as possible and no later than , 200 .

Q: What happens if I do not return a written consent?

A: If you do not return your signed written consent, it will have the same effect as voting against the merger, the merger agreement and the transactions contemplated thereby.

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Q: May I provide my written consent in person?

A: No. ARCA will not be holding a special meeting. The written consent is provided in lieu of a special meeting.

Q: May I change or revoke my vote after I have provided a signed written consent?

A: No. By consenting to the adoption of the merger agreement and approving the merger and transactions contemplated thereby, each ARCA stockholder is acknowledging, among other matters, that such stockholder s consent to the adoption of the merger, the merger agreement and the transactions contemplated thereby is irrevocable. You may not change or revoke your consent once it is provided.

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SUMMARY

This summary highlights selected information from this proxy statement/prospectus/consent solicitation. To understand the merger fully, you should read carefully this entire document and the documents to which we refer, including the annexes attached hereto. See Where You Can Find More Information on page 268. A copy of the merger agreement is attached as Annex A to the accompanying proxy statement/prospectus/consent solicitation and a copy of the amendment to the merger agreement is attached as Annex B to the accompanying proxy statement/prospectus/consent solicitation. You are encouraged to read the merger agreement as it is the legal document that governs the merger. Page references to this proxy statement/prospectus/consent solicitation have been included in parentheses to direct you to a more detailed description of the topics presented in this summary.

The Companies

Nuvelo, Inc.

201 Industrial Road, Suite 310

San Carlos, CA 94070-6211

(650) 517-8000

Nuvelo is a biopharmaceutical company dedicated to improving the lives of patients through the discovery, development and commercialization of novel drugs for acute cardiovascular disease, cancer and other debilitating medical conditions. Nuvelo s development pipeline includes NU172, a direct thrombin inhibitor that has completed Phase 1 development for use as a short-acting anticoagulant during medical or surgical procedures, and Phase 1 clinical candidate NU206, a recombinant, secreted protein for the potential treatment of gastrointestinal, or GI, diseases, including cancer therapy induced mucositis and inflammatory bowel disease, in addition to bone disease and wound healing. Nuvelo anticipates initiating a Phase 2 study evaluating NU172 in CABG patients in the fourth quarter of 2008 or first quarter of 2009. Nuvelo initiated a Phase 1 single ascending dose trial of NU206 in healthy volunteers in July 2008 and expects data from the trial in the fourth quarter of 2008. Nuvelo also plans to initiate a Phase 1b multiple ascending dose trial in healthy volunteers in the fourth quarter of 2008 or first quarter of 2009. In addition to its NU172 and NU206 development programs, Nuvelo has research programs in leukemia therapeutic antibodies and Wnt signaling pathway therapeutics to further expand its pipeline and create additional partnering and licensing opportunities.

ARCA biopharma, Inc.

8001 Arista Place, Suite 200

Broomfield, CO 80021

(720) 940-2200

ARCA is a privately-held biopharmaceutical company developing genetically-targeted therapies for heart failure and other cardiovascular diseases. ARCA is currently developing Gencaro, a pharmacologically unique beta-blocker and mild vasodilator, for the treatment of heart failure and other indications. The U.S. Food and Drug Administration, or FDA, accepted for filing ARCA s New Drug Application, or NDA, for Gencaro in September 2008. The name Gencaro has not yet been approved for use by the FDA. ARCA was originally organized in 2001 as a Colorado corporation and reincorporated to Delaware in 2004.

Dawn Acquisition Sub, Inc.

201 Industrial Road, Suite 310

San Carlos, CA 94070-6211

(650) 517-8000

Dawn Acquisition Sub, Inc. is a wholly-owned subsidiary of Nuvelo that was incorporated in Delaware in September 2008. Dawn Acquisition Sub, Inc. does not engage in any operations and exists solely to facilitate the merger.

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Summary of the Merger (see page 76)

If the merger is consummated, ARCA and Dawn Acquisition Sub, Inc. will merge, with ARCA surviving as a wholly-owned subsidiary of Nuvelo. It is anticipated that shortly after the merger Nuvelo will change its name to ARCA biopharma, Inc. A copy of the merger agreement is attached as *Annex A* to this proxy statement/prospectus/consent solicitation and a copy of the amendment to the merger agreement is attached as *Annex B* to this proxy statement/prospectus/consent solicitation. You are encouraged to read the merger agreement in its entirety because it is the legal document that governs the merger.

Reasons for the Merger (see page 80)

Mutual Reasons for the Merger

Nuvelo and ARCA believe that the combined company resulting from the merger will have the following potential advantages:

- the combined company will be a larger cardiovascular focused biotechnology company with a near term commercial opportunity represented by ARCA s product candidate, Gencaro, and longer term product development opportunities represented by Nuvelo s product candidate, NU 172;
- the combined company will be more securely capitalized to commercialize its late stage product candidate and develop its pipeline of longer term product candidates; and
- there are significant potential synergies and cost savings that Nuvelo and ARCA believe can be achieved by consolidating the infrastructures of the two companies and allowing management to fully leverage the combined research, development and administrative capabilities across multiple potential product candidates.

Each of the boards of directors of Nuvelo and ARCA also considered other reasons for the merger.

Nuvelo s board of directors considered, among other things:

- Nuvelo s limited prospects if it were to remain an independent, standalone company as a result of factors such as the absence of a late-stage product candidate, its declining cash balance, the expenses and fixed costs associated with its operations and its prospects for development and commercialization of Nuvelo s early stage product candidates, particularly given its limited resources;
- the opportunity for Nuvelo s stockholders to participate in the potential future value of the combined company;
- Nuvelo s board of directors view as to the potential for other third parties to enter into strategic relationships with or acquire Nuvelo on favorable terms, if at all, based on the interest expressed by other third parties during the strategic alternatives review process undertaken by Nuvelo; and
- the belief that the merger was more favorable to Nuvelo s stockholders than any other alternative reasonably available to Nuvelo and its stockholders, including the alternative of remaining an independent, standalone company.

ARCA s board of directors considered, among other things:

ARCA s additional capital requirements, which ARCA anticipates can be met with Nuvelo s available cash, together with ARCA s other cash resources, to fund ARCA s projected operating requirements through the end of 2009, beyond the expected date of FDA approval of Gencaro; and, given market conditions, the benefits of this option over others considered by ARCA to finance its operations, such as an equity offering;

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Nuvelo s longer term product development opportunities represented by its product candidate, NU172, that would be complimentary to development efforts undertaken for Gencaro;

ARCA s ability to leverage Nuvelo s other non-cardiovascular candidates and research platforms and its experienced clinical, regulatory and administrative employees as a compliment to ARCA s own employees; and

the merger with Nuvelo will enhance the combined company s access to capital, providing ARCA with a greater range of options than if it continued as a privately-held company.

Opinion of Nuvelo s Financial Advisor (see page 85)

Jefferies & Company, Inc., or Jefferies, served as Nuvelo s financial advisor in connection with the proposed transaction. On September 24, 2008, Jefferies delivered to the board of Nuvelo its oral opinion, subsequently confirmed in writing on such date, to the effect that, as of that date and based upon and subject to the various assumptions made, procedures followed, matters considered and limitations described in its opinion, the Exchange Ratio, representing the amount of shares of Nuvelo common stock to be exchanged for ARCA capital stock in the merger pursuant to the terms of the merger agreement, was fair, from a financial point of view, to Nuvelo.

Jefferies opinion was provided for the use and benefit of the Nuvelo board in its consideration of the proposed transaction. Jefferies opinion did not address the relative merits of the proposed transaction as compared to any alternative transaction or opportunity that might be available to Nuvelo, nor did it address the underlying business decision by Nuvelo to engage in the proposed transaction or the terms of the merger agreement or the documents referred to therein. Furthermore, Jefferies opinion did not constitute a recommendation as to how any holder of Nuvelo common stock should vote on the proposed transaction or any matter related thereto. The full text of Jefferies written opinion, dated September 24, 2008, is attached as *Annex E* to this proxy statement/prospectus and is incorporated into this proxy statement/prospectus by reference. Nuvelo urges its stockholders to read carefully Jefferies entire opinion. See the section captioned The Merger Opinion of Nuvelo s Financial Advisor beginning on page 85.

Overview of the Merger Agreement

Merger Consideration (see page 107)

At the effective time of the merger, each share of ARCA capital stock not held by Nuvelo, or any subsidiary of Nuvelo, shall be converted into a right to receive a number of shares of Nuvelo common stock equal to the Exchange Ratio. The Exchange Ratio is determined immediately prior to the effective time of the merger by dividing 109,009,278 by the number of shares of ARCA common stock outstanding and deemed to be outstanding pursuant to a formula set forth in the merger agreement.

Pursuant to the terms of the merger agreement, ARCA and Nuvelo have agreed upon a methodology to determine the shares of ARCA common stock outstanding and deemed outstanding which is dependent on the number of shares of ARCA capital stock outstanding and issuable upon the conversion of ARCA s outstanding preferred stock and convertible notes and the exercise of ARCA s outstanding options and warrants as well as the average closing price of Nuvelo s common stock for the five trading dates preceding the date the merger is consummated. For illustration purposes, assuming the merger closed on October 27, 2008, and based on the respective capitalizations of Nuvelo and ARCA on September 30, 2008, the Exchange Ratio would have been 3.2934 per share of ARCA capital stock. Nuvelo and ARCA have used this assumed Exchange Ratio of 3.2934 elsewhere in this proxy statement/prospectus/consent solicitation to reflect, for illustration purposes, the effect of

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the merger. The Exchange Ratio will be recalculated for the actual closing date of the merger using updated information.

Immediately after the merger, based on the Exchange Ratio, existing ARCA stockholders will own approximately 67% of the common stock of the combined company and Nuvelo stockholders will own approximately 33% of the common stock of the combined company, after giving effect to the issuance of shares of ARCA capital stock issuable upon exercise of options and warrants outstanding immediately prior to the effective time, primarily on a treasury stock basis, and without giving effect to options and warrants to purchase Nuvelo common stock outstanding immediately prior to the effective time.

The Exchange Ratio is subject to proportionate adjustment to account for the effect of the reverse stock split of Nuvelo s issued and outstanding common stock.

Conditions to Completion of Merger (see page 110)

Each party s obligation to complete the merger is subject to a number of conditions, which may be waived by the applicable party, and that include, among others, and subject to specified exceptions, the following:

- stockholders of ARCA must have approved the merger and adopted the merger agreement, and stockholders of Nuvelo must have approved the issuance of Nuvelo common stock in the merger and the amendment to the certificate of incorporation of Nuvelo to effect the reverse stock split;

- no temporary restraining order, preliminary or permanent injunction or other order preventing the consummation of the Merger shall have been issued by any court of competent jurisdiction or other governmental body and remain in effect, and there shall not be any legal requirement enacted or deemed applicable to the merger that makes consummation of the merger illegal;

- the initial listing application on any of the Nasdaq Global Select Market, Nasdaq Global Market or Nasdaq Capital Market shall have been conditionally approved, and the shares of Nuvelo common stock to be issued in the merger shall be conditionally approved for listing on any of such markets, both subject only to the completion of the closing and completion by Nuvelo of any reverse stock split required by Nasdaq; and

- since the signing of the merger agreement, there shall not have occurred and be continuing any material adverse effect for either party.

Limitation on Soliciting, Discussing or Negotiating Other Acquisition Proposals (see page 114)

Pursuant to the merger agreement, each of Nuvelo and ARCA agreed that, except as described below, they will not, during the pre-closing period, directly or indirectly:

- solicit, initiate, knowingly encourage, induce or facilitate the making, submission or announcement of any acquisition proposal or acquisition inquiry, each as defined in the merger agreement and explained in this proxy statement/prospectus/consent solicitation, or take any action that would reasonably be expected to lead to an acquisition proposal or acquisition inquiry;

- furnish any nonpublic information regarding ARCA or Nuvelo, as the case may be, or any of its subsidiaries, to any person in connection with or in response to an acquisition proposal or acquisition inquiry;

- engage in discussions or negotiations with any person with respect to any acquisition proposal or acquisition inquiry;

approve, endorse or recommend any acquisition proposal or acquisition inquiry; or

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enter into any letter of intent or similar document or any contract contemplating or otherwise relating to any acquisition transaction. Notwithstanding the foregoing, prior to obtaining the consent of their stockholders, either party may furnish information regarding such party to, and may enter into discussions or negotiations with, any third party in response to a bona fide written acquisition proposal made or received after the date of the merger agreement, which such party s board of directors determines in good faith, after consultation with a nationally recognized independent financial advisor and its outside legal counsel, constitutes or is reasonably likely to result in a superior offer, (as defined in the merger agreement and explained in this proxy statement/prospectus/consent solicitation), if:

- neither such party nor any representative of such party has breached the no solicitation provisions of the merger agreement described above;
- such party gives the other party at least two business days prior notice of the identity of the third party and of their intention to furnish information to, or enter into discussions or negotiations with, such third party before furnishing any information or entering into discussions or negotiations with such person, and such party receives from the third party an executed confidentiality agreement; and
- at least two business days prior to the furnishing of any information to a third party, the other party furnishes the same information to the other party to the extent not previously furnished.

Termination of the Merger Agreement (see page 119)

The merger agreement may be terminated prior to the effective time of the merger (whether before or after adoption of the merger agreement by ARCA s stockholders and whether before or after approval of the issuance of Nuvelo common stock in the merger by Nuvelo s stockholders):

- by mutual written consent of Nuvelo and ARCA, duly authorized by their respective boards of directors;
- subject to certain limitations, by either Nuvelo or ARCA if the merger shall not have been consummated by February 28, 2009;
- by either Nuvelo or ARCA if a court of competent jurisdiction or other governmental body shall have issued a final and nonappealable order, or shall have taken any other final and nonappealable action, having the effect of permanently restraining, enjoining or otherwise prohibiting the consummation of the merger;
- by either Nuvelo or ARCA if Nuvelo s stockholders fail to approve the issuance of the Nuvelo common stock pursuant to the merger agreement at the special meeting;
- subject to certain limitations, by either party in the event of any inaccuracy of representations and warranties of the other party having a material adverse effect or a material breach by the other party of its obligations or covenants under the merger agreement;
- subject to certain conditions, by Nuvelo immediately prior to entering into a definitive agreement with respect to a superior offer; or
- subject to certain conditions, by ARCA immediately prior to entering into a definitive agreement with respect to a superior offer.

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Termination Fees and Expenses (see page 121)

Nuvelo must pay ARCA a nonrefundable fee of $947,112 and reimburse ARCA for up to $500,000 in actual out of pocket legal, accounting and investment advisory fees paid or payable in connection with the transactions contemplated by the merger agreement if:

- the merger agreement is terminated by Nuvelo immediately prior to Nuvelo entering into a definitive agreement with respect to a transaction that constitutes a superior offer; or
- the merger agreement is terminated by Nuvelo or ARCA if the stockholders of Nuvelo do not approve the issuance of Nuvelo common stock at the Nuvelo special meeting of stockholders, and all of the following conditions are met:
  - prior to the Nuvelo special meeting of stockholders, an acquisition proposal with respect to Nuvelo has been publicly made and not withdrawn;
  - within nine months of such termination, Nuvelo enters into a definitive agreement to consummate an acquisition transaction with a party other than ARCA; and
  - such acquisition transaction is consummated pursuant to such definitive agreement.

ARCA must pay Nuvelo a nonrefundable fee of $1,922,924 and reimburse Nuvelo for up to $500,000 in actual out of pocket legal, accounting and investment advisory fees paid or payable in connection with the transactions contemplated by the merger agreement if the merger agreement is terminated by ARCA immediately prior to ARCA entering into a definitive agreement with respect to a transaction that constitutes a superior offer.

Voting Agreements (see page 123)

In order to induce Nuvelo to enter into the merger agreement, several ARCA stockholders entered into voting agreements with and granted irrevocable proxies in favor of Nuvelo pursuant to which, among other things, each of these stockholders agreed, solely in its capacity as a stockholder, to vote all of its shares of ARCA capital stock and other ARCA securities in favor of the merger, the execution and delivery by ARCA of the merger agreement and the adoption and approval of the merger agreement and the terms thereof, in favor of each of the other actions contemplated by the merger agreement and in favor of any action in furtherance of any of the foregoing, and against, among other things, any proposal made in opposition to, or in competition with, the merger.

As of October 15, 2008, the stockholders of ARCA that entered into voting agreements collectively owned 3,553,635 shares of common stock and 16,785,136 shares of preferred stock of ARCA, on an as converted basis, representing approximately 84.97% of the outstanding capital stock of ARCA, including approximately 92.11% of ARCA s outstanding preferred stock, on an as converted basis, of ARCA. All of these stockholders are executive officers, directors, or entities controlled by such persons, or 5% stockholders, of ARCA, and include all of the Principal Series Preferred Stockholders.

Under these voting agreements executed by ARCA stockholders, subject to certain exceptions, such stockholders also have agreed not to sell or transfer ARCA capital stock and securities held by them, or any voting rights with respect thereto, until the earlier of the termination of the merger agreement or the completion of the merger. To the extent that any such sale or transfer is permitted pursuant to the exceptions included in the voting agreement, each person to which any shares of ARCA capital stock or securities are so sold or transferred must agree in writing to be bound by the terms and provisions of the voting agreement.

In addition, in order to induce ARCA to enter into the merger agreement, several Nuvelo stockholders entered into voting agreements with and granted irrevocable proxies in favor of ARCA pursuant to which, among

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other things, each of these stockholders agreed, solely in his capacity as a stockholder, to vote all of his shares of Nuvelo common stock in favor of issuance of the shares of Nuvelo common stock in the merger and in favor of the amendment to Nuvelo s amended and restated certificate of incorporation to effect the reverse stock split, and against, among other things, any proposal made in opposition to, or in competition with, the merger.

These Nuvelo stockholders also granted ARCA an irrevocable proxy to their respective shares in accordance with the voting agreement. These Nuvelo stockholders may vote their shares of Nuvelo common stock on all other matters not referred to in such proxy.

As of September 24, 2008, the stockholders of Nuvelo that entered into voting agreements owned in the aggregate number of shares of Nuvelo common stock representing approximately 4% of the outstanding Nuvelo common stock.

Management of the Combined Company After the Merger (see page 197)

Immediately following the merger, the executive management team of the combined company is expected to be composed of the following individuals:

Name	Position in the Combined Company	Current Position
Richard B. Brewer	Chief Executive Officer	ARCA, President and CEO and Director
Michael R. Bristow, M.D., Ph. D.	Chief Science and Medical Officer	ARCA, Chairman and Chief Science and Medical Officer
Lee Bendekgey	Chief Financial Officer	Nuvelo, Sr. Vice President, Chief Financial Officer and General Counsel
Christopher Ozeroff	Executive Vice President of Business Development and General Counsel	ARCA, Executive Vice President of Business Development and General Counsel
Randall St. Laurent	Executive Vice President of Commercial Operations	ARCA, Executive Vice President of Commercial Operations

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The Board of Directors Following the Merger (see page 197)

Following the merger, the board of directors of the combined company will be as follows:

Name	Current Affiliation
Richard B. Brewer	ARCA, President and CEO and Director
Michael R. Bristow, M.D., Ph. D.	ARCA, Chairman and Chief Science and Medical Officer
Jean-François Formela, MD	Atlas Venture, Partner, and ARCA Director
J. William Freytag, Ph.D.	Freytag Holdings LLC, President, and ARCA Director
Ted W. Love, M.D.	Nuvelo, Chairman and CEO
Mary K. Pendergast	Pendergast Consulting, President, and Nuvelo Director
Burton E. Sobel, M.D.	University of Vermont and Fletcher Allen Health Care, Professor of Medicine and Biochemistry and Director of Cardiovascular Center, and Nuvelo Director
John L. Zabriskie, Ph.D.	Puretech Ventures, LLC, Co-Founder and Director, and ARCA Director
David G. Lowe, Ph.D.	Skyline Ventures, Managing Director, and ARCA Director
Linda Grais, M.D.	InterWest Management Partners IX, LLC, Venture Member, InterWest Partners IX, LP, General Partner, and ARCA Director

Interests of Nuvelo s Executive Officers and Directors (see page 94)

In considering the recommendation of the Nuvelo board of directors with respect to issuing shares of Nuvelo common stock as contemplated by the merger agreement, Nuvelo stockholders should be aware that certain members of the board of directors and executive officers of Nuvelo have interests in the merger that are different from, or in addition to, their interests as Nuvelo stockholders. These interests present a conflict of interest. The Nuvelo board of directors was aware of these conflicts of interest during its deliberations on the merits of the merger and in making its decision in approving the merger, the merger agreement, the amendments to Nuvelo s certificate of incorporation and the related transactions.

Interests of ARCA s Executive Officers and Directors (see page 97)

In considering the recommendation of the ARCA board of directors with respect to approving the adoption of the merger agreement, ARCA stockholders should be aware that certain members of the board of directors and executive officers of ARCA have interests in the merger that are different from, or in addition to, their interests as ARCA stockholders. These interests present a conflict of interest. The ARCA board of directors was aware of these conflicts of interest during its deliberations on the merits of the merger and in making its decision in approving the merger, the merger agreement and the transactions contemplated thereby.

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Stock Options and Warrants (see page 100)

Each option and warrant to purchase ARCA capital stock outstanding at the effective time of the merger shall be assumed by Nuvelo to the extent not previously exercised. Each such option or warrant shall be converted into a option or warrant, as applicable, to acquire that number of shares of Nuvelo common stock equal to the product obtained by multiplying (i) the number of shares of ARCA capital stock (on an as converted basis) subject to such option or warrant by (ii) the Exchange Ratio, rounded down to the nearest whole share of Nuvelo common stock. Each such option or warrant shall have a purchase price per share of Nuvelo common stock equal to the quotient obtained by dividing (x) the per share purchase price of ARCA capital stock (as adjusted for the conversion of such capital stock into common stock, as applicable) subject to such option or warrant by (y) the Exchange Ratio rounded up to the nearest whole cent. Each such option or warrant shall otherwise be subject to the same terms and conditions (including as to vesting and exercisability) as were applicable under the respective option or warrant to purchase ARCA capital stock immediately prior to the effective time of the merger. Subject to ARCA stockholder approval, prior to the effective time of the merger, ARCA plans to amend its 2004 Stock Incentive Plan, or the ARCA Plan, to increase the number of shares of ARCA common stock reserved and available for awards under the ARCA Plan by 2,000,000 shares to 8,356,550. ARCA anticipates granting additional option awards prior to the effective time of the merger. Shares of ARCA common stock reserved for awards but not covered by awards made prior to the effective time of the merger will not be assumed by Nuvelo, and after such effective time, no further awards can be made under the ARCA Plan.

Conversion of Convertible Notes (see page 125)

As agreed to in the merger agreement, ARCA entered into a Note and Warrant Purchase Agreement dated September 24, 2008, as amended on October 10, 2008 with certain holders of ARCA preferred stock pursuant to which ARCA sold, for an aggregate consideration of $8.75 million, its 6% Convertible Promissory Notes due March 31, 2009, or the Notes, and warrants, or the Warrants, to purchase a number of shares of ARCA s common stock as determined pursuant to the Warrants. The outstanding principal and accrued interest on the Notes will convert into that number of shares of ARCA common stock immediately prior to the closing of the merger equal to the amount of unpaid principal and interest due as of the date of conversion divided by the conversion price. The conversion price is equal to the lesser of: (i) $3.253 or (ii) the product of (a) the average closing price of Nuvelo common stock on the Nasdaq Global Market for the five consecutive trading days immediately preceding (but not including) the date the merger is consummated and (b) the Exchange Ratio; provided, however that in no event will the conversion price be less than $1.6265. The number of shares of ARCA common stock subject to the Warrants issued in the convertible bridge note financing is calculated by dividing (i) 20% of the sum of the principal amount of each Note plus the consideration paid for the associated Warrants by (ii) the conversion price for the Notes. The Warrants have an exercise price equal to the conversion price and have a five-year exercise period. Assuming the lowest conversion price possible under the Notes, the Warrants will be exercisable for an aggregate of 1,075,933 shares of ARCA common stock.

Conversion of Preferred Stock (see page 100)

In accordance with the Series A Preferred Stock Purchase Agreement, the Series B Preferred Stock Purchase Agreement and the Supplemental Agreement to Series B Preferred Stock Purchase Agreement, ARCA issued shares of its preferred stock to certain investors. Each share of Series A preferred stock will convert immediately prior to the merger into one share of ARCA common stock. Each share of Series B-1 and Series B-2 preferred stock will convert immediately prior to the merger into a number of shares of ARCA common stock equal to the original issue price for such share divided by the then effective conversion price for the Series B-1 or Series B-2 share, as applicable. The issuance of the notes and warrants under the Note and Warrant Purchase Agreement results in adjustments to the conversion prices for the Series B-1 and Series B-2 preferred stock in accordance with the anti-dilution provisions in ARCA s amended and restated certificate of incorporation, as amended,

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which we refer to as the Restated Certificate. The amount of the adjustments depends on the actual conversion price for the notes, which will not be determined until the closing of the merger. See Agreements Related to the Merger Note and Warrant Purchase Agreement. However, in no event will the conversion price for the notes be less than $1.6265 and in no event will the adjusted conversion prices for the Series B-1 and Series B-2 preferred stock be less than $2.00, as set forth in ARCA s Restated Certificate.

Material U.S. Federal Income Tax Consequences of the Merger (see page 104)

The merger has been structured to qualify as a reorganization within the meaning of Section 368(a) of the Internal Revenue Code of 1986, as amended, or the Code, and it is a closing condition to the merger that Nuvelo and ARCA receive opinions of their respective counsel regarding such qualification. There will be no U.S. federal income tax consequences to Nuvelo stockholders as a result of the merger. Assuming that the merger qualifies as a reorganization, ARCA stockholders will not recognize gain or loss for U.S. federal income tax purposes upon the exchange of shares of ARCA capital stock for shares of Nuvelo common stock, except with respect to cash received in lieu of fractional shares of Nuvelo common stock. Tax matters are highly complex, and the tax consequences of the merger to a particular ARCA stockholder will depend in part on such stockholder s circumstances. Accordingly, you are urged to consult your own tax advisor for a full understanding of the tax consequences of the merger to you, including the applicability and effect of federal, state, local and foreign income and other tax laws.

Risk Factors (see page 28)

Both Nuvelo and ARCA are subject to various risks associated with their businesses and their industries, and the combined company will also be subject to those and other risks. In addition, the merger poses a number of risks to each company and its stockholders, including the following risks:

- Some of Nuvelo and ARCA s officers and directors have interests in the merger that may be different from yours and influence them to support or approve the merger.
- The merger may be completed even though material adverse changes may result from the announcement of the merger, economic or industry-wide changes and other causes.
- Nuvelo s and ARCA s stockholders may not realize a benefit from the merger commensurate with the ownership dilution they will experience in connection with the merger.
- Negative perceptions regarding the pending merger may harm either Nuvelo s or ARCA s business and employee relationships.

Regulatory Approvals (see page 101)

As of the date of this proxy statement/prospectus/consent solicitation, neither Nuvelo nor ARCA is required to obtain approvals or clearances from any antitrust regulatory authorities in the United States or other countries to consummate the merger. In the United States, Nuvelo must comply with applicable federal and state securities laws and Nasdaq rules and regulations in connection with the issuance of shares of Nuvelo common stock in the merger and the filing of this proxy statement/prospectus/consent solicitation. Nuvelo intends to file an initial listing application with the Nasdaq Global Market pursuant to Nasdaq s reverse merger rules to effect the initial listing of Nuvelo s common stock issuable in connection with the merger.

Anticipated Accounting Treatment (see page 106)

The merger will be treated by Nuvelo as a reverse merger and will be accounted for as a business combination using the purchase method of accounting in accordance with U.S. generally accepted accounting principles. For accounting purposes, ARCA is considered to be acquiring Nuvelo in this transaction.

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Appraisal Rights (see page 101)

Nuvelo s stockholders are not entitled to appraisal rights in connection with the merger or any of the proposals to be voted on at the special meeting.

ARCA s stockholders are entitled to appraisal rights if they do not consent to the adoption of the merger agreement and they comply with the conditions established by Section 262 of the DCGL.

Comparison of Stockholder s Rights (see page 246)

Both Nuvelo and ARCA are incorporated under the laws of the State of Delaware and, accordingly, the rights of the stockholders of each are currently, and will continue to be, governed by the DGCL. If the merger is completed, ARCA s stockholders will become stockholders of Nuvelo, and their rights will be governed by the DCGL, the certificate of incorporation and the bylaws of Nuvelo, as they may be amended. The rights of Nuvelo s stockholders contained in the certificate of incorporation and bylaws of Nuvelo differ from the rights of ARCA s stockholders under the certificate of incorporation and bylaws of ARCA.

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MARKET PRICE AND DIVIDEND INFORMATION

Nuvelo

Nuvelo s common stock is listed on the Nasdaq Global Market under the symbol NUVO. Prior to July 2006, Nuvelo s common stock traded on the Nasdaq National Market, the predecessor to the Nasdaq Global Market. The following table sets forth, for the periods indicated, the high and low per share sales prices for Nuvelo s common stock as reported on Nasdaq.

Nuvelo Common Stock

	High	Low
Year Ended December 31, 2006		
First Quarter	$ 18.71	$ 8.16
Second Quarter	18.20	14.15
Third Quarter	20.98	15.13
Fourth Quarter	20.37	3.35
Year Ended December 31, 2007		
First Quarter	$ 4.12	$ 3.04
Second Quarter	6.63	2.55
Third Quarter	3.03	1.52
Fourth Quarter	2.70	1.26
Year Ended December 31, 2008		
First Quarter	$ 1.88	$ 0.55
Second Quarter	0.97	0.55
Third Quarter	0.75	0.34
Fourth Quarter (through October 15, 2008)	0.47	0.21

On September 24, 2008, the last day prior to the public announcement of the merger, the closing price per share of Nuvelo s common stock as reported on the Nasdaq Global Market was $0.40, for an aggregate market value of Nuvelo of approximately $21.5 million. Accordingly, if the merger had been consummated on that day, the value attributable to the shares of Nuvelo s common stock issued or issuable to holders of ARCA s outstanding common stock, preferred stock, options, warrants and convertible notes in connection with the merger would have been approximately $43.6 million, based on approximately 109 million shares of Nuvelo s common stock issued or issuable in the merger, multiplied by $0.40.

On , 2008, the last practicable date before the printing of this proxy statement/prospectus/consent solicitation, the closing price per share of Nuvelo s common stock as reported on the Nasdaq Global Market was $, for an aggregate market value of Nuvelo of approximately $. Accordingly, if the merger had been consummated on that day, the value attributable to the shares of Nuvelo s common stock issued to holders of ARCA s common stock, preferred stock, options, warrants and convertible notes in connection with the merger would have been approximately $, based on approximately million shares of Nuvelo s common stock issued or issuable in the merger multiplied by $.

Because the market price of Nuvelo s common stock is subject to fluctuation, the market value of the shares of Nuvelo s common stock that holders of ARCA s common stock, preferred stock, options, warrants and convertible notes will be entitled to receive in the merger may increase or decrease.

Shares of Nuvelo common stock are currently listed on the Nasdaq Global Market under the symbol NUVO. Following the merger, the combined company is expected to be renamed ARCA biopharma, Inc. and to change its symbol for trading on the Nasdaq Global Market. ARCA has reserved the symbol ARCB for this purpose.

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Nuvelo has never declared or paid cash dividends on its capital stock. Nuvelo currently intends to retain earnings, if any, to finance the growth and development of its business, and does not expect to pay any cash dividends to its stockholders in the foreseeable future. Payment of future dividends, if any, will be at the discretion of Nuvelo s board of directors.

As of the record date of , there were approximately holders of record of Nuvelo common stock.

ARCA

ARCA is a privately-held company and its shares are not publicly traded.

ARCA has never declared or paid any cash dividends on its capital stock nor does it intend to do so in the foreseeable future.

As of the record date of , there were approximately 53 holders of record of ARCA common stock and preferred stock.

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SELECTED HISTORICAL FINANCIAL DATA

Nuvelo Selected Historical Consolidated Financial Data

The statements of operations data for the years ended December 31, 2007, 2006 and 2005 and the balance sheet data as of December 31, 2007 and 2006 are derived from Nuvelo s audited consolidated financial statements, which are included in this proxy statement/prospectus/consent solicitation beginning on page F-12. The statements of operations data for the six months ended June 30, 2008 and 2007 and the balance sheet data as of June 30, 2008 are derived from Nuvelo s unaudited consolidated financial statements, which are included in this proxy statement/prospectus/consent solicitation beginning on page F-2. The unaudited financial data as of June 30, 2008 and for the six months ended June 30, 2008 and 2007 include all adjustments (consisting only of normal recurring adjustments) that Nuvelo considers necessary for a fair presentation of the financial position and operating results for the periods presented. The statements of operations data for the years ended December 31, 2004 and 2003 and the balance sheet data as of December 31, 2005, 2004 and 2003 are derived from Nuvelo s audited consolidated financial statements, which are not included in this proxy statement/prospectus/consent solicitation. Historical results are not necessarily indicative of future results and results for any interim period are not necessarily indicative of results to be expected for a full fiscal year. The following selected historical consolidated financial data should be read in conjunction with Management s Discussion and Analysis of Financial Condition and Results of Operations for Nuvelo and Nuvelo s consolidated financial statements and related notes thereto included in this proxy statement/prospectus/consent solicitation.

	Six Months Ended June 30,		Year Ended December 31,				
	2008	2007	2007	2006	2005	2004	2003
	(Unaudited)						
	(In thousands, except per share amounts)						
Statement of Operations Data:							
Contract revenues	$ 15,125	$ 46,735	$ 46,861	$ 3,888	$ 545	$ 195	$ 1,024
Operating expenses:							
Research and development	19,148	23,958	42,654	89,370	57,778	39,970	30,014
General and administrative	7,662	12,639	20,762	30,632	15,805	8,869	16,294
Restructuring	2,470		2,336				
Facility exit charges	1,472			24,460			
Impairment of goodwill	4,671						
Total operating expenses	35,423	36,597	65,752	144,462	73,583	48,839	46,308
Operating income (loss)	(20,298)	10,138	(18,891)	(140,574)	(73,038)	(48,644)	(45,284)
Interest and other income	1,662	3,631	6,693	8,385	2,431	1,063	458
Interest expense	(3)	(76)	(103)	(588)	(1,004)	(1,361)	(1,403)
Income (loss) from continuing operations	(18,639)	13,693	(12,301)	(132,777)	(71,611)	(48,942)	(46,229)
Discontinued operations, including loss on disposal						(3,547)	(3,958)
Income (loss) before cumulative effect of change in accounting principle	(18,639)	13,693	(12,301)	(132,777)	(71,611)	(52,489)	(50,187)
Cumulative effect of change in accounting principle				2,224			
Net income (loss)	$ (18,639)	$ 13,693	$ (12,301)	$ (130,553)	$ (71,611)	$ (52,489)	$ (50,187)
Basic and diluted net income (loss) per share:							
Income (loss) from continuing operations	$ (0.35)	$ 0.26	$ (0.23)	$ (2.58)	$ (1.73)	$ (1.59)	$ (2.20)
Discontinued operations						(0.11)	(0.19)
Cumulative effect of change in accounting principle				0.04			
Basic and diluted net income (loss) per share	$ (0.35)	$ 0.26	$ (0.23)	$ (2.54)	$ (1.73)	$ (1.70)	$ (2.38)

Weighted average shares used in computing net income (loss) per share:							
Basic	53,496	53,285	53,333	51,451	41,279	30,874	21,054
Diluted	53,496	53,300	53,333	51,451	41,279	30,874	21,054

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	June 30, 2008 (Unaudited)	2007	2006	December 31, 2005	2004	2003
			(In thousands)			
Balance Sheet Data:						
Cash and cash equivalents, marketable securities and restricted cash	$ 76,047	$ 103,567	$ 153,126	$ 70,336	$ 50,625	$ 34,189
Working capital	55,446	81,799	122,496	49,582	45,261	25,772
Total assets	87,018	120,683	184,405	108,046	79,264	57,809
Bank loans			1,492	3,032	2,600	
Notes payable				4,000	4,000	6,600
Related party line of credit			2,292	5,042	7,792	10,542
Other non-current liabilities	18,142	34,837	70,598	11,315	1,992	6,631
Accumulated deficit	(489,152)	(470,513)	(458,212)	(327,659)	(256,048)	(203,559)
Total stockholders equity	52,346	67,659	69,843	56,764	45,589	22,701

ARCA Selected Historical Financial Data

The statements of operations data for the years ended December 31, 2007, 2006 and 2005 and the balance sheet data as of December 31, 2007 and 2006 were derived from ARCA s audited financial statements which are included in this proxy statement/prospectus/consent solicitation beginning on page F-43. The statements of operations data for the years ended December 31, 2004 and 2003 and the balance sheet data as of December 31, 2005, 2004 and 2003 were derived from both ARCA s audited and unaudited financial statements which are not included in this proxy statement/prospectus/consent solicitation. The statement of operations data for the six months ended June 30, 2008 and 2007 and for the period from inception, December 17, 2001, through June 30, 2008, and the balance sheet data as of June 30, 2008 were derived from ARCA s unaudited financial statements which are included in this proxy statement/prospectus/consent solicitation beginning on page F-43.

The unaudited pro forma basic and diluted weighted average shares outstanding and net loss per common share data for the year ended December 31, 2007 and for the six-month period ended June 30, 2008 reflect the mandatory conversion, upon the consummation of the proposed merger, of all outstanding shares of preferred stock at their respective conversion rates then in effect into shares of ARCA common stock, as if the conversion had occurred on January 1, 2007 or the date of issuance, if later.

Historical results are not necessarily indicative of future results and results for any interim periods are not necessarily indicative of results for a full fiscal year.

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The following selected historical financial data should be read in conjunction with ARCA s Management s Discussion and Analysis of Financial Condition and Results of Operations for ARCA and ARCA s financial statements and related notes thereto included in this proxy statement/prospectus/consent solicitation. ARCA is considered to be a development stage company for financial reporting purposes.

	Six Months Ended June 30,		Year Ended December 31,					Period from December 17, 2001 (date of inception) to
	2008 (Unaudited)	2007 (Unaudited)	2007	2006	2005	2004	2003 (Unaudited)	June 30, 2008 (Unaudited)
			(In thousands, except per share data)					
Statement of operations data:								
Operating expenses:								
Research and development	$ 4,596	$ 4,737	$ 10,244	$ 3,978	$ 846	$ 60	$	$ 19,724
General and administrative	3,379	2,024	4,210	1,545	569	444	134	10,313
Loss from operations	(7,975)	(6,761)	(14,454)	(5,523)	(1,415)	(504)	(134)	(30,037)
Other income (expense), net	134	210	460	282	(44)	(7)	18	875
Net loss	$ (7,841)	$ (6,551)	$ (13,994)	$ (5,241)	$ (1,459)	$ (511)	$ (116)	$ (29,162)
Less: Accretion of redeemable convertible preferred stock	(29)	(10)	(37)	(17)				(84)
Net loss attributable to common stockholders	$ (7,870)	$ (6,561)	$ (14,031)	$ (5,258)	$ (1,459)	$ (511)	$ (116)	$ (29,246)
Basic and diluted net loss attributable to common stockholders per share	$ (1.85)	$ (1.75)	$ (3.71)	$ (1.62)	$ (1.16)	$ (1.88)	$ (1.24)	
Weighted average shares outstanding basic and diluted	4,251	3,748	3,781	3,247	1,258	272	93	
Pro forma basic and diluted net loss attributable to common stockholders per share (unaudited)	$ (0.39)		$ (0.92)					
Pro forma weighted average shares outstanding basic and diluted (unaudited)	19,929		15,189					

	As of June 30,	As of December 31,				
	2008 (Unaudited)	2007	2006	2005	2004	2003 (Unaudited)
			(In thousands)			
Balance sheet data:						
Cash and cash equivalents	$ 6,927	$ 15,862	$ 9,712	$ 373	$ 251	$ 8
Working capital	4,738	12,986	9,010	(745)	(678)	(115)
Total assets	8,502	16,204	9,941	452	322	8
Total liabilities	3,177	3,084	766	1,130	941	123
Redeemable convertible preferred stock	32,838	32,809	14,919			
Accumulated deficit	(29,162)	(21,321)	(7,327)	(2,086)	(627)	(116)
Total stockholders deficit	(27,513)	(19,689)	(5,744)	(678)	(619)	(115)

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SELECTED UNAUDITED PRO FORMA CONDENSED COMBINED FINANCIAL DATA

The following unaudited pro forma financial data should be read in conjunction with the historical financial statements and the accompanying notes of ARCA and Nuvelo, and the respective Management s Discussion and Analysis of Financial Condition and Results of Operations for Nuvelo, and Management s Discussion and Analysis of Financial Condition and Results of Operations for ARCA, which are included elsewhere in this proxy statement/prospectus/consent solicitation, and the other information contained in this proxy statement/prospectus/consent solicitation. See Where You Can Find More Information beginning on page 268 and the financial statements of Nuvelo and ARCA beginning on pages F-2 and 43, respectively. The following information does not give effect to the reverse stock split of Nuvelo common stock described in Nuvelo Proposal No. 2.

The following selected unaudited pro forma condensed combined financial information presents the effect of the merger of Nuvelo and ARCA pursuant to the merger agreement. For accounting purposes, ARCA is considered to be acquiring Nuvelo in the merger. The following unaudited pro forma condensed combined balance sheet data assume that the merger took place on June 30, 2008 and combines the ARCA historical balance sheet at June 30, 2008 with the Nuvelo historical condensed consolidated balance sheet at June 30, 2008 and $8.75 million of notes payable issued by ARCA in October 2008, which convert into common stock upon the closing of the proposed merger. The unaudited pro forma condensed combined statements of operations data assume that the merger took place as of January 1, 2007, and combines the historical results of Nuvelo and ARCA for the six months ended June 30, 2008 and the year ended December 31, 2007. The ARCA balance sheet information was derived from its unaudited balance sheet as of June 30, 2008 included herein. The Nuvelo balance sheet information was derived from its unaudited condensed consolidated balance sheet included in its Form 10-Q for the quarterly period ended June 30, 2008 and also included herein. The historical results of ARCA were derived from its unaudited statement of operations for the six months ended June 30, 2008 and its audited statement of operations for the year ended December 31, 2007 included herein. The historical results of Nuvelo were derived from its unaudited condensed consolidated statement of operations for the six months ended June 30, 2008 included in its Form 10-Q for the quarterly period ended June 30, 2008, and its audited consolidated statement of operations included in its Annual Report on Form 10-K for the year ended December 31, 2007 and also included herein.

The selected unaudited pro forma condensed combined financial data are presented for illustrative purposes only and are not necessarily indicative of the combined financial position or results of operations of future periods or the results that actually would have been realized had the entities been a single entity during these periods. The selected unaudited pro forma condensed combined financial data as of and for the six months ended June 30, 2008 and for the year ended December 31, 2007 are derived from the unaudited pro forma condensed combined financial information appearing elsewhere in this proxy statement/prospectus/consent solicitation, and should be read in conjunction with that information. For purposes of the unaudited pro forma condensed combined financial statements, presented elsewhere herein, Nuvelo and ARCA have made allocations of the estimated purchase price to the assets to be acquired and liabilities to be assumed based on preliminary estimates of their fair value. A final determination of these estimated fair values, which cannot be made prior to the completion of the merger, will be based on the actual net assets of Nuvelo that exist as of the date of consummation of the merger. The actual amounts recorded as of the consummation of the merger may differ materially from the information presented in these unaudited pro forma condensed combined financial statements as a result of:

- net cash used in the Nuvelo operations between the pro forma balance sheet date of June 30, 2008 and the closing of the merger;
- a change in the fair value of Nuvelo s common stock;
- the timing of completion of the merger;
- a change in the methodology used to account for the purchase price;

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a change in the accounting principles in which the transaction is accounted for (see Note 5 to the unaudited pro forma condensed combined financial statements elsewhere in this proxy statement/prospectus/consent solicitation); and

other changes in the Nuvelo net assets that may occur prior to completion of the merger, which could cause material differences in the information presented below.

The estimated purchase price of the Nuvelo acquisition in these unaudited pro forma condensed combined financial statements was based on the market capitalization of Nuvelo as of June 30, 2008, the date on which the proposed merger occurred for purposes of these pro forma financial statements, and the fair values of its vested stock options and warrants outstanding on that date. This was deemed the best estimate of the fair value of Nuvelo as the entity being acquired for accounting purposes on that date. The June 30, 2008 balance sheet of Nuvelo reflected approximately $70 million of cash, cash equivalents, and marketable securities and aggregate net assets with a fair value of $53.1 million, which significantly exceeded Nuvelo s market capitalization at that date. The application of the rules governing the preparation of this unaudited pro forma condensed combined balance sheet results in significant excess of fair value of acquired assets over purchase price, or negative goodwill, on a pro forma basis, which would be allocated against certain assets of Nuvelo to reduce their carrying value to zero and the residual amount recognized as a gain upon acquisition.

The final purchase price allocation will change significantly from preliminary estimates. The actual purchase accounting upon consummation of the merger will be based on the fair value of the consideration paid and fair values of Nuvelo s assets and liabilities as determined at the time of consummation. Nuvelo s market capitalization has experienced significant fluctuations during 2008 as a result of both market and company-specific factors, and such fluctuations may continue. Further, Nuvelo continues to use its cash and other liquid assets to finance its ongoing operations. As a result, at the date the merger is consummated, Nuvelo s cash, cash equivalents, and short-term investments are expected to be significantly less than at June 30, 2008, and its market capitalization cannot be predicted. ARCA and Nuvelo will re-evaluate the determination of the purchase price at the time of merger consummation, taking into consideration both Nuvelo s market capitalization at the time of consummation, and may consider alternative approaches, such as basing the purchase price on the fair value of Nuvelo s net assets, or based on the fair value of ARCA s common and redeemable convertible preferred stock rather than Nuvelo s common stock. ARCA and Nuvelo do not anticipate that the final purchase accounting performed when the merger is consummated will result in a significant negative goodwill amount because the proposed merger is not considered a bargain purchase transaction. Please see Note 2 to the unaudited pro forma combined condensed financial statements for further discussion.

	For the Six Months Ended June 30, 2008	For the Year Ended December 31, 2007
Unaudited Pro Forma Condensed Combined Statement of Operations Data (in thousands, except per share amounts):		
Total revenue(1)	$ 15,125	$ 46,861
Research and development expenses	23,621	52,632
Sales, general and administrative expenses	10,473	23,860
Restructuring	2,470	2,336
Facility exit charges	1,472	
Loss from operations	(22,911)	(31,967)
Net loss	(21,118)	(24,917)
Basic and diluted net loss per share	$ (0.13)	$ (0.15)

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	June 30, 2008
Unaudited Pro Forma Condensed Combined Balance Sheet Data (in thousands):	
Cash, cash equivalents, marketable securities and restricted cash(2)	$ 91,724
Working capital(2)	60,375
Total assets(2)	96,330
Accumulated deficit	(21,504)
Total stockholders equity(2)	54,709

(1) In the six months ended June 30, 2008, Nuvelo recorded as revenue $15.0 million that was received from Bayer HealthCare AG (Bayer) in connection with the termination of its collaboration agreement in June 2007. Following Nuvelo decision to discontinue further clinical development of alfimeprase, the $15.0 million, which had been recorded as deferred revenue, was recognized as revenue upon the expiration of the notice period, as defined in the termination agreement with Bayer.

In 2007, Nuvelo recorded as revenue $45.8 million of the $50.0 million up-front license fee received from Bayer in January 2006 as a result of the termination of its collaboration agreement in June 2007. The up-front license fee had been recorded as deferred revenue upon receipt and was being recognized on a straight-line basis over the performance period under the agreement, originally estimated to be through September 2020.

(2) Includes $8.75 million of notes payable issued by ARCA in October 2008, which convert into common stock upon the closing of the proposed merger,

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COMPARATIVE HISTORICAL AND UNAUDITED PRO FORMA PER SHARE DATA

The following information does not give effect to the reverse stock split of Nuvelo common stock described in Nuvelo Proposal No. 2.

The following information reflects the historical net loss and book value per share of Nuvelo common stock and the historical net loss and book value per share of ARCA common stock in comparison with the unaudited pro forma net loss and book value per share after giving effect to the proposed merger of Nuvelo with ARCA on a purchase method accounting basis. The combined company pro forma per common share data are provided for informational purposes only and are not necessarily indications of the results that would have been achieved had the transaction been completed as of the dates indicated or that may be achieved in the future. We have derived the combined company pro forma per common share data from the unaudited pro forma condensed combined financial statements presented elsewhere in this proxy statement/prospectus/consent solicitation.

You should read the tables below in conjunction with the audited and unaudited financial statements of Nuvelo and the notes related thereto included in this proxy statement/prospectus/consent solicitation and the audited and unaudited financial statements of ARCA and the notes related thereto included in this proxy statement/prospectus/consent solicitation and the unaudited pro forma condensed combined financial information and notes related thereto included elsewhere in this proxy statement/prospectus/consent solicitation.

	Six Months Ended June 30, 2008	Year Ended December 31, 2007
Nuvelo Historical Per Common Share Data:		
Basic and diluted net loss per share	$ (0.35)	$ (0.23)
Book value per share as of the period end	0.98	1.27
ARCA Historical Per Common Share Data:		
Basic and diluted net loss per share	$ (1.85)	$ (3.71)
Book value per share as of the period end	(5.51)	(4.45)
Combined Company Pro Forma Per Common Share Data:		
Basic and diluted net loss per share	$ (0.13)	$ (0.15)
Book value per share as of the period end	0.34	N/A

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RISK FACTORS

You should consider the following factors in evaluating whether to approve the proposals described in this proxy statement/prospectus/consent solicitation. These factors should be considered in conjunction with the other information included by Nuvelo and ARCA in this prospectus/proxy statement/consent solicitation.

Risks Related to the Proposed Merger and Combined Company

Nuvelo and ARCA anticipate that immediately following the merger the business of the combined company will have the same risks associated with ARCA and Nuvelo immediately prior to the merger. As a result, you should give attention to the risk factors set forth below under the headings Risks Related to ARCA, Risks Related to Nuvelo and the following risks related to the proposed merger and the combined company.

If the combined company is not able to successfully develop and commercialize Gencaro, or another product candidate, it may not be able to continue its business operations.

ARCA and Nuvelo currently have no products that have received regulatory approval for commercial sale. The process to develop, obtain regulatory approval for and commercialize potential product candidates is long, complex and costly. Following the merger, Gencaro, which is currently the subject of an NDA awaiting FDA approval, will be the combined company s only product candidate at a late stage of clinical development. As a result, the combined company s business is expected to be substantially dependent on its ability to obtain regulatory approval for and successfully commercialize Gencaro in a timely manner.

In addition to Gencaro, the combined company will have two product candidates in clinical trials, NU172 and NU206. These product candidates must be rigorously tested in clinical trials, and be shown to be safe and effective, before the FDA or other regulatory authorities outside the U.S. will consider them for approval. Failure to demonstrate that one or more of the combined company s product candidates is safe and effective, or significant delays in demonstrating such safety and efficacy, could diminish the benefits of the merger. Failure to obtain marketing approval of one or more of the combined company s product candidates from appropriate regulatory authorities, or significant delays in obtaining such approval, could diminish the benefits of the merger. If approved for sale, the combined company s product candidates must be successfully commercialized. Failure to successfully commercialize one or more of the combined company s product candidates could diminish the benefits of the merger, and, in particular, if the NDA for Gencaro is not approved, or is substantially delayed, or if the combined company is unable to successfully commercialize Gencaro, it may not be able to earn sufficient revenues to continue its business.

If the combined company fails to obtain additional financing, it may be unable to fund its operations and commercialize its product candidates.

The combined company expects that the cash used in its operations will increase for the next several years, and that it will spend substantial amounts to complete the development, regulatory approval and commercialization of Gencaro and other product candidates and to license or acquire other product candidates. ARCA believes that, if the merger is completed, existing cash and cash equivalents will be sufficient to meet the combined company s projected operating requirements through 2009.

The combined company s future funding requirements will depend on many factors, including:

- whether or when Gencaro is approved for sale;
- whether or when Gencaro s companion product, the Gencaro companion genetic test, is approved for sale;
- the costs of establishing sales, marketing and distribution capabilities;

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- the terms and timing of any collaborative, licensing and other arrangements that it has or may establish;
- cash requirements of any future acquisitions of product candidates;
- the scope, results and timing of preclinical studies and clinical trials and other development activities;
- the effects of competing clinical, technological and market developments; and
- the costs of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights.

Even if the combined company receives FDA approval to commercialize Gencaro, it cannot predict the amount of revenue it will generate from sales of Gencaro. Until the combined company can generate a sufficient amount of product revenue, it expects to finance future cash needs through public or private securities offerings or debt financings. To the extent that additional funds are raised by issuing equity securities, the combined company s stockholders may experience dilution.

If additional debt financing is raised in the future, the combined company may be required to grant any lenders a security interest in all or a portion of its assets and issue warrants to acquire its equity securities, resulting in dilution to its stockholders. In addition, any such debt financing may involve restrictive covenants, including limitations on the combined company s ability to incur additional debt, limitations on its ability to acquire or license intellectual property rights and other operating restrictions that could adversely impact its ability to conduct its business.

The combined company may also be required to:

- seek collaborators for its product candidates at an earlier stage than otherwise would be desirable and on terms that are less favorable than might otherwise be available; and
- relinquish, license or otherwise dispose of rights to technologies, product candidates or products that it would otherwise seek to develop or commercialize itself.

Future additional funding may not be available on acceptable terms, or at all. If the combined company is unable to raise additional capital when required or on acceptable terms, then the combined company may have to significantly delay, scale back or discontinue the development or commercialization of one or more of its product candidates.

The combined company will be relying upon a third party to obtain marketing clearance or approval of the companion test. There is no guarantee that the FDA will grant timely clearance or approval of the companion test, if at all, and failure to obtain such timely clearance or approval would adversely affect the combined company s ability to market Gencaro.

The drug label being sought for Gencaro would identify the patient receptor genotypes with a likelihood of enhanced efficacy, as well as those with a likelihood of a standard beta-blocker response and the smaller unfavorable subgroup with a low probability of benefit. Accordingly, the combined company believes it will be critical to the successful commercialization of Gencaro to develop a companion genetic test, or the Gencaro Test, that is simple to administer, useful and widely available.

The Gencaro Test is subject to regulation by the FDA and by comparable agencies in various foreign countries. The process of complying with the requirements of the FDA and comparable agencies is costly, time consuming and burdensome.

ARCA is relying on a third party to determine the appropriate regulatory pathway for the Gencaro Test and to obtain marketing clearance or approval from the FDA. Based on FDA guidance, it is anticipated that the Gencaro Test will be the subject of a PMA regulatory submission although the FDA may later decide that the

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Gencaro Test should be evaluated for clearance under the FDA s 510(k) notification process. ARCA does not believe that any further clinical trials will be required for the Gencaro Test PMA, though there is no guarantee that FDA will not require additional clinical data.

Despite the time and expense expended, regulatory clearance or approval is never guaranteed. If regulatory clearance or approval is delayed, or FDA approval of the Gencaro Test is not obtained at all or in parallel with the approval of Gencaro, or if the Gencaro Test cannot be successfully commercialized or commercialized in a manner that effectively supports the combined company s commercial efforts, or if the information concerning the differential response to Gencaro resulting from certain genetic variation is not included in the approval label for Gencaro, ARCA s commercial launch may be significantly affected. In such cases, the combined company could be forced to identify a new third-party test provider and obtain regulatory approval for that provider s genetic test, which could substantially delay and negatively affect the commercial prospects for Gencaro.

If Gencaro is approved, the FDA may require that the companion genetic test be administered to all patients before they receive Gencaro, which could limit its potential market.

Gencaro is a pharmacologically unique beta-blocker and mild vasodilator for heart failure that is more effective in certain patient populations but less effective in other patient populations than other beta-blockers currently being marketed, or potentially not effective at all. Based on certain genetic markers, ARCA believes that it can be determined whether Gencaro will be more effective or less effective for potential patients. ARCA has a contractual relationship with a third party to develop, obtain regulatory approval of and commercialize a genetic test to detect these genetic variations in patients.

Because Gencaro may not be effective in some patient populations, and these populations can be identified using the Gencaro Test, the FDA may require that the Gencaro Test be administered to all patients before they receive Gencaro. The FDA could also prohibit prescribing Gencaro to that patient population that is not positively affected by Gencaro. As a result, the market for Gencaro could be restricted, and the combined company s business could be harmed.

Future sales of Gencaro may suffer if its marketplace acceptance is negatively affected by the companion genetic test.

The companion genetic test for Gencaro is an important component of the commercial strategy for Gencaro. ARCA believes that the genetic test helps predict response to Gencaro, and that this aspect of the drug is important to its ability to compete effectively with current therapies. The companion genetic test adds an additional step in the prescribing process, an additional cost for the patient, the risk that the test results may not be rapidly available and the possibility that it may not be available at all hospitals and medical centers. Any one of these factors could affect prescriber behavior, which in turn may substantially impede market acceptance of the genetic test, which could cause significant harm to Gencaro s ability to compete, and in turn harm the combined company s business.

If Nuvelo and ARCA are not successful in integrating their organizations, the combined company may not be able to operate efficiently after the merger or to realize any benefits from the merger.

Achieving the benefits of the merger will depend in part on the successful integration of Nuvelo s and ARCA s technical and business operations and personnel in a timely and efficient manner. The integration process requires coordination of the personnel of both companies, involves the integration of systems, applications, policies, procedures, business processes and operations and is a complex, costly and time-consuming process. The difficulties of combining the operations of the companies include, among others:

- consolidating research and development operations;
- retaining key employees;

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consolidating corporate and administrative infrastructures;

preserving the research and development and other important relationships of the companies;

integrating and managing the technology of two companies;

using the combined company s liquid capital and other assets efficiently to develop the business of the combined company;

appropriately managing the liabilities of the combined company;

diverting management s attention from ongoing business concerns; and

coordinating geographically separate organizations.

Neither Nuvelo nor ARCA can assure you that they will receive any benefits of this or any other merger or acquisitions, or that any of the difficulties described above will not adversely affect the combined company. The integration process may be difficult and unpredictable because of possible conflicts and differing opinions on business, scientific and regulatory matters. If Nuvelo and ARCA cannot successfully integrate their technical and business operations and personnel, the combined company may not realize the expected benefits of the merger.

Nuvelo and ARCA expect to incur significant costs integrating the companies into a single business.

Nuvelo and ARCA expect to incur significant costs integrating their technical and business operations and personnel, which may include costs for employee redeployment, relocation or severance, conversion of information systems, reorganization of facilities, disposition of excess facilities and relocation or disposition of excess equipment. The benefits of the merger may not be sufficient to justify these integration costs.

Integrating Nuvelo and ARCA may divert the attention of the combined company s management away from its operations.

The successful integration of Nuvelo s and ARCA s technical and business operations and personnel may place a significant burden on the combined company s management and internal resources. The diversion of management s attention and any difficulties encountered in the transition and integration process could result in delays in clinical trial and product development programs of the combined company and could otherwise harm the combined company s business, financial condition and operating results.

Nasdaq will consider the anticipated merger a reverse merger and therefore will require the combined company to submit a new listing application, which will require certain actions on the combined company s part and may not be successful, which would result in you having difficulty converting your investment into cash effectively.

Nasdaq will consider the merger proposed in this proxy statement/prospectus/consent solicitation as a reverse merger and will require the combined company to submit a new listing application. Nasdaq may not approve the combined company s new listing application. If this occurs and the merger is still consummated, you may have difficulty converting your investments into cash effectively.

Additionally, as part of the new listing application, the combined company will be required to submit, among other things, a plan for the combined company to conduct a reverse stock split. A reverse stock split would increase the per share trading price by a yet undetermined multiple. The change in share price may affect the volatility and liquidity of the combined company s stock, as well as the marketplace s perception of the stock. As a result, the relative price of the combined company s stock may decline and/or fluctuate more than in the past, and you may have trouble converting your investments in the combined company into cash effectively.

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Failure to complete the merger could adversely affect Nuvelo s stock price and Nuvelo s and ARCA s future business and operations.

The merger is subject to the satisfaction of closing conditions, including approval by Nuvelo and ARCA stockholders, and neither Nuvelo nor ARCA can assure you that the merger will be approved. In the event that the merger is not consummated, Nuvelo and ARCA may be subject to many significant costs, including legal, accounting and advisory fees related to the merger, which must be paid even if the merger is not completed, and the payment of a termination fee under certain circumstances. If the merger is not consummated, the market price of Nuvelo common stock could decline as a result.

Completion of the merger may result in dilution of future earnings per share to the stockholders of Nuvelo or ARCA.

The completion of the merger may result in greater net losses or a weaker financial condition compared to that which would have been achieved by either Nuvelo or ARCA on a stand-alone basis. The merger could fail to produce the benefits that the companies anticipate, or could have other adverse effects that the companies currently do not foresee. In addition, some of the desired outcomes of the merger, such as the achievement of operating synergies, may not be realized. In this event, the merger could result in greater losses as compared to the losses that would have been incurred by Nuvelo or ARCA on a stand alone basis if the merger had not occurred.

The costs associated with the merger are difficult to estimate, may be higher than expected and may harm the financial results of the combined company.

Nuvelo and ARCA estimate that they will incur aggregate direct transaction costs of approximately $7.2 million associated with the merger, and additional costs associated with the consolidation and integration of operations, which cannot be estimated accurately at this time. If the total costs of the merger exceed Nuvelo s and ARCA s estimates or the benefits of the merger do not exceed the total costs of the merger, the financial results of the combined company could be adversely affected.

Nuvelo and ARCA executive officers and directors may have interests that are different from, or in addition to, those of Nuvelo and ARCA stockholders generally.

The executive officers and directors of Nuvelo and ARCA may have interests in the merger that are different from, or are in addition to, those of Nuvelo and ARCA stockholders generally. These interests include ownership through affiliated entities of Nuvelo common stock, certain ARCA directors being appointed to and replacing certain Nuvelo directors from the Nuvelo board of directors immediately after the effective time of the merger, certain Nuvelo executive officers receiving change in control payments in connection with merger and the adoption of new employment agreements for certain ARCA executives in connection with the merger and/or the provision and continuation of indemnification and insurance arrangements for current directors of ARCA following consummation of the merger. See the sections entitled Interests of Nuvelo s Executive Officers and Directors in the Merger starting on page 94 and Interests of ARCA s Executive Officers and Directors in the Merger starting on page 97.

The combined company will need to significantly increase the size of its organization and may experience difficulties in managing its growth.

ARCA and Nuvelo are small companies. As of September 30, 2008, ARCA has approximately 44 full-time employees and Nuvelo has approximately 51 employees. The merger will make certain positions redundant; such redundancies will result in terminations. While the merger will create redundancies and result in terminations, the combined company expects that it will need to substantially increase and modify its operations in the future to conduct clinical trials for any future product candidates and commercialize Gencaro and any other future product

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candidates that the combined company acquires or develops. Future growth will impose significant added responsibilities on members of management, including the need to identify, recruit, maintain and integrate additional employees. The combined company s future financial performance and its ability to commercialize its product candidates and to compete effectively will depend, in part, on its ability to manage any future growth effectively. To that end, the combined company must be able to:

- manage its clinical trials effectively;
- integrate current and additional management, administrative, financial and sales and marketing personnel;
- hire new personnel necessary to effectively commercialize product candidates it licenses;
- develop its administrative, accounting and management information systems and controls; and
- hire and train additional qualified personnel.

The combined company s management will be required to devote substantial time to comply with public company regulations.

As a public company, the combined company will incur significant legal, accounting and other expenses that ARCA did not incur as a private company. The Sarbanes-Oxley Act of 2002 as well as rules implemented by the SEC and the Nasdaq Global Market, impose various requirements on public companies, including those related to corporate governance practices. The combined company s management and other personnel will need to devote a substantial amount of time to these requirements. ARCA s management, which will substantially continue as the management of the combined company, does not have recent experience in addressing these requirements. Moreover, these rules and regulations will increase the combined company s legal and financial compliance costs relative to those of ARCA and will make some activities more time-consuming and costly.

The Sarbanes-Oxley Act requires, among other things, that the combined company maintain effective internal controls for financial reporting and disclosure controls and procedures. In particular, the combined company must perform system and process evaluation and testing of its internal controls over financial reporting to allow management and the combined company s independent registered public accounting firm to report on the effectiveness of its internal controls over financial reporting, as required by Section 404 of the Sarbanes-Oxley Act. The combined company s compliance with Section 404 will require that it incur substantial accounting and related expense and expend significant management efforts. The combined company will need to hire additional accounting and financial staff to satisfy the ongoing requirements of Section 404. Moreover, if the combined company is not able to comply with the requirements of Section 404, or if the combined company or its independent registered public accounting firm identifies deficiencies in its internal controls over financial reporting that are deemed to be material weaknesses, the market price of the combined company s stock could decline and the combined company could be subject to sanctions or investigations by the Nasdaq Global Market, the SEC or other regulatory authorities.

Material weaknesses may exist when the combined company reports on the effectiveness of its internal control over financial reporting for purposes of its reporting requirements.

Prior to the filing of the registration statement of which this proxy statement/prospectus/consent solicitation forms a part, ARCA was not subject to the Sarbanes-Oxley Act of 2002. Therefore, ARCA s management and independent registered public accounting firm did not perform an evaluation of ARCA s internal control over financial reporting as of December 31, 2007 in accordance with the provisions of the Sarbanes-Oxley Act. Material weaknesses may exist when the combined company reports on the effectiveness of its internal control over financial reporting for purposes of its reporting requirements under the Exchange Act or Section 404 of the Sarbanes-Oxley Act after the merger. The existence of one or more material weaknesses would preclude a conclusion that the combined company maintains effective internal control over financial reporting. Such a

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conclusion would be required to be disclosed in the combined company s future Annual Reports on Form 10-K and could impact the accuracy and timing of its financial reporting and the reliability of its internal control over financial reporting, which could harm the combined company s reputation and cause the market price of its common stock to drop.

Ownership of the combined company s common stock may be highly concentrated, and it may prevent you and other stockholders from influencing significant corporate decisions and may result in conflicts of interest that could cause the combined company s stock price to decline.

ARCA Executive officers, directors and their affiliates beneficially own or control approximately 88.49% of the outstanding common stock of ARCA (see ARCA Security Ownership of Certain Beneficial Owners and Management beginning on page 236 for more information on how ARCA beneficial ownership percentage is calculated and Security Ownership of Certain Beneficial Owners and Management Following the Merger beginning on page 240 for more information on the estimated ownership of the combined company following the merger). Accordingly, these executive officers, directors and their affiliates, acting individually or as a group, will have substantial influence over the outcome of a corporate action of the combined company requiring stockholder approval, including the election of directors, any merger, consolidation or sale of all or substantially all of the combined company s assets or any other significant corporate transaction. These stockholders may also delay or prevent a change in control of the combined company, even if such change in control would benefit the other stockholders of the combined company. The significant concentration of stock ownership may adversely affect the value of the combined company s common stock due to investors perception that conflicts of interest may exist or arise.

The combined company s stock price is expected to be volatile, and the market price of its common stock may drop following the merger.

The market price of the combined company s common stock could be subject to significant fluctuations following the merger. Market prices for securities of early-stage pharmaceutical, biotechnology and other life sciences companies have historically been particularly volatile. Some of the factors that may cause the market price of the combined company s common stock to fluctuate include:

- the regulatory status of Gencaro, and whether and when it is approved for sale, if at all;
- the results of the combined company s current and any future clinical trials and NDAs of its current and future product candidates;
- the entry into, or termination of, key agreements, including key strategic alliance agreements;
- the results and timing of regulatory reviews relating to the approval of the combined company s product candidates;
- failure of any of the combined company s product candidates, if approved, to achieve commercial success;
- general and industry-specific economic conditions that may affect the combined company s research and development expenditures;
- the results of clinical trials conducted by others on drugs that would compete with the combined company s product candidates;
- issues in manufacturing the combined company s product candidates or any approved products;
- the initiation of, material developments in or the conclusion of litigation to enforce or defend any of the combined company s intellectual property rights;

the loss of key employees;

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the introduction of technological innovations or new commercial products by competitors of the combined company;

changes in estimates or recommendations by securities analysts, if any, who cover the combined company s common stock;

future sales of the combined company s common stock;

changes in the structure of health care payment systems; and

period-to-period fluctuations in the combined company s financial results.

Moreover, the stock markets in general have experienced substantial volatility that has often been unrelated to the operating performance of individual companies. These broad market fluctuations may also adversely affect the trading price of the combined company s common stock.

In the past, following periods of volatility in the market price of a company s securities, stockholders have often instituted class action securities litigation against those companies. Such litigation, if instituted, could result in substantial costs and diversion of management attention and resources, which could significantly harm the combined company s profitability and reputation.

Nuvelo and ARCA do not expect the combined company to pay cash dividends, and accordingly, stockholders must rely on stock appreciation for any return on their investment in the combined company.

Nuvelo and ARCA anticipate that the combined company will retain its earnings, if any, for future growth and therefore does not anticipate paying cash dividends in the future. As a result, only appreciation of the price of the combined company s common stock will provide a return to stockholders. Investors seeking cash dividends should not invest in the combined company s common stock.

Anti-takeover provisions in the combined company s charter and bylaws may prevent or frustrate attempts by stockholders to change the board of directors or current management and could make a third-party acquisition of the combined company difficult.

The combined company s certificate of incorporation and bylaws, as amended, will contain provisions that may discourage, delay or prevent a merger, acquisition or other change in control that stockholders may consider favorable, including transactions in which stockholders might otherwise receive a premium for their shares. These provisions could limit the price that investors might be willing to pay in the future for shares of the combined company s common stock.

Nuvelo and ARCA may not be able to complete the merger or may elect to pursue a different strategic transaction, which may not occur on commercially reasonably terms or at all.

Neither Nuvelo nor ARCA can assure you that they will close the pending merger in a timely manner or at all. The merger agreement is subject to many closing conditions and termination rights, as set forth in more detail in The Merger Agreement Conditions to the Completion of the Merger and The Merger Agreement Termination below. If Nuvelo and ARCA do not close the pending merger, Nuvelo s and ARCA s board of directors may elect to attempt to complete a different strategic transaction. Attempting to complete a different strategic transaction would prove to be costly and time consuming, and neither Nuvelo nor ARCA can make any assurances that a future strategic transaction will occur on commercially reasonable terms or at all.

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Risks Related to Nuvelo

Nuvelo may not be able to develop and commercialize any of Nuvelo s product candidates successfully.

Nuvelo has two product candidates in clinical development, and does not know whether it will be able to develop them successfully. In January 2008, Nuvelo announced its enrollment of the first patient in a single-center, Phase 1 trial to determine the safety, tolerability and pharmacokinetics of escalating bolus doses of NU172. In April 2008, Nuvelo announced positive results from this Phase 1 trial. In August 2008, Nuvelo completed a Phase 1b proof-of-concept trial, in which NU172 rapidly produced and maintained anticoagulation with a rapid return toward baseline after the infusion ended. Nuvelo anticipates initiating a Phase 2 study evaluating NU172 in coronary artery bypass graft, or CABG, patients in the fourth quarter of 2008 or first quarter of 2009. Nuvelo cannot predict whether the results of the anticipated Phase 2 study will be consistent with the results of the earlier studies. Nuvelo cannot predict whether it will be able to initiate and complete the Phase 2 study, or whether it will be successful. Nuvelo has only tested NU172 in healthy, normal volunteers, and does not know how active it will be, or how well it will be tolerated, in patients undergoing medical or surgical procedures.

Nuvelo initiated a Phase 1 single ascending dose healthy volunteer trial for NU206 in Australia in July 2008 and expects top-line data from this trial in the fourth quarter of 2008. Nuvelo cannot predict whether Nuvelo will be able to successfully complete the Phase 1 trial for NU206 in healthy volunteers. Currently, Nuvelo does not have approval from the FDA to study NU206 in healthy volunteers. Nuvelo does not know how active NU206 will be in humans, or how well NU206 will be tolerated.

Nuvelo has had material clinical development failures in the past and may again in the future. In 2006, Nuvelo s clinical-stage product candidate, alfimeprase, did not meet its primary endpoint in the first of two planned Phase 3 trials for the treatment of acute peripheral arterial occlusion, or PAO, and in the first of two planned Phase 3 trials for the treatment of catheter occlusion, or CO. All clinical trials for alfimeprase were suspended in December 2006. Nuvelo subsequently reported its decision to close the suspended PAO trial. In the second quarter of 2007, Nuvelo reported its decision to pursue alfimeprase for the treatment of CO in a Phase 2 trial using a single, higher and more concentrated dose of alfimeprase and reported Nuvelo s decision to pursue alfimeprase for the treatment of acute ischemic stroke in a Phase 2 clinical trial. On March 17, 2008, Nuvelo announced that the data from its alfimeprase Phase 2 trial in CO did not show sufficient improvement in catheter opening at the higher dose and concentration evaluated in the study to meet the desired target product profile. As a result, Nuvelo ended further clinical development of alfimeprase, including the programs in CO and acute ischemic stroke.

In August 2007, Nuvelo announced the suspension of its clinical development of Nuvelo s product candidate, rNAPc2, for the treatment of metastatic colorectal cancer and acute coronary syndromes.

Other than Nuvelo s NU172 and NU206 product development programs, all of Nuvelo s potential products and programs, including its research programs in leukemia therapeutic antibodies and Wnt signaling pathway therapeutics, are currently in research or preclinical development, and revenues from the sales of any products may not occur for several years, if at all. If Nuvelo is unable to successfully develop and commercialize its products, Nuvelo s business, results of operations and financial condition will be affected in a materially adverse manner.

Nuvelo s success is dependent on the proper management of Nuvelo s current and future business operations, and the expenses associated with them.

Nuvelo s business strategy requires it to manage its operations to provide for the continued research and development of its product candidates. Nuvelo s strategy also calls for it to manage relationships with collaborators and other third parties, while simultaneously managing the expenses generated by these activities. In August 2007, Nuvelo announced a reduction of approximately 30% of its workforce, across its research,

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clinical development and administrative functions. This reduction in force was a part of Nuvelo s efforts to reduce its operating expenses through prioritization of Nuvelo s development portfolio and streamlining Nuvelo s infrastructure. As a result of the reduction in force, Nuvelo recorded a restructuring charge of approximately $2.3 million in the third quarter of 2007. On March 17, 2008, Nuvelo announced the decision to discontinue alfimeprase clinical development and restructure to make additional resources available for its other research and development programs. As a result of the reduction in force, Nuvelo recorded a restructuring expense of $2.5 million in the first quarter of 2008.

Nuvelo continues to believe that strict cost containment in the near term is essential if its current funds are to be sufficient to allow it to continue its currently planned operations. If Nuvelo is unable to effectively manage its current operations, it may not be able to implement its business strategy and its financial condition and results of operations will be adversely affected. If Nuvelo is unable to effectively manage its expenses, Nuvelo may find it necessary to reduce its expenses through another reduction in its workforce, which could adversely affect Nuvelo s operations.

If Nuvelo encounters difficulties enrolling patients in its clinical trials, its trials could be delayed or otherwise adversely affected.

Clinical trials for Nuvelo s product candidates require that Nuvelo identify and enroll a large number of patients with the disorder or condition under investigation. Nuvelo may not be able to enroll a sufficient number of patients to complete its clinical trials in a timely manner.

Patient enrollment is affected by factors including:

- design of the protocol;
- the size of the patient population;
- eligibility criteria for the study in question;
- perceived risks and benefits of the drug under study;
- availability of competing therapies, including the off-label use of therapies approved for related indications;
- efforts to facilitate timely enrollment in clinical trials;
- the success of Nuvelo s personnel in making the arrangements with potential clinical trial sites necessary for those sites to begin enrolling patients;
- patient referral practices of physicians;
- availability of clinical trial sites; and
- other clinical trials seeking to enroll subjects with similar profiles.

If Nuvelo has difficulty enrolling a sufficient number of patients to conduct its clinical trials as planned, Nuvelo may need to delay or terminate ongoing or planned clinical trials, either of which would have a negative effect on its business. Delays in enrolling patients in Nuvelo s clinical trials would also adversely affect its ability to generate product, milestone and royalty revenues, and could impose significant additional costs on

Nuvelo or on its collaborators.

Nuvelo s clinical trials for its product candidates may not yield results that will enable Nuvelo to further develop its products and obtain the regulatory approvals necessary to sell them.

Nuvelo, and its collaborators, will only receive regulatory approval for its product candidates if Nuvelo can demonstrate in carefully designed and conducted clinical trials that the product candidate is safe and effective. Nuvelo does not know whether its current or any future clinical trials will demonstrate sufficient safety and

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efficacy to obtain the requisite regulatory approvals or will result in marketable products. Clinical trials are lengthy, complex and expensive processes with uncertain results. Nuvelo has spent, and expects to continue to spend, significant amounts of time and money in the clinical development of its product candidates. It will take Nuvelo several years to complete its testing, and failure can occur at any stage of testing. The results Nuvelo obtains in preclinical testing and early clinical trials may not be predictive of results that are obtained in later studies. Nuvelo may suffer significant setbacks in advanced clinical trials, even after promising results in earlier studies. For example, in December 2006, Nuvelo announced that alfimeprase did not meet its primary endpoint in the first of two planned Phase 3 trials for the treatment of acute PAO and in the first of two planned Phase 3 trials for the treatment of CO. In the second quarter of 2007, Nuvelo reported its decision to close the suspended PAO trial. In March 2008, Nuvelo announced that the data from its alfimeprase Phase 2 program in CO did not show sufficient improvement in catheter opening at the higher dose and concentration evaluated in the study to meet the desired target product profile. As a result, Nuvelo ended further clinical development of alfimeprase, including the programs in CO and acute ischemic stroke. Based on results at any stage of clinical trials, Nuvelo may decide to repeat or redesign a trial or discontinue development of one or more of Nuvelo s product candidates. If Nuvelo fails to adequately demonstrate the safety and efficacy of its products under development, Nuvelo will not be able to obtain the required regulatory approvals to commercialize Nuvelo s product candidates, and its business, results of operations and financial condition would be materially adversely affected.

Clinical trials are subject to continuing oversight by governmental regulatory authorities and institutional review boards, or IRBs, and must meet the requirements of these authorities in the U.S. and in foreign countries, including those for informed consent and good clinical practices. Nuvelo may not be able to comply with these requirements and the FDA, a similar foreign authority, an IRB, or Nuvelo may suspend or terminate clinical trials at any time.

Administering Nuvelo s product candidates to humans may produce undesirable side effects. These side effects could interrupt, delay or halt clinical trials of Nuvelo s product candidates and could result in the FDA or other regulatory authorities denying approval of its product candidates for any or all targeted indications.

If clinical trials for a product candidate are unsuccessful, Nuvelo will be unable to commercialize the product candidate. If one or more of Nuvelo s clinical trials are delayed, it will be unable to meet its anticipated development timelines. Either circumstance could cause the market price of Nuvelo s common stock to decline. For example, in December 2006, after Nuvelo announced that alfimeprase did not meet its primary endpoint in Phase 3 trials for the treatment of PAO and a Phase 3 trial for CO, the closing price of Nuvelo s common stock was $4.05 on the day of the announcement, as compared with $19.55 on the trading day prior to the announcement. Similarly, when Nuvelo announced it was terminating all clinical development of alfimeprase in March 2008, the closing price of Nuvelo s common stock was $0.73 the day after the announcement, as compared with $1.36 prior to the announcement.

If Nuvelo fails to maintain existing licenses, or fails to develop new collaborations, its business will be harmed.

The success of Nuvelo s business is dependent, in significant part, upon its ability to maintain current licensing and collaborative relationships, and to enter into multiple new licenses and collaboration agreements. Nuvelo also must manage effectively the numerous issues that arise from such arrangements and agreements. Management of Nuvelo s relationships with these third parties has required and will require:

- a significant amount of Nuvelo s management team s time and effort;
- effective allocation of Nuvelo and third-party resources to multiple projects;
- agreements with third parties as to ownership of proprietary rights and development plans, including clinical trials or regulatory approval strategy; and
- the recruitment and retention of management, scientific and other personnel.

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In March 2005, Nuvelo entered into a collaboration agreement with the Kirin Pharma Company, Limited for the development and commercialization of NU206. Nuvelo initiated a Phase 1 single ascending dose healthy volunteer trial for NU206 in Australia in July 2008, and expects top-line data expected from this trial in the fourth quarter of 2008. All operating expenses and any profits related to the development and commercialization of NU206 are being shared 60 percent by Nuvelo and 40 percent by Kirin. If this agreement is terminated, or Nuvelo or Kirin elect under certain circumstances to no longer actively participate in the collaboration, the relationship with respect to NU206 will convert from an expense and profit sharing structure to a royalty-based structure. If the agreement is terminated by Kirin, Nuvelo will be responsible for all costs and expenses associated with Nuvelo s research and development of NU206.

On July 31, 2006, Nuvelo entered into an agreement with Archemix Corporation. Under the agreement, Archemix is responsible for the discovery of short-acting aptamers targeting the coagulation cascade for use in acute cardiovascular procedures, and Nuvelo is responsible for development and worldwide commercialization of these product candidates. Under the agreement, Nuvelo made an upfront license fee payment to Archemix of $4.0 million. Nuvelo is also funding at least $5.25 million of Archemix s research in the area of short-acting aptamer discovery over the first six years of the agreement. In addition, Nuvelo may have to make payments to Archemix totaling up to $35.0 million per development compound on the achievement of specified development and regulatory milestones, along with potential royalty payments based on sales of licensed compounds. In August 2008, Nuvelo completed a Phase 1b proof-of-concept trial, in which NU172 rapidly produced and maintained anticoagulation with a rapid return toward baseline after the infusion ended. Nuvelo anticipates initiating a Phase 2 study evaluating NU172 in CABG patients in the fourth quarter of 2008 or first quarter of 2009. If and when Nuvelo enrolls the first patient in a Phase 2 study of NU172, a $3.0 million milestone fee becomes payable to Archemix. At the initiation of the first Phase 3 study for any licensed compound, Archemix has the option to elect to participate in profits from sales of the compound by funding its pro rata share of prior and future product development and commercialization expenses, in lieu of receiving milestone payments and royalties with respect to that compound. Nuvelo also is obligated to purchase Archemix common stock having a value equal to the lesser of $10.0 million or 15 percent of the total gross proceeds raised by Archemix in a qualified public offering of Archemix stock occurring within five years of the effective date of the new collaboration agreement.

Due to the factors discussed above and other possible disagreements with current or potential collaborative partners, Nuvelo may be delayed or prevented from developing or commercializing NU172, NU206 or other preclinical product candidates, or Nuvelo may become involved in litigation or arbitration with its partners, which would be time-consuming or expensive and could have a material adverse effect on Nuvelo s stock price. Nuvelo s relationships with its collaboration partners also may be materially adversely affected by any failure to successfully enroll or complete any of its planned trials of its product candidates. Nuvelo s efforts to manage simultaneously a number of collaboration arrangements may not be successful, and its failure to manage effectively such collaborations would significantly harm its business, financial condition and results of operations.

In addition to Nuvelo s existing collaborations, Nuvelo may enter into new collaborative arrangements whereby Nuvelo would share costs of identifying, developing and marketing product candidates. Nuvelo cannot assure you that it will be able to negotiate new collaboration arrangements of this type on acceptable terms, or at all.

Nuvelo heavily depends on third parties for manufacturing and a variety of other functions, including clinical trials management. Nuvelo s current and future arrangements with its manufacturers and other third parties may not provide it with the benefits Nuvelo expects.

Nuvelo does not have the resources, facilities or experience to manufacture its product candidates on its own. Nuvelo relies on third parties, such as contract research and manufacturing organizations, to manufacture its product candidates for clinical trials, and, if Nuvelo s product candidates are approved, in quantities for commercial sales. Nuvelo currently relies on a number of sole-source service providers and suppliers to

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manufacture bulk drug substance, fill and finish its product candidates and label and package them. Nuvelo does not have long-term supply agreements with these third-party manufacturers. Nuvelo may not be able to finalize contractual arrangements, transfer technology or maintain relationships with such organizations in order to file an investigational new drug application, or IND, with the FDA, and proceed with clinical trials for any of Nuvelo s product candidates.

Since a Phase 2 study of NU172 is to be initiated, and NU206 is in Phase 1 clinical trials, Nuvelo is dependent upon third-party contract manufacturers to develop the necessary production processes and produce the volume of cGMP-grade material needed to complete such trials. Nuvelo has entered into and intends to enter into additional contractual relationships with third parties in order to (i) complete the Good Laboratory Practices, or GLP, toxicology and other studies necessary to file INDs with the FDA, (ii) produce a sufficient volume of cGMP-grade material in order to conduct clinical trials of these other product candidates and (iii) fill and finish and label and package Nuvelo s material. Nuvelo cannot be certain that it will be able to complete these tasks on a timely basis or that it will be able to obtain sufficient quantities of material or other manufacturing services on commercially reasonable terms. In addition, the failure of any of these third parties to perform their obligations may delay Nuvelo s filing for an IND or impede Nuvelo s progress through the clinical trial phase. Any significant delay or interruption would have a material adverse effect on Nuvelo s ability to file an IND with the FDA and/or proceed with the clinical trial phase for any of its product candidates.

Moreover, contract manufacturers that Nuvelo may use must continually adhere to cGMP enforced by the FDA through a facilities inspection program. If one of Nuvelo s contract manufacturers fails to maintain compliance, the production of Nuvelo s product candidate could be interrupted, resulting in delays, additional costs and potentially lost revenues. In addition, if the facilities of such manufacturers do not pass a pre-approval plant inspection, the FDA will not grant pre-market approval of Nuvelo s product candidates.

Nuvelo also currently relies upon third parties to perform administrative functions and functions related to the research, development, preclinical testing and clinical trials of its product candidates. Nuvelo s reliance on third-party contract research organizations and consultants that manage and monitor its clinical trials may result in delays in completing, or in failing to complete, Nuvelo s clinical trials if they fail to perform with the speed and competency Nuvelo expects. Nuvelo s reliance on third-party contract research organizations to conduct research and testing, including GLP, and toxicology studies necessary to gather the data necessary to file INDs with the FDA for any of Nuvelo s product candidates may result in delays in Nuvelo s regulatory filings if the third parties do not conduct their research or testing properly, or if they fail to complete their contract research or testing on the anticipated schedule. In either case, the progress of Nuvelo s clinical programs may be delayed and Nuvelo s research and development costs may increase, which may in turn have a material adverse affect on Nuvelo s business.

Nuvelo s reliance on these manufacturing and other contract services relationships poses a number of risks, including:

- inability of third parties to manufacture, including filing and finishing and labeling and packaging, Nuvelo s product candidates in a cost-effective or timely manner or in quantities needed for clinical trials;
- changes to current raw material suppliers or product manufacturers (whether the change is attributable to Nuvelo or the supplier or manufacturer), resulting in delayed clinical studies, regulatory submissions and commercialization of Nuvelo s product candidates;
- failure to identify acceptable manufacturers or other suppliers or enter into favorable long-term agreements with them;
- ineffective clinical trials management or monitoring resulting in delays in or interruptions to Nuvelo s clinical trials;

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delays in, or failures to achieve, scale-up to commercial quantities of Nuvelo s product candidates resulting in delayed regulatory submissions and commercialization of Nuvelo s product candidates;

Nuvelo s inability to effectively control the resources devoted by Nuvelo s partners to its programs or products;

disagreements with third parties that could disrupt Nuvelo s operation or delay or terminate the research, development or manufacturing of product candidates, or result in litigation or arbitration;

inadequate contractual protection or difficulty in enforcing the contracts if one of Nuvelo s partners fails to perform;

failure of these third parties to comply with regulatory requirements;

conflicts of interest between third parties work for Nuvelo and their work for another entity or entities, and the resulting loss of their services; and

lack of all necessary intellectual property rights to manufacture and sell Nuvelo s product candidates.

Given these risks, Nuvelo s current and future arrangements with third parties may not be successful. If these efforts fail, Nuvelo would be required to devote additional internal resources to the activities currently performed, or to be performed, by third parties, to seek alternative third-party sources, or to delay Nuvelo s product development or commercialization.

Nuvelo is dependent on key personnel, and it must attract and retain qualified employees, collaborators and consultants.

The success of Nuvelo s business is highly dependent on the principal members of Nuvelo s scientific and management staff, including Nuvelo s senior management team. The loss of the services of any such individual might seriously harm Nuvelo s product development efforts. Retaining and training personnel with the requisite skills is challenging and extremely competitive, particularly in Northern California, where Nuvelo is located.

Nuvelo s success will depend on Nuvelo s ability to attract and retain qualified employees to help develop its potential products and execute its research and development strategy. Nuvelo has programs in place to retain personnel, including programs to create a positive work environment and competitive compensation packages. Because competition for employees in Nuvelo s field is intense, however, Nuvelo may be unable to retain its existing personnel or attract qualified individuals to fill open positions. In addition, in August 2007 and again in March 2008 Nuvelo reduced its workforce as part of its efforts to reduce operating expenses through prioritization of its development portfolio and streamlining its infrastructure. These reductions in Nuvelo s workforce, together with its evaluation of strategic alternatives, may impair its ability to recruit and retain qualified employees and to effectively complete administrative and development functions. If Nuvelo needs to rehire terminated individuals or hire individuals with similar skills, it may be unable to do so. Nuvelo s success also depends on the continued availability of outside scientific collaborators, including collaborators at research institutions, to perform research and develop processes to advance and augment Nuvelo s internal research efforts. Competition for collaborators is intense. Nuvelo also relies on services provided by outside consultants. Attracting and retaining qualified outside consultants is competitive, and, generally, outside consultants can terminate their relationship with Nuvelo at will. If Nuvelo does not retain qualified personnel, outside consultants and scientific collaborators, or if it experiences turnover or difficulties recruiting new employees or outside consultants, Nuvelo s research and development programs could be delayed, and it could experience difficulties in generating sufficient revenue to maintain its business.

Nuvelo may not achieve its projected development goals in the time frames it announces and expects.

Nuvelo sets goals for, and makes public statements regarding, the timing of certain accomplishments, such as the commencement and completion of clinical trials and the disclosure of trial results, which Nuvelo

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sometimes refers to as milestones. These milestones may not be achieved, and the actual timing of these events can vary dramatically due to a number of factors such as delays or failures in Nuvelo s clinical trials, disagreements with current or future collaborative partners, the uncertainties inherent in the regulatory approval process and manufacturing scale-up and delays in achieving manufacturing or marketing arrangements sufficient to commercialize Nuvelo s products. There can be no assurance that Nuvelo s clinical trials will be completed, or that it will make regulatory submissions or receive regulatory approvals as planned. If Nuvelo fails to achieve one or more of these milestones as planned, its business will be materially adversely affected, and the price of Nuvelo s shares will decline.

The success of Nuvelo s potential products in research and preclinical studies does not guarantee that these results will be replicated in humans.

Several of Nuvelo s drug development programs are currently in the research stage or in preclinical development, including Nuvelo s research programs in leukemia therapeutic antibodies and Wnt signaling pathway therapeutics. Although Nuvelo s clinical development-stage product candidates have shown favorable results in preclinical studies, these results may not be replicated in Nuvelo s clinical trials with humans. Before Nuvelo makes any products available to the public from its research and development programs, Nuvelo or its collaboration partners will need to conduct further research and development and complete laboratory testing and animal studies. These programs may not move beyond their current stages of development. Even if Nuvelo s research does advance, Nuvelo will need to engage in certain additional preclinical development efforts to determine whether a product is sufficiently safe and effective to enter clinical trials. Nuvelo has little experience with these activities with respect to protein candidates and may not be successful in developing these products. Consequently, there is no assurance that the results in Nuvelo s research and preclinical studies are predictive of the results that Nuvelo may see in its clinical trials with humans or that they are predictive of whether any resulting products will be safe and effective in humans.

FDA and international regulatory approval of Nuvelo s products is uncertain.

The research, testing, manufacturing and marketing of drug products such as those proposed to be developed by Nuvelo or its collaboration partners are subject to extensive regulation by federal, state and local governmental authorities, including the FDA and comparable agencies in other countries. To obtain regulatory approval of a drug product, Nuvelo or its collaboration partners must demonstrate to the satisfaction of the applicable regulatory agency, among other things, that the product is safe and effective for its intended uses. In addition, Nuvelo must show that the manufacturing facilities used to produce the products are in compliance with current cGMP and that the process for manufacturing the product has been validated in accordance with the requirements of the FDA and comparable agencies in other countries.

The process of obtaining FDA and other required regulatory approvals and clearances typically takes several years and will require Nuvelo to expend substantial capital and resources. Despite the time and expense expended, regulatory approval is never guaranteed. The number of preclinical and clinical tests that will be required for FDA and international regulatory approval varies depending on the product candidate, the disease or condition that the product candidate is in development for, and the regulations applicable to that particular product candidate. The FDA or comparable international regulatory authorities can delay, limit or deny approval of a product candidate for many reasons, including:

- a product candidate may not be safe or effective;
- the FDA or comparable international regulatory authorities may interpret data from preclinical and clinical testing in different ways than Nuvelo and Nuvelo s collaboration partners interpret them;
- the FDA or comparable international regulatory authorities may not approve Nuvelo s manufacturing processes or facilities or the processes or facilities of Nuvelo s collaboration partners; or
- the FDA or comparable international regulatory officials may change their approval polices or adopt new regulations.

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In addition, in order to market any products outside of the U.S., Nuvelo and its collaborators must establish and comply with numerous and varying regulatory requirements of other jurisdictions, including the European Medicines Evaluation Agency, or EMEA, regarding safety and efficacy. Approval procedures vary among countries and can involve additional product testing and additional administrative review periods. The time required to obtain approval in other countries differs from that required to obtain FDA approval. The regulatory approval process in other countries can include all of the risks detailed above regarding FDA approval in the U.S. as well as other risks. Regulatory approval in one country does not ensure regulatory approval in another, but a failure or delay in obtaining regulatory approval in one country may have a negative effect on the regulatory process in others. Failure to obtain regulatory approval in other countries or any delay or setback in obtaining such approval could have the same adverse effects detailed above regarding FDA approval in the U.S.

If and when Nuvelo s products obtain such approval or clearances, the manufacturing, marketing and distribution of such products would remain subject to extensive ongoing regulatory requirements. Failure to comply with applicable regulatory requirements could result in:

- warning letters;
- fines;
- civil penalties;
- injunctions;
- recall or seizure of products;
- total or partial suspension of production;
- refusal of the government to grant approvals; or
- withdrawal of approvals and criminal prosecution.

Any delay or failure by Nuvelo, or its collaboration partners, to obtain regulatory approvals for Nuvelo s product candidates:

- would adversely affect Nuvelo s ability to generate product, milestone and royalty revenues;
- could impose significant additional costs on Nuvelo or its collaboration partners;
- could diminish competitive advantages that Nuvelo may attain;
- would adversely affect the marketing of Nuvelo s products; and

could cause the price of Nuvelo s shares to decline.

Even if Nuvelo receives regulatory approval for its product candidates, the FDA or international regulatory authorities may impose limitations on the indicated uses for which Nuvelo s products may be marketed and subsequently withdraw approval or take other actions against Nuvelo, or its products, that are adverse to Nuvelo s business. The FDA and comparable international regulatory authorities generally approve products for particular indications. An approval for a limited indication reduces the size of the potential market for the product. Product approvals, once granted, may be withdrawn if problems occur after initial marketing.

Nuvelo has not yet commercialized any of its product candidates; Nuvelo s ability to commercialize products is unproven.

Nuvelo has not yet commercialized any of its in-licensed therapeutic product candidates. Nuvelo s commercialization of products is subject to several risks, including but not limited to:

the possibility that a product is toxic, ineffective or unreliable;

failure to obtain regulatory approval for the product;

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difficulties in manufacturing the product on a large scale;

difficulties in planning, coordinating and executing the commercial launch of the product;

difficulties in marketing, distribution or sale of the product;

the possibility of a failure to comply with laws and regulations related to the marketing sale and reimbursement of the product;

competition from superior products; or

third-party patents that preclude Nuvelo from marketing a product.

Any regulatory approvals that Nuvelo or its collaboration partners receive for Nuvelo s product candidates may be subject to limitations on the intended uses for which the product candidates may be marketed or contain requirements for potentially costly post-marketing follow-up studies. The labeling, packaging, adverse event reporting, storage, advertising, promotion and record-keeping for any approved product will be subject to extensive regulatory requirements. Additionally, Nuvelo, its collaborators and its suppliers may not be able to produce any products in commercial quantities at a reasonable cost or may not be able to successfully market such products. If Nuvelo does not develop a commercially viable product, then Nuvelo will suffer significant harm to its business, financial condition and operating results.

Even if a product candidate is approved for commercial sale, significant strategic planning and resources will be necessary to effectively coordinate the commercial launch of the product in the approved indication or indications, and to effectively market, distribute and sell the product for use in the approved indication or indications. In addition, the marketing, distribution, sale and reimbursement of pharmaceutical products is heavily regulated, and Nuvelo must comply with all such applicable laws and regulations, or incur costs, fees, fines and other liabilities associated with non-compliance. If Nuvelo s or a collaboration partner s commercial launch of a product approved for commercial sale were to be unsuccessful, or if Nuvelo or a collaboration partner were to fail in Nuvelo s or their efforts to properly market, distribute or sell any product approved for sale, Nuvelo s business, financial condition and operating results would suffer significant harm.

Even if approved, Nuvelo s products may not be accepted in the marketplace, and Nuvelo may not be able to generate significant revenue, if any.

Even if they are approved for marketing, Nuvelo s products, if any, may never achieve market acceptance among physicians, patients and the medical community. The degree of market acceptance of any products developed by Nuvelo, alone or in conjunction with collaboration partners, will depend on a number of factors, including:

the establishment and demonstration of the clinical efficacy and safety of the products;

convenience and ease of administration;

cost-effectiveness;

Nuvelo s products potential advantages over alternative treatment methods;

marketing, sales and distribution support of Nuvelo s products; and

reimbursement policies of government and third-party payers.

Physicians, patients or the medical community in general may not accept and utilize any of the products that Nuvelo alone, or in conjunction with Nuvelo s collaboration partners, develops. In practice, competitors may be more effective in marketing their drugs. The lack of such market acceptance would significantly harm Nuvelo s business, financial condition and results of operations. Even if Nuvelo s product candidates are approved for marketing and are accepted by physicians, patients and the medical community, the size of the market for these

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products may be insufficient to sustain Nuvelo s business, or may not provide an acceptable return on Nuvelo s investment in the development of these products. As a result, the commercialization of any of Nuvelo s product candidates could fail even if Nuvelo receives marketing approval from the FDA or similar foreign authorities, and acceptance by the medical and patient communities.

Nuvelo faces intense competition.

The biopharmaceutical industry is intensely competitive, which is accentuated by the rapid pace of technological development. Nuvelo s products, if successfully developed, will compete with a number of traditional drugs and therapies and with new products currently under development. Nuvelo also expects to face increased competition in the future as new companies enter Nuvelo s markets. Research and discoveries by others may result in breakthroughs that render Nuvelo s potential products obsolete even before they begin to generate any revenue. The competitors for Nuvelo s drugs currently in development will vary depending on the particular indication pursued, and may include major pharmaceutical, medical device and biotechnology firms, many of which have substantially greater research and product development capabilities and financial, scientific, marketing and human resources than Nuvelo has. Nuvelo s lead clinical-stage product candidate, NU172, is an anticoagulant that has the potential for predictable anticoagulant effects and rapid self-reversal. If approved, it could face competition from other drugs or devices that are used to anticoagulate a patient in the setting of medical or surgical procedures where human blood is exposed to foreign materials such as coronary artery bypass graft surgery, kidney dialysis and a variety of vascular surgical and coronary interventions. Competition differs depending on the indication and includes, for example, heparin and its antidote, protamine, as well as Angiomax® bivalirudin, an approved product of The Medicines Company. Nuvelo s second product candidate, NU206, if approved for the treatment of mucositis, could face competition from drugs such as palifermin, an approved Amgen product.

Nuvelo s competitors may obtain patents and regulatory approvals for their competing products more rapidly than Nuvelo or its collaboration partners, or develop products that are more effective than those developed by Nuvelo or its collaboration partners. All of Nuvelo s products will face competition from companies developing similar products as well as from companies developing other forms of treatment for the same conditions.

Many of the companies developing competing products have greater expertise than Nuvelo or its collaboration partners have in discovery, research and development, manufacturing, preclinical and clinical testing, obtaining regulatory approvals and marketing. Other smaller companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These companies as well as other organizations compete with Nuvelo in recruiting and retaining qualified scientific and management personnel as well as in acquiring technologies complementary to Nuvelo s programs. Nuvelo may face competition with respect to:

- product efficacy and safety;
- the timing and scope of regulatory approvals;
- availability of resources;
- reimbursement coverage; and
- price and patent position, including the potentially dominant patent positions of others.

There can be no assurance that research and development by others will not render the products that Nuvelo may develop obsolete or uneconomical, or result in treatments or cures superior to any therapy developed by Nuvelo or that any therapy Nuvelo develops will be preferred to any existing or newly-developed alternative products.

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Nuvelo is subject to the risk of natural disasters.

Nuvelo s facilities are located in Northern California. If a fire, earthquake, flood or other natural disaster disrupts Nuvelo s research or development efforts, Nuvelo s business, financial condition and operating results could be materially adversely affected. Although Nuvelo maintains personal property and general business interruption coverage, it does not maintain earthquake or flood insurance coverage for personal property or resulting business interruption.

Risks Related to Nuvelo s Capital Structure and Financial Results and Stock Price Volatility

Nuvelo will need to raise additional capital, and such capital may be unavailable to Nuvelo when it needs it or not available on acceptable terms.

Nuvelo will need to raise significant additional capital to finance the research and clinical development of Nuvelo s product candidates. If future securities offerings are successful, they could dilute Nuvelo s current stockholders equity interests and reduce the market price of Nuvelo s common stock. Financing may be unavailable when Nuvelo needs it or may not be available on acceptable terms. The unavailability of financing may require Nuvelo to delay, scale back or eliminate expenditures for the research and development of Nuvelo s potential biopharmaceutical products. Nuvelo may also be required to raise capital by granting rights to third parties to develop and market product candidates that Nuvelo would prefer to develop and market on its own, potentially reducing the ultimate value that Nuvelo could realize from these product candidates.

If Nuvelo is unable to obtain additional financing when it needs it, the capital markets may perceive that Nuvelo is not able to raise the amount of financing it desires, or on the terms that it desires. This perception, if it occurs, may negatively affect the market price of Nuvelo s common stock. If sufficient capital is not available, Nuvelo may be forced to delay, reduce the scope of, eliminate or divest one or more of Nuvelo s research or development programs. As an example, in August 2007, Nuvelo announced that it suspended the clinical development of rNAPc2. Any such action could significantly harm Nuvelo s business, financial condition and results of operations.

Nuvelo s future capital requirements and the adequacy of Nuvelo s currently available funds will depend on many factors, including, among others, the following:

- any business transactions or arrangements through which the Company acquires or purchases new products, product candidates or other companies;
- Nuvelo s ability to maintain, and the financial commitments involved in, Nuvelo s existing collaborative and licensing arrangements, including Nuvelo s ability to continue to receive cost-sharing reimbursements from Kirin;
- progress in current and anticipated clinical studies of Nuvelo s products, including NU172 and NU206;
- Nuvelo s need to develop, acquire or license new technologies or products;
- future funding commitments to new and existing collaborators, such as Archemix, from which Nuvelo is obligated to purchase Archemix common stock having a value equal to the lesser of $10.0 million or 15% of the total gross proceeds raised by Archemix in a qualified public offering;
- the cost of manufacturing Nuvelo s material for preclinical and clinical purposes;
- Nuvelo s ability to establish new collaborative relationships with other companies to share costs and expertise of identifying, developing and commercializing product candidates;

the magnitude and scope of Nuvelo s research and development programs, including development of product candidates;

continued scientific progress in Nuvelo s research and development programs, including progress in Nuvelo s research and preclinical studies;

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the cost involved in maintaining facilities to support research and development of Nuvelo s product candidates;

the cost of prosecuting and enforcing Nuvelo s intellectual property rights;

the time and cost involved in obtaining regulatory approvals;

competing technological and market developments;

current conditions and the uncertainty of future conditions in the financial markets and in the biotech sector; and

other factors not within Nuvelo s control.

As of September 30, 2008, Nuvelo s stock price does not meet the minimum bid price for continued listing on the Nasdaq Global Market. Nuvelo s ability to publicly or privately sell equity securities and the liquidity of Nuvelo s common stock could be adversely affected if Nuvelo is delisted from the Nasdaq Global Market or if Nuvelo is unable to transfer its listing to another stock market.

Nasdaq Global Market listing standards require that for continued listing, the bid price of Nuvelo s common stock must be a minimum of $1.00 per share. Since Nuvelo announced on March 17, 2008 that it was terminating the development of alfimeprase, the bid price of Nuvelo s common stock has been less than $1.00 each trading day since March 18, 2008. On May 1, 2008, Nuvelo received notice from Nasdaq indicating that, for 30 consecutive business days, the bid price for Nuvelo s common stock had closed below the minimum $1.00 per share requirement for continued inclusion on the Nasdaq Global Market. Nuvelo was given 180 calendar days, or until October 28, 2008, to regain compliance with this listing requirement, which would be accomplished if the bid price of Nuvelo s common stock closed at $1.00 per share or more for a minimum of 10 consecutive business days. As of September 30, 2008, the bid price of Nuvelo s common stock closed at $0.44 per share. The notice from Nasdaq also indicated that, if Nuvelo does not regain compliance by October 28, 2008, Nasdaq will provide a staff determination letter notifying Nuvelo that its common stock will be delisted, after which Nuvelo may appeal the staff determination to the Nasdaq Listing Qualifications Panel. On October 16, 2008, Nasdaq advised Nuvelo that it had suspended until January 19, 2009 the enforcement of the rules requiring a minimum $1.00 closing bid price for all Nasdaq listed companies.

Following the end of this suspension period and the 12 day balance of Nuvelo s initial 180 days compliance period, Nuvelo expects to receive a staff determination letter if it has not regained compliance by that time. Upon receipt of the determination letter, Nuvelo intends to submit a request to appeal the determination and present a plan for compliance at an oral hearing with Nasdaq in Washington, D.C. The request for appeal will automatically stay the determination until the appeal is heard and a Nasdaq panel rules on whether to grant conditional listing for up to 180 days following the staff determination in order for Nuvelo to complete its plan of compliance. There can be no assurance that the appeal will be successful or on the timeline presented above or that the plan of compliance and the combined company will be able to satisfy the requirements for maintaining a Nasdaq Global Market listing.

As part of this prospectus/proxy statement/consent solicitation, Nuvelo is seeking stockholder approval for a reverse split of its common stock in order to regain compliance with Nasdaq s minimum bid price requirement. See the section of this prospectus/proxy statement/consent solicitation titled Nuvelo Proposal No. 2 Amendment to Amended and Restated Certificate of Incorporation to Effect a Reverse Stock Split of Nuvelo s Common Stock. There can be no assurance that the reverse split will be approved or will have its desired effect.

If Nuvelo does not regain compliance with this listing requirement by the new deadline imposed by Nasdaq, but meets the initial inclusion criteria for the Nasdaq Capital Market (except for the bid price requirement), Nuvelo may apply to transfer the listing of Nuvelo s common stock to this market. If accepted by the Nasdaq Capital Market, Nuvelo will be provided with an additional 180-day period to demonstrate compliance. If Nuvelo

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is not eligible for an additional compliance period at that time, Nasdaq will provide written notification that Nuvelo s securities will be delisted. Upon such notice, Nuvelo may appeal the determination to the Nasdaq Listing Qualifications Panel. There can be no assurance that Nuvelo s common stock would be eligible for transfer to the Nasdaq Capital Market, or, if Nuvelo appeals Nasdaq staff s determination, that such appeal would be successful.

If Nuvelo s common stock is delisted by Nasdaq, its common stock may be eligible for quotation on the OTC Bulletin Board maintained by Nasdaq, another over-the-counter quotation system, or on the pink sheets. Upon any such delisting, Nuvelo s common stock would become subject to the regulations of the Securities and Exchange Commission relating to the market for penny stocks. A penny stock is any equity security not traded on a national securities exchange that has a market price of less than $5.00 per share. The regulations applicable to penny stocks may severely affect the market liquidity for Nuvelo s common stock and could limit your ability to sell your securities in the secondary market. In such a case, an investor may find it more difficult to dispose of or obtain accurate quotations as to the market value of Nuvelo s common stock, although there can be no assurance that Nuvelo s common stock will be eligible for trading or quotation on any alternative exchanges or markets.

Delisting from Nasdaq could adversely affect Nuvelo s ability to raise additional financing through the public or private sale of equity securities, would significantly affect the ability of investors to trade Nuvelo s securities and would negatively affect the value and liquidity of Nuvelo s common stock. Delisting could also have other negative results, including the potential loss of confidence by employees, the loss of institutional investor interest and fewer business development opportunities.

Nuvelo s stock price has historically been and is likely to remain highly volatile, and an investment in Nuvelo s stock could suffer a decline in value.

Stock prices and trading volumes for many biopharmaceutical companies fluctuate widely for a number of reasons, including factors which may be unrelated to their businesses or results of operations, such as media coverage, legislative and regulatory measures and the activities of various interest groups or organizations. This market volatility, as well as general domestic or international economic, market and political conditions, could materially and adversely affect the market price of Nuvelo s common stock and the return on any investment in Nuvelo s company.

Historically, Nuvelo s stock price has been extremely volatile. Between January 1, 2007 and December 31, 2007, the price ranged between a high of $6.63 per share and a low of $1.26 per share. Between January 1, 2008 and September 30, 2008, the price ranged between a high of $1.88 per share and a low of $0.34 per share. In March 2008, Nuvelo announced that the data from Nuvelo s Phase 2 program in catheter occlusion did not show sufficient improvement in catheter opening at the higher dose and concentration evaluated in the study to meet the desired target product profile and that Nuvelo ended further clinical development of alfimeprase. The closing price of Nuvelo s common stock was $0.73 the day after this announcement, as compared with $1.36 prior to this announcement. Significant market price fluctuations of Nuvelo s common stock can be due to a variety of factors, including:

- the depth of demand for Nuvelo s common stock;
- any announcements of or speculation about strategic transactions involving Nuvelo, such as its merging with, being acquired by, or acquiring another entity;
- the experimental nature of, and public concern or expectations with respect to, Nuvelo s product candidates;
- actual or anticipated fluctuations in Nuvelo s operating results;
- sales of Nuvelo s common stock by existing holders, or sales of shares issuable upon exercise of outstanding options and warrants;

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market conditions relating to the biopharmaceutical and pharmaceutical industries;

any announcements of technological innovations, new commercial products or collaborations, or clinical progress or lack thereof by Nuvelo, its collaborative partners or its competitors;

announcements concerning regulatory developments or developments with respect to proprietary rights;

changes in Nuvelo s collaborative arrangements;

changes in or Nuvelo s failure to meet market or, to the extent securities analysts follow Nuvelo s common stock, securities analysts expectations;

loss of key personnel;

changes in accounting principles; and

general market conditions.

In addition, the stock market in general, and the market for biotechnology and other life science stocks in particular, has historically been subject to extreme price and volume fluctuations. This volatility has had a significant effect on the market prices of securities issued by many companies for reasons unrelated to the operating performance of these companies.

Nuvelo has a significant accumulated deficit and anticipates continuing losses.

Nuvelo has incurred significant net losses, including $130.6 million in 2006, $12.3 million in 2007 and $18.6 million in the six months ended June 30, 2008. As of June 30, 2008, Nuvelo had an accumulated deficit of $489.2 million and Nuvelo anticipate continuing losses for the foreseeable future.

All of Nuvelo s product candidates are in various stages of product development, and some are still in research or in early development. None of them are approved for sale. The process of developing Nuvelo s drug products will require significant additional research and development, preclinical testing, clinical trials and regulatory approvals.

These activities, together with drug manufacturing, general administrative and other expenses, are expected to result in operating losses for the foreseeable future. To date, Nuvelo has not generated any revenues from product sales. Nuvelo does not expect to achieve significant product sales or royalty revenue from product sales for several years, and it may never do so. Nuvelo expects to incur additional operating losses in the future, and these losses may increase significantly as Nuvelo continues preclinical research and clinical trials, applies for regulatory approvals and develops its product candidates. These losses, among other things, have caused and may cause Nuvelo s stockholders equity and working capital to decrease. Nuvelo may not be successful in developing its product candidates and obtaining regulatory approvals. Nuvelo may never generate profits and, as a result, the market price of Nuvelo s common stock could decline.

Moreover, utilization of Nuvelo s net operating loss and research and development credit carryforwards are subject to an annual limitation under the change in ownership provisions of the Internal Revenue Code of 1986 and similar state law provisions, as a result of certain transactions that Nuvelo has entered into prior to 2006. If the proposed merger with ARCA is consummated, a change in ownership of Nuvelo will occur and Nuvelo s ability to utilize these carryforwards will be substantially reduced.

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Nuvelo may face fluctuations in operating results.

Nuvelo s operating results may rise or fall significantly from period to period as a result of many factors, including:

- any business transactions or arrangements through which Nuvelo acquires or purchases new products or product candidates;
- the amount of research and development Nuvelo engage in;
- if Nuvelo is obligated to purchase Archemix common stock having a value equal to the lesser of $10.0 million or 15 percent of the total gross proceeds, in accordance with the collaboration agreement with Archemix;
- the number of product candidates Nuvelo has, their progress in research, preclinical and clinical studies and the costs involved in manufacturing them;
- Nuvelo s ability to maintain existing and enter into new strategic relationships;
- the scope, duration and effectiveness of Nuvelo s licensing and collaborative arrangements;
- Nuvelo s ability to maintain its facilities to support its operations;
- the costs involved in prosecuting, maintaining and enforcing patent claims;
- the possibility that others may have or obtain patent rights that are superior to Nuvelo s;
- changes in government regulation;
- changes in the price of Nuvelo s common stock or other variables used as a basis for valuing stock-based awards;
- changes in accounting policies or principles; and
- release of successful products into the market by Nuvelo s competitors.

In addition, as a result of Nuvelo s adoption of SFAS 123(R), Nuvelo must measure compensation cost for stock-based awards made to employees at the grant date of the award, based on the fair value of the award, and recognize the cost as an expense over the employee s requisite service period. As the variables that Nuvelo uses as a basis for valuing future awards change over time, the magnitude of the expense that Nuvelo must recognize may vary significantly. Any such variance from one period to the next could cause a significant fluctuation in Nuvelo s operating results.

All of Nuvelo s potential products are currently in research, preclinical or clinical development, and revenues from the sales of any products resulting from this research and development may not occur for several years, if at all. Nuvelo has a significant amount of fixed costs such as lease obligations, and certain charges to Nuvelo s statement of operations are dependent on movements in the price of Nuvelo s common stock, which historically has been and is likely to remain highly volatile. As a result, Nuvelo may experience fluctuations in its operating results from quarter to quarter and continue to generate losses. Quarterly comparisons of Nuvelo s financial results may not necessarily be meaningful, and investors should not rely upon such results as an indication of Nuvelo s future performance. In addition, investors may react adversely if Nuvelo s reported operating results are less favorable than in a prior period or are less favorable than those anticipated by investors or the financial community, which may result in a drop in the market price of Nuvelo s common stock.

Future sales or the possibility of future sales of Nuvelo s common stock may depress the market price of Nuvelo s common stock.

Sales in the public market of substantial amounts of Nuvelo s common stock could depress prevailing market prices of its common stock. As of September 30, 2008, Nuvelo had 53,663,805 shares of common stock

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outstanding. All of these shares are freely transferable without restriction or further registration under the Securities Act, except for shares held by Nuvelo s directors, officers and other affiliates and unregistered shares held by non-affiliates. As of September 30, 2008, Nuvelo s directors, officers and greater than five percent stockholders held approximately 13 percent of the shares of Nuvelo s outstanding common stock. Although Nuvelo does not believe that Nuvelo s directors, officers and greater than five percent stockholders have any present intentions to dispose of large amounts of any shares of common stock owned by them, there can be no assurance that such intentions will not change in the future. The sale of these additional shares could depress the market price of Nuvelo s common stock.

As of September 30, 2008, Nuvelo had approximately 12,427,846 shares of Nuvelo s common stock which may be issued under Nuvelo s 2004 Equity Incentive Plan, 2002 Equity Incentive Plan, 1995 Stock Option Plan, Non-Employee Director Stock Option Plan, stock option agreements entered into outside of any of Nuvelo s stock option plans, and Nuvelo s Employee Stock Purchase Plan. Included in these 12,427,846 shares are (i) 5,140,278 shares of Nuvelo s common stock issuable under outstanding options to purchase Nuvelo s common stock under the specified plans, (ii) 440,206 shares of Nuvelo s common stock issuable under stock option agreements entered into outside of any of Nuvelo s stock option plans, (iii) 27,332 shares of Nuvelo s common stock issuable under restricted stock units, (iv) 6,537,957 shares of Nuvelo s common stock reserved for future grants under Nuvelo s 2004 Equity Incentive Plan, and (v) 282,073 shares of Nuvelo s common stock reserved for future issuance under Nuvelo s Employee Stock Purchase Plan. As of September 30, 2008, outstanding options to purchase 4,068,534 shares of common stock were exercisable, and no restricted stock units have been vested. If and when these options are exercised, such shares are available for sale in the open market without further registration under the Securities Act. The existence of these outstanding options and share reserves may negatively affect Nuvelo s ability to complete future equity financings at acceptable prices and on acceptable terms. The exercise of those options, and the prompt resale of shares of Nuvelo s common stock received, may also result in downward pressure on the price of Nuvelo s common stock.

As of September 30, 2008, 850,224 shares of Nuvelo s common stock were issuable upon the exercise of outstanding warrants, which were all exercisable as of this date. Once a warrant is exercised, the holder can arrange for the resale of shares either by invoking any applicable registration rights, causing the shares to be registered under the Securities Act and thus freely transferable, or by relying on an exemption to the Securities Act. If these registration rights, or similar registration rights that may apply to securities Nuvelo may issue in the future, are exercised, it could result in additional sales of Nuvelo s common stock in the market, which may have an adverse effect on Nuvelo s stock price.

Nuvelo will need to raise significant additional capital to finance the research, development and commercialization of Nuvelo s drug products. If future securities offerings are successful, they could dilute Nuvelo s current stockholders equity interests and reduce the market price of its common stock.

Nuvelo s investments in marketable debt securities are subject to credit risk that may adversely affect their fair value.

Nuvelo maintains a significant portfolio of investments in marketable debt securities, which are recorded at fair value. To minimize Nuvelo s exposure to credit risk, Nuvelo invests in securities with strong credit ratings and has established guidelines relative to diversification and maturity with the objective of maintaining safety of principal and liquidity. Nuvelo does not invest in derivative financial instruments, mortgage-backed securities or auction rate securities, and Nuvelo has not recorded any losses on Nuvelo s securities due to credit or liquidity issues. In 2007 and 2008, rising delinquency and default rates on subprime mortgages and declining home prices had caused a significant decline in the value of residential mortgage-backed securities, which had negatively impacted the entire credit market in the U.S. In recent months, certain other financial instruments had also sustained downgrade in credit ratings and decline in value. Further deterioration in the credit market may have an adverse effect on the fair value of Nuvelo s investment portfolio.

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Nuvelo does not intend to pay cash dividends on its common stock in the foreseeable future.

Nuvelo does not anticipate paying cash dividends on its common stock in the foreseeable future. Any payment of cash dividends will depend upon Nuvelo s financial condition, results of operations, capital requirements and other factors and will be at the discretion of Nuvelo s board of directors. Furthermore, Nuvelo may incur additional indebtedness that may severely restrict or prohibit the payment of dividends.

Nuvelo has implemented anti-takeover provisions that could discourage, prevent or delay a takeover, even if the acquisition would be beneficial to Nuvelo s stockholders.

Provisions of Nuvelo s certificate of incorporation and bylaws, as well as provisions of Delaware law, could make it more difficult for a third party to acquire Nuvelo, even if doing so would benefit Nuvelo s stockholders. These provisions:

- establish a classified board of directors so that not all members of Nuvelo s board may be elected at one time;
- authorize the issuance of up to 5,000,000 shares of preferred stock that could be issued by Nuvelo s board of directors to increase the number of outstanding shares and hinder a takeover attempt;
- limit who may call a special meeting of stockholders;
- prohibit stockholder action by written consent, thereby requiring all stockholder actions to be taken at a meeting of Nuvelo s stockholders; and
- establish advance notice requirements for nominations for election to Nuvelo s board of directors or for proposing matters that can be acted upon at a stockholder meeting.

Specifically, Nuvelo s certificate of incorporation provides that all stockholder action must be effected at a duly called meeting and not by a written consent. The bylaws provide, however, that Nuvelo s stockholders may call a special meeting of stockholders only upon a request of stockholders owning at least 50 percent of Nuvelo s common stock. These provisions of Nuvelo s certificate of incorporation and bylaws could discourage potential acquisition proposals and could delay or prevent a change in control. Nuvelo designed these provisions to reduce Nuvelo s vulnerability to unsolicited acquisition proposals and to discourage certain tactics that may be used in proxy fights. These provisions, however, could also have the effect of discouraging others from making tender offers for Nuvelo s shares. As a consequence, they also may inhibit fluctuations in the market price of Nuvelo s shares that could result from actual or rumored takeover attempts. Such provisions also may have the effect of preventing changes in Nuvelo s management.

Nuvelo is permitted to issue shares of Nuvelo s preferred stock without stockholder approval upon such terms as Nuvelo s board of directors determines. Therefore, the rights of the holders of Nuvelo s common stock are subject to, and may be adversely affected by, the rights of the holders of Nuvelo s preferred stock that may be issued in the future. In addition, the issuance of preferred stock could have a dilutive effect on the holdings of Nuvelo s current stockholders.

Nuvelo is subject to the Delaware anti-takeover laws regulating corporate takeovers. These anti-takeover laws prevent a Delaware corporation from engaging in a merger or sale of more than ten percent of its assets with any stockholder, including all affiliates and associates of the stockholder, who owns 15 percent or more of the corporation s outstanding voting stock, for six years following the date that the stockholder acquired 15 percent or more of the corporation s stock unless:

- the board of directors approved the transaction where the stockholder acquired 15 percent or more of the corporation s stock;

after the transaction in which the stockholder acquired 15 percent or more of the corporation s stock, the stockholder owned at least 85 percent of the corporation s outstanding voting stock, excluding

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shares owned by directors, officers and employee stock plans in which employee participants do not have the right to determine confidentially whether shares held under the plan will be tendered in a tender or exchange offer; or

on or after this date, the merger or sale is approved by the board of directors and the holders of at least two-thirds of the outstanding voting stock that is not owned by the stockholder.

The provisions of Nuvelo s governing documents, stockholder rights plan and current Delaware law may, collectively:

lengthen the time required for a person or entity to acquire control of Nuvelo through a proxy contest for the election of a majority of Nuvelo s board of directors;

discourage bids for Nuvelo s common stock at a premium over market price; and

generally deter efforts to obtain control of Nuvelo.

Nuvelo has adopted Change in Control and Severance Benefit Plans that could discourage, prevent or delay a takeover, even if the acquisition would be beneficial to Nuvelo s stockholders.

In December 2004, Nuvelo s board of directors approved an Executive Change in Control and Severance Benefit Plan for Nuvelo s executive officers and other eligible employees, which was amended and restated in August 2007. The purpose of the plan is to provide for the payment of severance benefits and/or change in control benefits to certain of Nuvelo s eligible employees, and the plan supersedes and replaces any change in control and/or severance plans adopted by Nuvelo previously. All of Nuvelo s executive employees at the level of vice president or above have been designated as participants in the plan and Nuvelo s board of directors may designate other eligible individuals as participants. The plan provides that, upon a change in control of the company as defined under the plan, all Nuvelo stock options and stock awards held by a plan participant will become fully vested. Such shares held by a plan participant will also become fully vested if the participant is terminated without cause, or constructively terminated, within one month preceding Nuvelo s change in control. If a participant is terminated without cause or constructively terminated one month before or one year after Nuvelo s change in control, he or she will also be entitled to certain cash severance and continued medical benefits. In June 2008, the compensation committee of Nuvelo s board of directors approved a Change in Control Severance Benefit Plan for Nuvelo s employees who are not eligible for benefits under the Executive Change in Control and Severance Benefit Plan, entitling these employees to certain cash severance and continued medical benefits if terminated without cause within one year after Nuvelo s change of control.

The change in control and severance benefits for certain of Nuvelo s employees provided for under these plans are expected to be triggered by the merger with ARCA. If the merger with ARCA is not consummated, these provisions could make it more difficult and expensive, or less desirable, for a third party to acquire Nuvelo, even if doing so would benefit Nuvelo s stockholders.

Risks Related to Nuvelo Intellectual Property and Other Legal Matters

Nuvelo is party to securities litigation, and defending these lawsuits could hurt Nuvelo s business. The volatility of the market price of Nuvelo s securities could engender additional class action securities litigation.

Following periods of volatility in the market price of a company s securities, class action securities litigation has often been instituted against such a company. This risk is especially acute for Nuvelo, because biotechnology companies have experienced greater than average stock price volatility in recent years and, as a result, have been subject to, on average, a greater number of securities class action claims than companies in other industries. Any such litigation instigated against Nuvelo could result in substantial costs and a diversion of management s attention and resources, which could significantly harm Nuvelo s business, financial condition and operating results. For example, in December 2006, after Nuvelo announced that alfimeprase did not meet its primary

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endpoint in the first of two planned Phase 3 trials for the treatment of acute peripheral arterial occlusion and in the first of two planned Phase 3 trials for the treatment of catheter occlusion, the closing price of one share of Nuvelo s common stock was $4.05 on the day of the announcement, as compared with a closing price of $19.55 on the trading day prior to the announcement. On February 9, 2007, Nuvelo, Inc. and certain of Nuvelo s former and current officers and directors were named as defendants in a purported securities class action lawsuit filed in the U.S. District Court for the Southern District of New York. The suit alleges violations of the Securities Exchange Act of 1934 related to the clinical trial results of alfimeprase, which Nuvelo announced on December 11, 2006, and seeks damages on behalf of purchasers of Nuvelo s common stock during the period between January 5, 2006 and December 8, 2006. Specifically, the suit alleges that Nuvelo misled investors regarding the efficacy of alfimeprase and the drug s likelihood of success. The plaintiff seeks unspecified damages and injunctive relief. Three additional lawsuits were filed in the Southern District of New York on February 16, 2007, March 1, 2007 and March 6, 2007, respectively. On April 10, 2007, three separate motions to consolidate the cases, appoint lead plaintiff, and appoint lead plaintiff s counsel were filed. On April 18, 2007, Nuvelo filed a motion to transfer the four cases to the Northern District of California. The Court granted Nuvelo s motion to transfer the cases to the Northern District of California in July 2007. Plaintiffs have filed motions for consolidation, lead plaintiff and lead plaintiff s counsel in the Northern District of California. Plaintiffs filed their consolidated complaint in the Northern District of California on November 9, 2007. Nuvelo filed a motion to dismiss plaintiffs consolidated complaint on December 21, 2007. Plaintiffs filed an opposition to Nuvelo s motion to dismiss on February 4, 2008. On June 12, 2008, the Court held a hearing on the motion to dismiss. The motion to dismiss the consolidated complaint is still pending. Nuvelo currently cannot determine the impact that this litigation will have on Nuvelo s business, results of operations or financial condition.

In addition, Variagenics, with which Nuvelo merged in 2003, has been named as a defendant in a securities class action lawsuit alleging the failure to disclose additional and excessive commissions purportedly solicited by and paid to underwriters who are also named defendants in the lawsuit. Plaintiffs in the suit allege that underwriters took these commissions and in exchange allocated shares of Variagenics stock to their preferred customers through alleged agreements with these preferred customers that tied the allocation of initial public offering shares to agreements by the customers to make additional aftermarket purchases at pre-determined prices. As a result of Nuvelo s merger with Variagenics, Nuvelo is obligated to continue to defend against this litigation. Nuvelo believes that any attorneys fees, loss or settlement payment with respect to this suit will not be material to Nuvelo s financial position or results of operations, and that any loss, settlement payment or attorneys fees accrued with respect to the suit will be paid by Nuvelo s insurance provider. Because of a recent court ruling, the settlement class, as defined in the settlement papers, is no longer feasible. While a new complaint has not been filed against Nuvelo, there are several focus cases against other issuers in which new complaints have been filed. Defendant issuers in the focus cases filed motions to dismiss the new complaints. On March 26, 2008, the District Court issued an order granting in part and denying in part the focus issuers motions to dismiss. The focus issuers had been advised that plaintiffs intended to file new complaints against Nuvelo, but none have been filed yet. Nuvelo could be forced to incur material expenses in the litigation if the parties cannot achieve a settlement, and in the event there is an adverse outcome, Nuvelo s business could be harmed.

The commercial success of Nuvelo s products will depend upon Nuvelo s ability to protect the intellectual property rights associated with Nuvelo s products and product candidates.

Nuvelo s competitive success will depend, in part, on Nuvelo s ability to obtain and maintain patent protection for its inventions, technologies and discoveries, including intellectual property that Nuvelo licenses. The patent positions of biotechnology companies involve complex legal and factual questions, and Nuvelo cannot assure you that Nuvelo s patents and licenses will successfully preclude others from using Nuvelo s technology. Nuvelo could incur substantial costs in seeking enforcement of its proprietary rights against infringement.

Nuvelo currently has, or has in-licensed, issued patents and pending patent applications that include claims to Nuvelo s in-licensed clinical products. Nuvelo obtained exclusive worldwide rights to alfimeprase from

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Amgen in October 2004. Nuvelo obtained exclusive worldwide rights for all indications of rNAPc2 and all of the rNAPc molecules owned by Dendreon in February 2004. The U.S. government may claim a non-exclusive right to use rNAPc2 with respect to the treatment of hemorrhagic fever. Nuvelo also currently has patents that cover some of Nuvelo s technological discoveries and patent applications that Nuvelo expects to protect some of its gene, protein and technological discoveries. Nuvelo will continue to apply for patents for its discoveries. Nuvelo cannot assure you that any of its applications, or its licensors applications, will issue as patents, or that any patent issued or licensed to Nuvelo will not be challenged, invalidated, circumvented or held unenforceable by way of an interference proceeding or litigation.

The timing of the grant of a patent cannot be predicted. Patent applications describing and seeking patent protection of methods, compositions, or processes relating to proprietary inventions involving human therapeutics could require Nuvelo to generate data, which may involve substantial costs. Nuvelo s pending patent applications may lack priority over others applications or may not result in the issuance of patents. Even if issued, Nuvelo s patents may not be sufficiently broad to provide protection against competitors with similar technologies and may be challenged, invalidated or circumvented.

In addition to patents, Nuvelo relies on a combination of trade secrets, copyright and trademark laws, nondisclosure agreements, licenses and other contractual provisions and technical measures to maintain and develop Nuvelo s competitive position with respect to intellectual property. Nevertheless, these measures may not be adequate to safeguard the technology underlying Nuvelo s products. For example, employees, consultants and others who participate in the development of Nuvelo s products may breach their agreements with Nuvelo regarding its intellectual property, and Nuvelo may not have adequate remedies for the breach. Nuvelo s trade secrets could become known through other unforeseen means. Nuvelo depends on its collaborators and other third parties that license intellectual property to Nuvelo to protect its licensed intellectual property. These collaborators and other third parties could fail to take a necessary step to protect Nuvelo s licensed intellectual property, which could seriously harm Nuvelo s intellectual property position.

Nuvelo also may not be able to effectively protect its intellectual property rights in some foreign countries, as many countries do not offer the same level of legal protection for intellectual property as the U.S. Furthermore, certain of the patent applications describing Nuvelo s proprietary methods are filed only in the U.S. Even where Nuvelo has filed its patent applications internationally, for some cases and in certain countries, Nuvelo has chosen not to maintain foreign patent protection by opting not to enter national phase or opting not to pay maintenance annuities.

Notwithstanding Nuvelo s efforts to protect its intellectual property, Nuvelo s competitors may independently develop similar or alternative technologies or products that are equal or superior to Nuvelo s technology. Nuvelo s competitors may also develop similar products without infringing on any of Nuvelo s intellectual property rights or design around Nuvelo s proprietary technologies.

If the manufacture, use or sale of Nuvelo s products infringe on the intellectual property rights of others, Nuvelo could face costly litigation, which could cause Nuvelo to pay substantial damages or licensing fees and limit its ability to sell some or all of its products.

Extensive litigation regarding patents and other intellectual property rights has been common in the biopharmaceutical industry. Litigation may be necessary to assert infringement claims, enforce patent rights, protect trade secrets or know-how and determine the enforceability, scope and validity of certain proprietary rights. The defense and prosecution of intellectual property lawsuits, U.S. Patent and Trademark Office interference proceedings, and related legal and administrative proceedings in the U.S. and internationally involve complex legal and factual questions. As a result, such proceedings are costly and time-consuming to pursue, and their outcome is uncertain.

Regardless of merit or outcome, Nuvelo s involvement in any litigation, interference or other administrative proceedings could cause Nuvelo to incur substantial expense and could significantly divert the efforts of

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Nuvelo s technical and management personnel. An adverse determination may subject Nuvelo to the loss of its proprietary position or to significant liabilities, or require Nuvelo to seek licenses that may include substantial cost and ongoing royalties. Licenses may not be available from third parties, or may not be obtainable on satisfactory terms. An adverse determination or a failure to obtain necessary licenses may restrict or prevent Nuvelo from manufacturing and selling its products, if any. These outcomes could materially harm Nuvelo s business, financial condition and results of operations.

Nuvelo s market success depends in part on Nuvelo neither infringing valid, enforceable patents or proprietary rights of third parties, nor breaching any licenses that may relate to Nuvelo s technologies and products. Nuvelo is aware of third-party patents and proprietary rights that may relate to Nuvelo s technology. Nuvelo may be required to obtain licenses to patents or other proprietary rights of others for itself, its collaboration partners and its service providers in order to conduct research, development or commercialization of some or all of Nuvelo s programs. Nuvelo plan to seek licenses, as it deem appropriate, but it is possible that Nuvelo may infringe upon these patents or proprietary rights of third parties. If Nuvelo does not obtain these licenses, it may encounter delays in product market introductions, incur substantial costs while Nuvelo attempts to design around existing patents or not be able to develop, manufacture or sell products. In response, third parties may assert infringement or other intellectual property claims against Nuvelo, its collaboration partners or its service providers. Nuvelo may consequently be subjected to substantial damages for past infringement or be required to modify its products if it is ultimately determined that Nuvelo s products infringe a third party s proprietary rights. Further, Nuvelo may be prohibited from selling its products before it obtains a license, which, if available at all, may require Nuvelo to pay substantial royalties, which could adversely impact Nuvelo s product costs and have an impact on its business. Further, if Nuvelo does obtain these licenses, the agreed terms may necessitate reevaluation of the potential commercialization of any one of Nuvelo s programs. Failing to obtain a license could result in litigation. Even if these claims are without merit, defending a lawsuit takes significant time, may be expensive and may divert management attention from other business concerns. Any public announcements related to litigation or interference proceedings initiated or threatened against Nuvelo could cause Nuvelo s stock price to decline.

Nuvelo faces product liability exposure and potential unavailability of insurance.

Nuvelo risks financial exposure to product liability claims in the event that the use of products developed by Nuvelo, or its collaboration partners, if any, result in personal injury. Nuvelo may experience losses due to product liability claims in the future. Nuvelo has obtained limited product liability insurance coverage. Such coverage, however, may not be adequate or may not continue to be available to Nuvelo in sufficient amounts or at an acceptable cost, or at all. Nuvelo may not be able to obtain commercially reasonable product liability insurance for any product approved for marketing. A product liability claim or other claim, product recalls, as well as any claims for uninsured liabilities or in excess of insured liabilities, may significantly harm Nuvelo s business, financial condition and results of operations.

Nuvelo faces heavy government regulation, and any disputes relating to business practices or improper handling, storage or disposal of hazardous materials, chemicals and patient samples could be time consuming and costly.

Nuvelo s research and development and production activities involve the controlled use of hazardous or radioactive materials, chemicals, including oxidizing and reducing reagents, infectious disease agents, patient tissue and blood samples. Nuvelo, its collaborators, and service providers are subject to federal, state and local laws and regulations governing the use, storage, handling and disposal of these materials and certain waste products. Nuvelo could be liable for accidental contamination or discharge or any resultant injury from hazardous materials, and conveyance, processing, and storage of and data on patient samples. If Nuvelo, its collaborators, or service providers fail to comply with applicable laws or regulations, Nuvelo could be required to pay penalties or be held liable for any damages that result, and this liability could exceed Nuvelo s financial resources. Further, future changes to environmental health and safety laws could cause Nuvelo to incur additional expense or restrict

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its operations. In addition, Nuvelo s collaborators and service providers may be working with hazardous materials, including viruses and hazardous chemicals, in connection with Nuvelo s collaborations. In the event of a lawsuit or investigation, Nuvelo could be held responsible for any injury caused to persons or property by exposure to, or release of, patient samples that may contain viruses and hazardous materials. The cost of this liability could exceed Nuvelo s resources.

Nuvelo also is subject to numerous federal, state and local laws, regulations and recommendations relating to safe working conditions, laboratory and manufacturing practices, general business practices, the experimental use of animals, and the environment. In addition, Nuvelo cannot predict the extent of government regulations or the impact of new governmental regulations that might significantly harm the discovery, development, production and marketing of Nuvelo s products. Nuvelo may be required to incur significant costs to comply with current or future laws or regulations, and Nuvelo may be adversely affected by the cost of such compliance.

Risks Related to ARCA s Business

If ARCA is not able to successfully develop and commercialize Gencaro, ARCA may not generate sufficient revenues to continue its business operations.

ARCA currently has no products that have received regulatory approval for commercial sale. The process to develop, obtain regulatory approval for and commercialize potential product candidates is long, complex and costly. Gencaro is ARCA s only product candidate at a late stage of clinical development and is currently awaiting approval of its NDA. ARCA has no other product candidates. As a result, ARCA s business is currently substantially dependent on its ability to obtain regulatory approval for and successfully commercialize Gencaro in a timely manner. If the NDA is not approved, or is substantially delayed, or if ARCA is unable to successfully commercialize Gencaro, it may not be able to earn sufficient revenues to continue its business.

Unless ARCA is able to generate sufficient product revenue, ARCA will continue to incur losses from operations and may not achieve or maintain profitability.

ARCA is a development stage biopharmaceutical company with a limited operating history. To date, it has not generated any product revenue and has historically funded its operations through investment capital. ARCA has incurred losses in each year since its inception. For its fiscal years ended December 31, 2007, 2006 and 2005, ARCA s net losses were $14.0 million, $5.2 million and $1.5 million, respectively. For its six months ended June 30, 2008, ARCA s net losses were $7.8 million. As of June 30, 2008, ARCA had incurred $29.2 million in net losses since its inception. These losses, among other things, have had and will continue to have an adverse effect on ARCA s stockholders equity and working capital. Even if ARCA receives regulatory approval for any product candidates, sales of such products may not generate sufficient revenue for it to achieve or maintain profitability. ARCA s ability to generate revenue depends on a number of factors, including its ability to:

- develop and obtain regulatory approval for Gencaro™ or other product candidates;
- obtain commercial quantities of Gencaro or other product candidates at acceptable cost levels;
- successfully market and sell Gencaro or other product candidates;
- successfully partner a companion genetic test with the commercial launch of Gencaro; and
- successfully conduct and complete clinical trials for Gencaro and other product candidates.

ARCA expects to incur increased general and administrative expenses due to higher sales and marketing expenses. As a result, it expects to continue to incur significant and increasing operating losses for the foreseeable future. Because of the numerous risks and uncertainties associated with developing therapeutic drugs, ARCA may experience larger than expected future losses and may never reach profitability.

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ARCA s product candidates are subject to extensive regulation, which can be costly and time-consuming, and unsuccessful or delayed regulatory approvals could increase ARCA s future development costs or impair ARCA s future revenue.

The preclinical and clinical development, testing, manufacture, safety, efficacy, labeling, storage, recordkeeping, advertising, promotion, sale, and marketing, and distribution of ARCA s product candidates are subject to extensive regulation by the FDA and other regulatory authorities in the United States and elsewhere. These regulations also vary in important, meaningful ways from country to country. ARCA is not permitted to market a potential drug in the United States until ARCA receives approval of a New Drug Application, or NDA, from the FDA. ARCA has not received an NDA approval from the FDA. There can be no guarantees with respect to ARCA s product candidates that clinical studies will support an ARCA NDA, that the products will receive necessary regulatory approvals, or that they will prove to be commercially successful.

To receive regulatory approval for the commercial sale of any product candidates, ARCA must demonstrate safety and efficacy in humans to the satisfaction of regulatory authorities through preclinical studies and adequate and well-controlled clinical trials of the product candidates. This process is expensive and can take many years, and failure can occur at any stage of the testing. ARCA s failure to adequately demonstrate the safety and efficacy of its product candidates will prevent regulatory approval and commercialization of such products. With respect to Gencaro, the FDA could determine that the preclinical studies and clinical trials conducted by or on Gencaro s behalf were inadequate, and such a determination would prevent regulatory approval and commercialization of Gencaro. For instance, ARCA filed an NDA for Gencaro in July 2008, based primarily on a single Phase 3 trial. The FDA guidelines generally suggest that sponsors conduct two adequate and well-controlled studies to demonstrate the safety and efficacy of a product candidate such as Gencaro in support of FDA approval. FDA interpretation of the statutory requirements also states that a single study may be sufficient to support approval if the FDA determines that, based on relevant science and other confirmatory evidence, there is strong evidence to establish the safety and efficacy of the drug candidate using a single adequate and well-controlled study. If the FDA determines that the clinical data for Gencaro is not sufficiently strong to demonstrate Gencaro s safety and efficacy for chronic heart failure, then Gencaro may not be approved by the FDA for ARCA s proposed indications, may be approved for a more limited indication, or the FDA may require ARCA to conduct additional studies before approving Gencaro for chronic heart failure. Even if ARCA conducted additional studies and submitted the attendant data, FDA may ultimately decide that the NDA does not satisfy the criteria for approval.

In the event that ARCA or its contractors conduct preclinical studies that did not comply with good laboratory practices, or GLP, or incorrectly design or carry out human clinical trials or those clinical trials fail to demonstrate clinical significance, ARCA will not likely be able to obtain FDA approval for product development candidates. ARCA s inability to successfully and effectively complete clinical trials for any product candidates on schedule or at all will severely harm ARCA s business. Significant delays in clinical development could materially increase product development costs or allow ARCA s competitors to bring products to market before it does, impairing ARCA s ability to effectively commercialize any future product candidates. ARCA does not know whether planned clinical trials will begin on time, will need to be redesigned or will be completed on schedule, if at all. Clinical trials can be delayed for a variety of reasons, including:

- delays or failures in obtaining regulatory authorization to commence a trial because of safety concerns of regulators relating to ARCA s product candidates or similar product candidates of ARCA s competitors or failure to follow regulatory guidelines;
- delays or failures in obtaining clinical materials and manufacturing sufficient quantities of the product candidate for use in trials;
- delays or failures in reaching agreement on acceptable terms with prospective study sites;
- delays or failures in obtaining approval of our clinical trial protocol from an institutional review board, or IRB, to conduct a clinical trial at a prospective study site;

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delays in recruiting patients to participate in a clinical trial, which may be due to the size of the patient population, eligibility criteria, protocol design, perceived risks and benefits of the drug, availability of other approved and standard of care therapies, availability of clinical trial sites;

other clinical trials seeking to enroll subjects with similar profile;

failure of our clinical trials and clinical investigators to be in compliance with the FDA s Good Clinical Practices, or GCP;

unforeseen safety issues, including negative results from ongoing preclinical studies;

inability to monitor patients adequately during or after treatment;

difficulty monitoring multiple study sites; and

failure of ARCA s third-party contract research organizations, clinical site organizations and other clinical trial managers, to satisfy their contractual duties, comply with regulations or meet expected deadlines.

In addition, any approvals ARCA may obtain may not cover all of the clinical indications for which it seeks approval. In addition, if ARCA chooses to make claims of superiority over currently marketed competitive products, ARCA must substantiate those claims with scientific evidence from prospectively designed head-to-head clinical trials. Also, an approval might contain significant limitations in the form of narrow indications, warnings, precautions or contraindications with respect to conditions of use. If the FDA determines that a risk evaluation and mitigation strategy, or REMS, is necessary to ensure that the benefits of the drug outweigh the risks, ARCA may be required to include as part of the NDA a proposed REMS that may include a package insert directed to patients, a plan for communication with healthcare providers, restrictions on a drug s distribution, or a Medication Guide to provide better information to consumers about the drug s risks and benefits. Finally, an approval could be conditioned on ARCA s commitment to conduct further clinical trials, which ARCA may not have the resources to conduct or which may negatively impact ARCA s financial situation.

In September 2008, the FDA formally accepted for filing ARCA s New Drug Application, or NDA, for Gencaro, with the goal of reviewing the NDA by May 31, 2009. Filing of the NDA indicates that the application is sufficiently complete to allow for FDA to review ARCA s data supporting the safety profile and effectiveness of Gencaro, but does not guarantee approval. All of ARCA s product candidates are prone to the risks of failure inherent in drug development. The results from preclinical animal testing and early human clinical trials may not be predictive of results obtained in later human clinical trials. Further, although a new product may show promising results in preclinical or early human clinical trials, it may subsequently prove unfeasible or impossible to generate sufficient safety and efficacy data to obtain necessary regulatory approvals. The data obtained from preclinical and clinical studies are susceptible to varying interpretations that may delay, limit or prevent regulatory approval, and the FDA and other regulatory authorities in the United States and elsewhere exercise substantial discretion in the drug approval process. The numbers, size and design of preclinical studies and clinical trials that will be required for FDA or other regulatory approval will vary depending on the product candidate, the disease or condition for which the product candidate is intended to be used and the regulations and guidance documents applicable to any particular product candidate. The FDA or other regulators can delay, limit or deny approval of any product candidate for many reasons, including, but not limited to:

side effects;

safety and efficacy;

defects in the design of clinical trials;

the fact that the FDA or other regulatory officials may not approve ARCA s or ARCA s third party manufacturer s processes or facilities; or

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the fact that new regulations may be enacted by the FDA or other regulators may change their approval policies or adopt new regulations requiring new or different evidence of safety and efficacy for the intended use of a product candidate.

In light of widely publicized events concerning the safety of certain drug products, regulatory authorities, members of Congress, the Government Accountability Office, medical professionals and the general public have raised concerns abut potential drug safety issues. These events have resulted in the withdrawal of certain drug products, revisions to certain drug labeling that further limit use of the drug products and establishment of risk management programs that may, for instance, restrict distribution of drug products. The increased attention to drug safety issues may result in a more cautious approach by the FDA to clinical trials and approval. Data from clinical trials may receive greater scrutiny with respect to safety and the product s risk/benefit profile, which may make the FDA or other regulatory authorities more likely to terminate clinical trials before completion, or require longer or additional clinical trials that may result in substantial additional expense, and a delay or failure in obtaining approval or approval for a more limited indication than originally sought. Aside from issues concerning the quality and sufficiency of submitted preclinical and clinical data, FDA may be constrained by limited resources from reviewing and determining the approvability of the Gencaro NDA by May 31, 2009. Indeed, in early 2008, the FDA announced that due to a lack of resources, NDAs may not be reviewed within the performance goals under the Prescription Drug User Fee Act, and from time to time, FDA has extended the review period for NDAs.

In addition, the manufacture and tableting of Gencaro is done by third party suppliers, who must pass a pre-approval inspection of their facilities before ARCA can obtain marketing approval. The FDA could also request additional information or data, including data from an additional Phase 3 study, which may extend the review period.

In its NDA, ARCA has requested that the FDA approve Gencaro as a therapy that can be prescribed by physicians for patients with heart failure, and specifically for its effect on certain clinical outcomes for these heart failure patients. ARCA has also requested that certain information be included in the prescribing information distributed with Gencaro that shows the effect of genetic differences in patients on the clinical results for Gencaro. The FDA could approve Gencaro, but without including some or all of the prescribing information that ARCA has requested. For instance, FDA could approve Gencaro without some or all of the pharmacogenetic information in the labeling. This, in turn, could substantially and detrimentally impact ARCA s ability to successfully commercialize Gencaro.

ARCA has no manufacturing capacity which puts it at risk of lengthy and costly delays of bringing its products to market.

ARCA does not currently operate manufacturing facilities for clinical or commercial production of its product candidates, including their active pharmaceutical ingredients, or API. ARCA has no experience in drug formulation or manufacturing, and it lacks the resources and the capabilities to manufacture any of its product candidates on a clinical or commercial scale. ARCA does not intend to develop facilities for the manufacture of product candidates for clinical trials or commercial purposes in the foreseeable future.

ARCA has contracted with Groupe Novasep to manufacture commercial quantities of the API for Gencaro. For drug production, ARCA has contracted with Patheon, Inc. to manufacture the Gencaro tablets. These contract manufacturers may not perform as agreed or may not remain in the contract manufacturing business for the time required to successfully produce, store and distribute ARCA s products. In the event of a natural disaster, equipment malfunctions or failures, technology malfunctions, strikes, lock-outs or work stoppages, regional power outages, product tampering, war or terrorist activities, actions of regulatory authorities, business failure, strike or other difficulty, ARCA may be unable to replace a third-party manufacturer in a timely manner and the production of its product candidates would be interrupted, resulting in delays and additional costs.

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ARCA or its contract manufacturers may also fail to achieve and maintain required manufacturing standards, which could result in patient injury or death, product recalls or withdrawals, an order by governmental authorities to halt production, delays or failures in product testing or delivery, cost overruns or other problems that could seriously hurt its business. Contract manufacturers also often encounter difficulties involving production yields, quality control and quality assurance, as well as shortages of qualified personnel. In addition, its contract manufacturers are subject to ongoing inspections and regulation by the FDA, the U.S. Drug Enforcement Agency and corresponding state agencies and they may fail to meet these agencies acceptable standards of compliance. If ARCA s contract manufacturers fail to comply with applicable governmental regulations, such as quality control, quality assurance and the maintenance of records and documentation, production of the product may ARCA may not be able to continue production of the API or finished product. If the safety of any API or product supplied is compromised due to failure to adhere to applicable law or for other reasons, this may jeopardize our regulatory approval for Gencaro and other product candidates, and may be held liable for any injuries sustained as a result.

Upon the occurrence of one of the aforementioned events, the ability to switch manufacturers may be difficult for a number of reasons, including:

- the number of potential manufacturers is limited and ARCA may not be able to negotiate agreements with alternative manufacturers on commercially reasonable terms;
- long lead times are often needed to manufacture drugs;
- the manufacturing process is complex and may require a significant learning curve; and
- the FDA must approve any replacement prior to manufacturing, which requires new testing and compliance inspections.

If ARCA s product candidates receive regulatory approval, ARCA would be subject to ongoing regulatory obligations and restrictions, which may result in significant expenses and limit its ability to commercialize its potential products.

If a product candidate of ARCA is approved by the FDA or by another regulatory authority, ARCA would be held to extensive regulatory requirements over product manufacturing, testing, distribution, labeling, packaging, adverse event reporting and other reporting to regulatory authorities, storage, advertising, marketing, promotion, distribution, and record keeping. Regulatory approvals may also be subject to significant limitations on the indicated uses or marketing of the product candidates. Potentially costly follow-up or post-marketing clinical studies may be required as a condition of approval to further substantiate safety or efficacy, or to investigate specific issues of interest to the regulatory authority. Previously unknown problems with the product candidate, including adverse events of unanticipated severity or frequency, may result in additional regulatory controls or restrictions on the marketing or use of the product or the need for postmarketing studies, and could include withdrawal of the products from the market.

Furthermore, ARCA s third-party manufacturers and the manufacturing facilities that they use to make ARCA s product candidates are regulated by the FDA. Quality control and manufacturing procedures must continue to conform to cGMP after approval. Drug manufacturers and their subcontractors are required to register their facilities and products manufactured annually with the FDA and certain state agencies and are subject to periodic unannounced inspections by the FDA, state and/or other foreign authorities. Any subsequent discovery of problems with a product, or a manufacturing or laboratory facility used by ARCA or its collaborators, may result in restrictions on the product, or on the manufacturing or laboratory facility, including a withdrawal of the drug from the market or suspension of manufacturing. Any changes to an approved product, including the way it is manufactured or promoted, often require FDA approval before the product, as modified, can be marketed. ARCA and its third-party manufacturers will also be subject to ongoing FDA requirements for submission of safety and other post-market information.

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The marketing and advertising of ARCA s drug products by its collaborators or ARCA will be regulated by the FDA, certain state agencies or foreign regulatory authorities. Violations of these laws and regulations, including promotion of ARCA s products for unapproved uses or failing to disclose risk information, are punishable by criminal and civil sanctions and may result in the issuance of enforcement letters or other enforcement action by the FDA, Department of Justice, state agencies, or foreign regulatory authorities that could jeopardize ARCA s ability to market the product.

In addition to FDA, state or foreign regulations, the marketing of ARCA s drug products by ARCA or its collaborators will be regulated by federal, state or foreign laws pertaining to health care fraud and abuse, such as the federal anti-kickback law prohibiting bribes, kickbacks or other remuneration for the order or recommendation of items or services reimbursed by federal health care programs. Many states have similar laws applicable to items or services reimbursed by commercial insurers. Violations of these laws are punishable by criminal and civil sanctions, including, in some instances, imprisonment and exclusion from participation in federal and state health care programs, including the Medicare, Medicaid and Veterans Affairs healthcare programs. Because of the far-reaching nature of these laws, ARCA may be required to discontinue one or more of its practices to be in compliance with these laws. Health care fraud and abuse regulations are complex, and even minor irregularities can potentially give rise to claims that a statute or prohibition has been violated. Any violations of these laws, or any action against us for violations of these laws, even if we successfully defend against it, could have a material adverse effect on ARCA s business, financial condition and results of operations.

ARCA could also become subject to false claims litigation under federal statutes, which can lead to civil money penalties, restitution, criminal fines and imprisonment, and exclusion from participation in Medicare, Medicaid and other federal and state health care programs. These false claims statutes include the False Claims Act, which allows any person to bring a suit on behalf of the federal government alleging submission of false or fraudulent claims, or causing to present such false or fraudulent claims, under federal programs or contracts claims or other violations of the statute and to share in any amounts paid by the entity to the government in fines or settlement. These suits against pharmaceutical companies have increased significantly in volume and breadth in recent years. Some of these suits have been brought on the basis of certain sales practices promoting drug products for unapproved uses. This new growth in litigation has increased the risk that a pharmaceutical company will have to defend a false claim action, pay fines or restitution, or be excluded from the Medicare, Medicaid, Veterans Affairs and other federal and state healthcare programs as a result of an investigation arising out of such action. ARCA may become subject to such litigation and, if ARCA is not successful in defending against such actions, those actions may have a material adverse effect on our business, financial condition and results of operations.

Additionally, the law or regulatory policies governing pharmaceuticals may change. New statutory requirements may be enacted or additional regulations may be enacted that could prevent or delay regulatory approval of its product candidate. ARCA cannot predict the likelihood, nature or extent of adverse government regulation that may arise from future legislation or administrative action, either in the United States or elsewhere.

If ARCA, its collaborators or its third-party manufacturers fail to comply with applicable continuing regulatory requirements, our business could be seriously harmed because a regulatory agency may:

- issue warning letters;
- suspend or withdraw ARCA s regulatory approval for approved products;
- seize or detain products or recommend a product recall;
- refuse to approve pending applications or supplements to approved applications filed by us;
- suspend any of ARCA s ongoing clinical trials;

impose restrictions on ARCA s operations, including costly new manufacturing requirements;

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seek an injunction;

close the facilities of ARCA s contract manufacturers; or

impose civil or criminal penalties.

If ARCA s third-party suppliers fail to comply with ongoing FDA or other foreign regulatory authority requirements, or if there are unanticipated problems with the medical devices related to Gencaro, these products could be subject to restrictions or withdrawal from the market.

Any medical device for which clearance or approval is obtained, and the manufacturing processes, reporting requirements, post-approval clinical data and promotional activities for such product, will be subject to continued regulatory review, oversight and periodic inspections by the FDA and other domestic and foreign regulatory bodies. With respect to the Gencaro Test, suppliers of the Gencaro Test will be required to comply with the FDA s Quality System Regulation, or QSR, and International Standards Organization, or ISO, requirements which cover the methods and documentation of the design, testing, production, control, quality assurance, labeling, packaging, storage and shipping of any product for which clearance or approval is obtained. Regulatory bodies, such as the FDA, enforce the QSR and other regulations through periodic inspections. The failure by third-party manufacturers or suppliers, as the case may be, to comply with applicable statutes and regulations administered by the FDA and other regulatory bodies, or the failure to timely and adequately respond to any adverse inspectional observations or product safety issues, could result in, among other things, enforcement actions. If any of these actions were to occur, it could harm ARCA s reputation and cause product sales and profitability of Gencaro to suffer and may prevent ARCA from generating revenue.

Even if regulatory clearance or approval is granted, such clearance or approval may be subject to limitations on the intended uses for which the product may be marketed and reduce our potential to successfully commercialize the product and generate revenue from the product.

Medical devices related to Gencaro, such as the Gencaro Test, may in the future be subject to product recalls that could harm the combined company s reputation, business and financial results.

The FDA and similar foreign governmental authorities have the authority to require the recall of commercialized products in the event of material deficiencies or defects in design or manufacture. In the case of the FDA, the authority to require a mandatory recall must be based on an FDA finding that there is a reasonable probability that the device would cause serious adverse health consequences or death. In addition, foreign governmental bodies have the authority to require the recall of our products in the event of material deficiencies or defects in design or manufacture. Manufacturers may, under their own initiative, initiate a field correction or removal, known as a recall, for a product if any material deficiency in a device is found. A government-mandated or voluntary recall by ARCA s third-party suppliers could occur as a result of component failures, manufacturing errors, design or labeling defects or other deficiencies and issues. Any such recalls would divert managerial and financial resources and may have an adverse effect on the combined company s and ARCA s financial condition and results of operations.

If medical devices related to Gencaro cause or contribute to a death or a serious injury, or malfunction in certain ways, ARCA s third-party suppliers will be subject to medical device reporting regulations, which can result in voluntary corrective actions or agency enforcement actions.

Under the FDA medical device reporting regulations, medical device manufacturers are required to report to the FDA information that a device has or may have caused or contributed to a death or serious injury or has malfunctioned in a way that would likely cause or contribute to death or serious injury if the malfunction of the device or one of our similar devices were to recur. If ARCA s third-party suppliers fail to report these events to the FDA within the required timeframes, or at all, the FDA could take enforcement action against ARCA s third-party suppliers. Any such adverse event involving medical devices related to Gencaro also could result in future

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voluntary corrective actions, such as recalls or customer notifications, or agency action, such as inspection or enforcement action. Any corrective action, whether voluntary or involuntary, taken by ARCA s third-party suppliers may significantly affect the combined company ability to market Gencaro. In such cases, ARCA or the combined company could be forced to identify a new third-party test provider.

Clinical trials may be required to support current or future versions of the Gencaro Test. Delays or failures in any such clinical trials may prevent ARCA s third-party suppliers from commercializing any modified or new versions of the Gencaro Test and will adversely affect the combined company s business, operating results and prospects.

Based on discussions with the FDA, ARCA does not believe that additional clinical data are needed for the Gencaro Test submission. However, FDA may require clinical data for the Gencaro Test submission and/or future products. Initiating and completing clinical trials necessary to support 510(k)s or PMAs, if required, for current or future products will be time consuming and expensive and the outcome uncertain. Moreover, the results of early clinical trials are not necessarily predictive of future results, and any product we advance into clinical trials may not have favorable results in later clinical trials.

Conducting successful clinical studies may require the enrollment of large numbers of patients, and suitable patients may be difficult to identify and recruit. Patient enrollment in clinical trials and completion of patient participation and follow-up depends on many factors, including: the size of the patient population; the number of patients to be enrolled; the nature of the trial protocol; the attractiveness of, or the discomforts and risks associated with, the treatments received by enrolled subjects; the availability of appropriate clinical trial investigators, support staff, and proximity of patients to clinical sites; and the patients ability to meet the eligibility and exclusion criteria for participation in the clinical trial and patient compliance. For example, patients may be discouraged from enrolling in clinical trials if the trial protocol requires them to undergo extensive post-treatment procedures or follow-up to assess the safety and effectiveness of ARCA s products or if they determine that the treatments received under the trial protocols are not attractive or involve unacceptable risks or discomforts. In addition, patients participating in clinical trials may die before completion of the trial or suffer adverse medical events unrelated to investigational products.

Development of sufficient and appropriate clinical protocols to demonstrate safety and efficacy are required, and ARCA s third-party suppliers, the combined company or ARCA may not adequately develop such protocols to support clearance and approval. Significant risk trials will require the submission and approval of an IDE from the FDA. There is no guarantee that the FDA will approve ARCA s third-party suppliers or ARCA s future IDE submissions. Further, the FDA may require ARCA s third-party suppliers or ARCA to submit data on a greater number of patients than originally anticipated and/or for a longer follow-up period or change the data collection requirements or data analysis applicable to our clinical trials. Delays in patient enrollment or failure of patients to continue to participate in a clinical trial may cause an increase in costs and delays in the approval and attempted commercialization of future products or result in the failure of the clinical trial. In addition, despite considerable time and expense invested in such clinical trials, the FDA may not consider the data to be adequate to demonstrate safety and efficacy. Such increased costs and delays or failures could adversely affect ARCA s third-party suppliers , the combined company s or ARCA s business, operating results and prospects.

Federal regulatory reforms may adversely affect ARCA s or its suppliers ability to sell products profitably.

From time to time, legislation is drafted and introduced in the U.S. Congress that could significantly change the statutory provisions governing the clearance or approval, manufacture and marketing of a medical device. In addition, FDA regulations and guidance are often revised or reinterpreted by the agency in ways that may significantly affect the way that medical devices are marketed and promoted. It is impossible to predict whether legislative changes will be enacted or FDA regulations, guidance or interpretations changed, and what the impact of such changes, if any, may be.

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Without limiting the generality of the foregoing, last year, the Food and Drug Administration Amendments Act of 2007, or the Amendments, were enacted. The Amendments require, among other things, that the FDA propose, and ultimately implement, regulations that will require manufacturers to label medical devices with unique identifiers unless a waiver is received from the FDA. Once implemented, compliance with those regulations may require manufacturers to take additional steps in the manufacture and labeling of medical devices. These steps may require additional resources and could be costly. In addition, the Amendments require medical device manufacturers to, among other things, comply with clinical trial registration requirements once clinical trials are initiated.

The loss of any rights to market key products would significantly impair ARCA s operating results.

ARCA has licensed from Cardiovascular Pharmacology and Engineering Consultants, LLC, or CPEC, who has licensed rights in Gencaro from Bristol Myers Squibb, or BMS, the exclusive rights to Gencaro for all therapeutic and diagnostic uses in any country until the later of (i) 10 years from the first commercial sale of Gencaro in such country, or (ii) the termination of ARCA s commercial exclusivity in such country. ARCA is obligated to use commercially reasonable efforts to develop and commercialize Gencaro, including obtaining regulatory approvals. ARCA s ability to develop and commercialize Gencaro is dependent on numerous factors, including some factors that are outside of its control. CPEC has the right to terminate ARCA s license if ARCA materially breaches its obligations under the license agreement and fails to cure any such breach within the terms of the license.

If ARCA s license agreement with CPEC is terminated for reasons related to non-payment of fees, or for any other breach, then ARCA would have no further rights to develop and commercialize Gencaro for any indication. The termination of this license, or of any other agreement which enables ARCA to market a key product or product candidate, could significantly and adversely affect ARCA s business.

If ARCA is unable to establish a direct sales force in the U.S., its business may be harmed.

ARCA is currently building its sales organization. Assuming Gencaro is approved by the FDA for commercial sale, ARCA intends to market Gencaro in the U.S. to physicians, hospitals and other health care providers using its own sales force. While certain ARCA employees have experience in establishing and managing a sales force, these employees have no such experience since being with ARCA. ARCA will need to incur significant additional expenses and commit significant additional management resources to establish a sufficient sales force for Gencaro.

ARCA may not be able to successfully establish these capabilities despite these additional expenditures. If ARCA elects to rely on third parties to sell Gencaro and any other products, then it may receive less revenue than if it sold such products directly. In addition, ARCA may have little or no control over the sales efforts of those third parties. In the event ARCA is unable to sell Gencaro and other selected product candidates, either directly or through third parties, the commercialization of Gencaro may be delayed indefinitely and ARCA s business may be harmed.

ARCA s failure to establish and manage a distribution network for its products could delay or compromise the commercialization of Gencaro and other future products.

ARCA has not yet established systems and processes necessary for distributing products to customers. ARCA plans to contract with one or more wholesale distributors to warehouse its products and distribute them to retail, hospital and other pharmacy suppliers that would then distribute its products directly to patients. This distribution network will require significant coordination with its sales and marketing and finance organizations. Failure to secure contracts with distribution services could negatively impact the distribution of ARCA s products, if any, and failure to coordinate financial systems could negatively impact its ability to accurately report product revenue, if any. If ARCA is unable to effectively establish and manage the distribution process, then the commercialization of Gencaro and other product candidates may be delayed or severely compromised and ARCA s results of operations may be harmed.

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If approved by the FDA, Gencaro will be entering into a competitive marketplace and may not succeed.

Gencaro is a new type of beta-blocker and vasodilator being developed for heart failure and other indications. While ARCA anticipates that this drug will be the first genetically-targeted cardiovascular drug, Gencaro will be one of a number of successful drugs in the beta-blocker class currently on the market. Currently, there are three branded beta-blockers indicated for chronic heart failure in NYHA class II-IV patients: TOPROL-XL (once-a-day formulation), Coreg and Coreg CR (once-a-day). TOPROL-XL and Coreg have generic equivalents commercially available in the U.S. (Metoprolol Succinate and Carvedilol respectively). The price of the generic forms of these drugs will be less than the anticipated price of Gencaro, if approved. As a result, Gencaro may not be successful in competing against these existing drugs.

Additionally, Forest Laboratories may apply for approval to use Bystolic, a drug currently used to treat high blood pressure, for treatment of heart failure. If approved for treatment of heart failure, Gencaro may not be successful in competing against Bystolic, an already well-known name brand. Accordingly, ARCA may not achieve its revenue goals, and its business may be harmed.

ARCA s commercial opportunity may be reduced or eliminated if competitors develop and commercialize products that are safer, more effective, have fewer side effects, are more convenient or are less expensive than Gencaro. If products with any of these properties are developed, or any of the existing products are better marketed, then prescriptions of Gencaro by physicians and patient use of Gencaro could be significantly reduced or rendered obsolete and noncompetitive. Further, public announcements regarding the development of any such competing drugs could adversely affect the market price of ARCA s common stock.

Future sales of ARCA s products may suffer if they are not accepted in the marketplace by physicians, patients and the medical community.

Gencaro or ARCA s other product candidates may not gain market acceptance among physicians, patients and the medical community. The degree of market acceptance of Gencaro or ARCA s other product candidates will depend on a number of factors, such as its effectiveness and tolerability, as compared with competitive drugs. Also, prevalence and severity of side-effects could negatively effect market acceptance of Gencaro. Side-effects observed during clinical trials included fatigue, dizziness and slowed heart beat. Failure to achieve market acceptance of Gencaro would significantly harm ARCA s business.

If ARCA is unable to obtain acceptable prices or adequate reimbursement from third-party payors for Gencaro, or any other product candidates that ARCA may seek to commercialize, then its revenues and prospects for profitability will suffer.

ARCA s ability to commercialize Gencaro, or any other product candidates that it may seek to commercialize, is highly dependent on the extent to which coverage and reimbursement for these product candidates will be available from:

- governmental payors, such as Medicare and Medicaid;
- private health insurers, including managed-care organizations; and
- other third-party payors.

Many patients will not be capable of paying for ARCA s potential products themselves and will rely on third-party payors to pay for their medical needs. A primary current trend in the U.S. health care industry is toward cost containment. Large private payors, managed-care organizations, group purchasing organizations and similar organizations are exerting increasing influence on decisions regarding the use of, and reimbursement levels for, particular treatments. Such third-party payors, including Medicare, are challenging the prices charged for medical products and services, and many third-party payors limit reimbursement for newly approved health care products. In particular, third-party payors may limit the reimbursed indications.

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Cost-control initiatives could decrease the price ARCA might establish for products, which could result in product revenues lower than anticipated. If the prices for ARCA s product candidates decrease or if governmental and other third-party payors do not provide adequate coverage and reimbursement levels, then ARCA s revenue and prospects for profitability will suffer.

ARCA s competitors may be better positioned in the marketplace and thereby may be more successful than ARCA at developing, manufacturing and marketing approved products.

Many of ARCA s competitors currently have significantly greater financial resources and expertise in conducting clinical trials, obtaining regulatory approvals, managing manufacturing and marketing approved products than ARCA. Other early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. In addition, these third parties compete with ARCA in recruiting and retaining qualified scientific and management personnel, establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring therapies and therapy licenses complementary to ARCA s programs or advantageous to its business. ARCA expects that its ability to compete effectively will depend upon its ability to:

- successfully and rapidly complete clinical trials for any future product candidates and obtain all requisite regulatory approvals in a cost-effective manner;
- build an adequate sales and marketing infrastructure;
- develop competitive formulations of its product candidates;
- attract and retain key personnel; and
- identify and obtain other product candidates on commercially reasonable terms.

If ARCA fails to identify and license or acquire other products or product candidates, then it may be unable to expand its business, and the acquisition or licensing of other products or product candidates may put a strain on ARCA s operations and will likely require ARCA to seek additional financing.

One of ARCA s key strategies is to license or acquire clinical-stage products or product candidates and further develop them for commercialization. The market for licensing and acquiring products and product candidates is intensely competitive and many of ARCA s competitors may have greater resources than ARCA. Other than this transaction with Nuvelo, ARCA has no definitive agreement regarding any material acquisitions. If ARCA undertakes any additional acquisitions, whether product candidates or other biopharmaceutical companies, the process of integrating an acquired product, candidate or complementary company into ARCA s business may put a strain on its operations, divert personnel, financial resources and management s attention. If ARCA is not successful in identifying and licensing or acquiring other products or product candidates or completing future acquisitions, then it may be unable expand its pipeline of product candidates beyond Gencaro. In addition, any future acquisition would give rise to additional operating costs and will likely require ARCA to seek additional financing. Future acquisitions could result in additional issuances of equity securities that would dilute the ownership of existing stockholders. Future acquisitions could also result in the incurrence of debt, contingent liabilities or the amortization of expenses related to other intangible assets, any of which could adversely affect ARCA s operating results.

Any future product revenues could be reduced by imports from countries where ARCA s product candidates are available at lower prices.

Even if ARCA obtains FDA approval to market Gencaro or other products in the U.S., ARCA s sales in the U.S. may be reduced if ARCA s products are imported into the U.S. from lower priced markets, whether legally or illegally. In the U.S., prices for pharmaceuticals are generally higher than in the bordering nations of Canada and Mexico. There have been proposals to legalize the import of pharmaceuticals from outside the U.S. If such legislation were enacted, then ARCA s future revenues could be reduced.

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If product liability lawsuits are successfully brought against ARCA, then ARCA will incur substantial liabilities and may be required to limit commercialization of Gencaro or other product candidates.

ARCA faces product liability exposure related to the testing of its product candidates in human clinical trials, and may face exposure to claims by an even greater number of persons once it begins marketing and distributing its products commercially. If ARCA cannot successfully defend itself against product liability claims, then it will incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

decreased demand for its products and product candidates;

injury to its reputation;

withdrawal of clinical trial participants;

costs of related litigation;

substantial monetary awards to patients and others;

loss of revenues; and

the inability to commercialize its products and product candidates.

ARCA does not maintain product liability insurance to cover its clinical trials. While ARCA intends to expand its insurance coverage to include the sale of commercial products if marketing approval is obtained for Gencaro or any other product candidate, it does not currently maintain such insurance. Insurance coverage is increasingly expensive; ARCA may not be able to secure insurance coverage at a reasonable cost, and it may not be able to obtain insurance coverage that will be adequate to satisfy any liability that may arise.

Defending against claims relating to improper handling, storage or disposal of hazardous chemicals, radioactive or biological materials could be time consuming and expensive.

ARCA s research and development of product candidates may involve the controlled use of hazardous materials, including chemicals, radioactive and biological materials. ARCA cannot eliminate the risk of accidental contamination or discharge and any resultant injury from the materials. Various laws and regulations govern the use, manufacture, storage, handling and disposal of hazardous materials. ARCA may be sued or be required to pay fines for any injury or contamination that results from its use or the use by third parties of these materials. Compliance with environmental laws and regulations may be expensive, and current or future environmental regulations may impair its research, development and production efforts.

Third parties may own or control patents or patent applications that ARCA may be required to license to commercialize its product candidates or that could result in litigation that would be costly and time consuming.

ARCA s ability to commercialize Gencaro and other product candidates depends upon its ability to develop, manufacture, market and sell these drugs without infringing the proprietary rights of third parties. A number of pharmaceutical and biotechnology companies, universities and research institutions have or may be granted patents that cover technologies similar to the technologies owned by or licensed to ARCA. ARCA may choose to seek, or be required to seek, licenses under third party patents, which would likely require the payment of license fees or royalties or both. ARCA may also be unaware of existing patents that may be infringed by Gencaro, the genetic testing ARCA intends to use in connection with Gencaro or its other product candidates. Because patent applications can take many years to issue, there may be other currently pending applications that may later result in issued patents that are infringed by Gencaro or ARCA s other product candidates. Moreover, a

license may not be available to ARCA on commercially reasonable terms, or at all.

There is a substantial amount of litigation involving patent and other intellectual property rights in the biotechnology and biopharmaceutical industries generally. If a third party claims that ARCA is infringing on

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their technology, then ARCA s business and results of operations could be harmed by a number of factors, including:

- infringement and other intellectual property claims, even if without merit, are expensive and time-consuming to litigate and can divert management s attention from ARCA s core business;
- monetary damage awards for past infringement can be substantial;
- a court may prohibit ARCA from selling or licensing product candidates unless the patent holder chooses to license the patent to ARCA; and
- if a license is available from a patent holder, ARCA may have to pay substantial royalties.

ARCA may also be forced to bring an infringement action if it believes that a competitor is infringing its protected intellectual property. Any such litigation will be costly, time-consuming and divert management s attention, and the outcome of any such litigation may not be favorable to ARCA.

ARCA s intellectual property rights may not preclude competitors from developing competing products and ARCA s business may suffer.

ARCA s competitive success will depend, in part, on ARCA s ability to obtain and maintain patent protection for its inventions, technologies and discoveries, including intellectual property that ARCA licenses. The patent positions of biotechnology companies involve complex legal and factual questions, and ARCA cannot be certain that ARCA s patents and licenses will successfully preclude others from using ARCA s technology. ARCA could incur substantial costs in seeking to enforce its proprietary rights against infringement.

ARCA may not be able to effectively protect its intellectual property rights in some foreign countries, as many countries do not offer the same level of legal protection for intellectual property as the U.S. Furthermore, the patent applications describing ARCA s proprietary methods are filed only in the U.S.

Although Gencaro has an established patent strategy, the timing of the grant of a patent cannot be predicted. Patent applications describing and seeking patent protection of methods, compositions or processes relating to proprietary inventions involving human therapeutics could require ARCA to generate data, which may involve substantial costs. ARCA s pending patent applications may lack priority over others applications or may not result in the issuance of patents. Even if issued, ARCA s patents may not be sufficiently broad to provide protection against competitors with similar technologies and may be challenged, invalidated or circumvented.

While the composition of matter patents on the compound have expired, ARCA holds the intellectual property arising from the discovery of the interaction of Gencaro with the polymorphisms of the $ß_1$ and a_{2c} receptors. ARCA has filed patent applications that claim the use of Gencaro with the diagnosis of a patient s receptor genotype. ARCA s NDA requested a label that will include a claim that efficacy varies based on receptor genotype and a recommendation in the prescribing information that prospective patients be tested for their receptor genotype. Under applicable law, a generic bucindolol label would likely be required to include this recommendation as it pertains directly to the safe or efficacious use of the drug. Such a label could be considered as inducing infringement, carrying the same liability as direct infringement.

Nevertheless, these measures may not be adequate to safeguard the technology underlying ARCA s product candidate. For example, employees, consultants and others who participate in the development of ARCA s products may breach their agreements with ARCA regarding its intellectual property, and ARCA may not have adequate remedies for the breach. Third parties could fail to take a necessary step to protect ARCA s licensed intellectual property, which could seriously harm ARCA s intellectual property position. Even if the patents are granted, the approved label may not contain language covered by the patents, or ARCA may be unsuccessful in enforcing them.

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If ARCA is not able to protect its proprietary technology, trade secrets and know-how, then its competitors may develop competing products. Any issued patent may not be sufficient to prevent others from competing with ARCA; for instance, if the FDA does not require that Gencaro and any equivalent be labeled consistently with any patent protection. Further, ARCA has trade secrets relating to Gencaro, and such trade secrets may become known or independently discovered. ARCA s issued patents and those that may issue in the future, or those licensed to ARCA, may be challenged, opposed, invalidated or circumvented, which could limit ARCA s ability to stop competitors from marketing related products or the term of patent protection that ARCA may have for its product candidates. All of these factors may affect ARCA s competitive position.

If the manufacture, use or sale of ARCA s products infringe on the intellectual property rights of others, ARCA could face costly litigation, which could cause ARCA to pay substantial damages or licensing fees and limit its ability to sell some or all of its products.

Extensive litigation regarding patents and other intellectual property rights has been common in the biopharmaceutical industry. Litigation may be necessary to assert infringement claims, enforce patent rights, protect trade secrets or know-how and determine the enforceability, scope and validity of certain proprietary rights. The defense and prosecution of intellectual property lawsuits, U.S. Patent and Trademark Office interference proceedings, and related legal and administrative proceedings in the U.S. and internationally involve complex legal and factual questions. As a result, such proceedings are costly and time-consuming to pursue, and their outcome is uncertain.

Regardless of merit or outcome, ARCA s involvement in any litigation, interference or other administrative proceedings could cause ARCA to incur substantial expense and could significantly divert the efforts of ARCA s technical and management personnel. Any public announcements related to litigation or interference proceedings initiated or threatened against Nuvelo could cause Nuvelo s stock price to decline. An adverse determination may subject ARCA to the loss of its proprietary position or to significant liabilities, or require ARCA to seek licenses that may include substantial cost and ongoing royalties. Licenses may not be available from third parties, or may not be obtainable on satisfactory terms. An adverse determination or a failure to obtain necessary licenses may restrict or prevent ARCA from manufacturing and selling its products, if any. These outcomes could materially harm ARCA s business, financial condition and results of operations.

If ARCA fails to attract and keep senior management and key scientific personnel, it may be unable to successfully develop and commercialize its product candidates.

ARCA s success depends on its continued ability to attract, retain and motivate highly qualified management and clinical and scientific personnel and on its ability to develop and maintain important relationships with leading academic institutions, clinicians and scientists. The loss of services of one or more of ARCA s members of senior management could delay or prevent the successful completion of the commercialization of Gencaro or in other ways harm ARCA s business. In particular, the loss of the service of Richard Brewer, ARCA s president and chief executive officer, or Dr. Michael Bristow, ARCA s founder and chief science and medical officer, could substantially impair ARCA s future proposals. To mitigate a portion of this risk, ARCA currently carries key person insurance on the life of Dr. Bristow in the amount of $1 million.

There is significant competition from other companies and research and academic institutions for qualified personnel in the areas of ARCA s activities. Competition for personnel with biopharmaceutical skills is intense. If ARCA fails to identify, attract, retain and motivate these highly skilled personnel, then it may be unable to continue its development and commercialization activities.

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FORWARD-LOOKING INFORMATION

This registration statement includes forward-looking statements within the meaning of the safe harbor provisions of the United States Private Securities Litigation Reform Act of 1995. Words such as anticipate, believes, budget, continue, could, estimate, expect, forecast, i plan, potential, predicts, project, should, will and similar expressions are intended to identify such forward-looking statements. Forward-l statements in this prospectus/proxy statement/consent solicitation include, without limitation, statements regarding benefits of the proposed merger and future expectations concerning available cash and cash equivalents, the expected timing of the conclusion of clinical trials, the timing of regulatory filings, and other matters that involve known and unknown risks, uncertainties and other factors that may cause actual results, levels of activity, performance or achievements to differ materially from results expressed in or implied by this prospectus/proxy statement/consent solicitation. Such risk factors include, among others: the ability to consummate the proposed merger; the ability of the combined company to develop and commercialize product candidates; the ability to obtain the substantial additional funding required to conduct development and commercialization activities; the ability to obtain regulatory approvals; the ability to comply with Nasdaq listing standards; the ability to conduct clinical trials, including difficulties or delays in the completion of patient enrollment, data collection or data analysis; the results of preclinical studies and clinical trials with respect to products under development and whether such results will be indicative of results obtained in later clinical trials; and the ability to obtain, maintain and enforce patent and other intellectual property protection for product candidates. These and other risks are described in greater detail in the section entitled Risk Factors beginning on page 28 of this prospectus/proxy statement/consent solicitation.

Actual results may differ materially from those contained in the forward-looking statements in this prospectus/proxy statement/consent solicitation. You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of this prospectus/proxy statement/consent solicitation. All forward-looking statements are qualified in their entirety by this cautionary statement.

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THE SPECIAL MEETING OF NUVELO STOCKHOLDERS

Date, Time and Place

The special meeting of Nuvelo stockholders will be held on , at Nuvelo, Inc., 201 Industrial Road, Suite 310, San Carlos, California commencing at 9:00 a.m. local time. Nuvelo is sending this proxy statement/prospectus/consent solicitation to you in connection with the solicitation of proxies by the Nuvelo board of directors for use at the Nuvelo special meeting and any adjournments or postponements of the special meeting. This proxy statement/prospectus/consent solicitation is first being furnished to Nuvelo s stockholders on or about , 2008.

Purposes of the Nuvelo Special Meeting

The purposes of the Nuvelo special meeting are:

1. To consider and vote upon a proposal to approve the issuance of Nuvelo common stock pursuant to the Agreement and Plan of Merger and Reorganization, dated September 24, 2008, by and among Nuvelo, Inc., Dawn Acquisition Sub, Inc., and ARCA biopharma, Inc., as amended by that Amendment No. 1 to Agreement and Plan of Merger and Reorganization, dated October 28, 2008, by and among Nuvelo, Inc., Dawn Acquisition Sub, Inc., and ARCA biopharma, Inc., and as described in the attached proxy statement/prospectus/consent solicitation. A copy of the merger agreement is attached as *Annex A* to this proxy statement/prospectus/consent solicitation and a copy of the amendment to the merger agreement is attached as *Annex B* to this proxy statement/prospectus/consent solicitation.

2. To consider and vote upon a proposal to approve an amendment to Nuvelo s amended and restated certificate of incorporation in order to effect a reverse stock split of the issued and outstanding shares of Nuvelo s common stock as described in this prospectus/proxy statement/consent solicitation. A copy of this proposed amendment to the Nuvelo amended and restated certificate of incorporation is attached as *Annex G* to this prospectus/proxy statement/consent solicitation.

3. To consider and vote upon a proposal to approve an amendment to Nuvelo s amended and restated certificate of incorporation in order to increase the number of authorized shares of Nuvelo common stock to 250 million as described in this prospectus/proxy statement/consent solicitation. A copy of the proposed amendment to the Nuvelo amended and restated certificate of incorporation is attached as *Annex F* to this prospectus/proxy statement/consent solicitation.

4. To consider and vote upon an adjournment of the special meeting, if necessary, if a quorum is present, to solicit additional proxies if there are not sufficient votes in favor of Proposals No. 1 and No. 2.

5. To transact such other business as may properly come before the special meeting or any adjournment or postponement thereof.

Recommendation of the Nuvelo Board of Directors

THE NUVELO BOARD OF DIRECTORS HAS DETERMINED AND BELIEVES THAT THE ISSUANCE OF SHARES OF NUVELO COMMON STOCK IN THE MERGER IS ADVISABLE TO, AND IN THE BEST INTERESTS OF, NUVELO AND ITS STOCKHOLDERS AND HAS APPROVED SUCH ISSUANCE. THE NUVELO BOARD OF DIRECTORS RECOMMENDS THAT NUVELO STOCKHOLDERS VOTE FOR PROPOSAL NO. 1 TO APPROVE THE ISSUANCE OF SHARES OF NUVELO COMMON STOCK IN THE MERGER.

THE NUVELO BOARD OF DIRECTORS HAS DETERMINED AND BELIEVES THAT THE APPROVAL OF THE AMENDMENT TO NUVELO S AMENDED AND RESTATED CERTIFICATE OF INCORPORATION TO EFFECT A REVERSE STOCK SPLIT OF THE ISSUED AND

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OUTSTANDING SHARES OF NUVELO S COMMON STOCK IS ADVISABLE AND IN THE BEST INTERESTS OF, NUVELO AND ITS STOCKHOLDERS AND HAS APPROVED SUCH AMENDMENT. THE NUVELO BOARD OF DIRECTORS RECOMMENDS THAT NUVELO STOCKHOLDERS VOTE FOR PROPOSAL NO. 2 TO APPROVE THE AMENDMENT TO NUVELO S AMENDED AND RESTATED CERTIFICATE OF INCORPORATION TO EFFECT A REVERSE STOCK SPLIT OF THE ISSUED AND OUTSTANDING SHARES OF NUVELO S COMMON STOCK.

THE NUVELO BOARD OF DIRECTORS HAS DETERMINED AND BELIEVES THAT THE APPROVAL OF THE AMENDMENT TO NUVELO S AMENDED AND RESTATED CERTIFICATE OF INCORPORATION TO INCREASE THE NUMBER OF AUTHORIZED SHARES OF NUVELO COMMON STOCK TO 250 MILLION IS ADVISABLE AND IN THE BEST INTERESTS OF, NUVELO AND ITS STOCKHOLDERS AND HAS APPROVED SUCH AMENDMENT. THE NUVELO BOARD OF DIRECTORS RECOMMENDS THAT NUVELO STOCKHOLDERS VOTE FOR PROPOSAL NO. 3 TO APPROVE THE AMENDMENT TO NUVELO S AMENDED AND RESTATED CERTIFICATE OF INCORPORATION TO INCREASE THE NUMBER OF AUTHORIZED SHARES OF NUVELO COMMON STOCK TO 250 MILLION.

THE NUVELO BOARD OF DIRECTORS HAS DETERMINED AND BELIEVES THAT ADJOURNING THE SPECIAL MEETING, IF NECESSARY, IF A QUORUM IS PRESENT, TO SOLICIT ADDITIONAL PROXIES IF THERE ARE NOT SUFFICIENT VOTES IN FAVOR OF PROPOSALS NO. 1 AND NO. 2 IS ADVISABLE AND IN THE BEST INTERESTS OF NUVELO AND ITS STOCKHOLDERS AND HAS APPROVED SUCH ADJOURNMENT, IF NECESSARY. NUVELO S BOARD OF DIRECTORS RECOMMENDS THAT NUVELO STOCKHOLDERS VOTE FOR PROPOSAL 4 TO ADJOURN THE SPECIAL MEETING, IF NECESSARY, IF A QUORUM IS PRESENT, TO SOLICIT ADDITIONAL PROXIES IF THERE ARE NOT SUFFICIENT VOTES IN FAVOR OF PROPOSALS NO. 1 AND NO. 2.

Record Date and Voting Power

Only holders of record of Nuvelo common stock at the close of business on the record date, , are entitled to notice of, and to vote at, the Nuvelo special meeting. There were approximately holders of record of Nuvelo common stock at the close of business on the record date. Because many of such shares are held by brokers and other institutions on behalf of stockholders, Nuvelo is unable to estimate the total number of stockholders represented by these record holders. At the close of business on the record date, shares of Nuvelo common stock were issued and outstanding. Each share of Nuvelo common stock entitles the holder thereof to one vote on each matter submitted for stockholder approval. See Nuvelo Security Ownership by Certain Beneficial Owners and Management for information regarding ownership by management and persons known by management of Nuvelo to be the beneficial owners of more than 5% of the outstanding shares of Nuvelo common stock.

Voting and Revocation of Proxies

The proxy accompanying this proxy statement/prospectus/consent solicitation is solicited on behalf of Nuvelo s board of directors for use at the special meeting.

If you are a stockholder of record of Nuvelo as of the record date referred to above, you may vote in person at the special meeting or vote by proxy over the Internet, by telephone or using the enclosed proxy card. Whether or not you plan to attend the special meeting, Nuvelo urges you to vote by proxy to ensure your vote is counted. You may still attend the special meeting and vote in person if you have already voted by proxy.

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If your shares are registered directly in your name, you may vote:

Over the Internet. Go to the web site of Nuvelo s tabulator, , at and follow the instructions you will find there. You must specify how you want your shares voted or your Internet vote cannot be completed and you will receive an error message. Your shares will be voted according to your instructions.

By Telephone. Call ( ) - toll-free from the United States or Canada and follow the instructions. You must specify how you want your shares voted and confirm your vote at the end of the call or your telephone vote cannot be completed. Your shares will be voted according to your instructions.

By Mail. Complete, date and sign the enclosed proxy card and mail it in the enclosed postage-paid envelope to . Your proxy will be voted according to your instructions. If you do not specify how you want your shares voted, they will be voted as recommended by Nuvelo s board of directors.

In Person at the Meeting. If you attend the meeting, you may deliver your completed proxy card in person or you may vote by completing a ballot, which will be available at the meeting.

If your shares are held in street name for your account by a bank broker or other nominee, you may vote:

Over the Internet or By Telephone. You will receive instructions from your broker or other nominee if you are permitted to vote over the Internet or by telephone.

By Mail. You will receive instructions from your broker or other nominee explaining how to vote your shares.

In Person at the Meeting. Contact the bank, broker or other nominee that holds your shares to obtain a broker s proxy card and bring it with you to the meeting. **A broker s proxy is *not* the form of proxy enclosed with this proxy statement. You will not be able to vote shares you hold in street name at the meeting unless you have a proxy from your broker issued in your name giving you the right to vote the shares.**

All properly executed proxies that are not revoked will be voted at the special meeting and at any adjournments or postponements of the special meeting in accordance with the instructions contained in the proxy. If a holder of Nuvelo s common stock executes and returns a proxy and does not specify otherwise, the shares represented by that proxy will be voted FOR Proposal No. 1 to approve the issuance of shares of Nuvelo s common stock in the merger; FOR Proposal No. 2 to approve an amendment to Nuvelo s certificate of incorporation to effect a reverse stock split of the issued and outstanding shares of Nuvelo s common stock; FOR Proposal No. 3 to approve an amendment to Nuvelo s certificate of incorporation to increase the number of authorized shares of Nuvelo common stock to 250 million; and FOR Proposal No. 4 to adjourn the special meeting, if necessary, if a quorum is present, to solicit additional proxies if there are not sufficient votes in favor of Proposals No. 1 and No. 2 in accordance with the recommendation of Nuvelo s board of directors.

Any Nuvelo s stockholder of record voting by proxy, other than those stockholders who have executed a voting agreement and irrevocable proxy, has the right to revoke the proxy at any time before the polls close at the special meeting by sending a written notice stating that it would like to revoke its proxy to the Secretary of Nuvelo, by voting again over the Internet or by telephone, by providing a duly executed proxy card bearing a later date than the proxy being revoked or by attending the special meeting and voting in person. Attendance alone at the special meeting will not revoke a proxy. A beneficial owner of Nuvelo s common stock that holds shares in street name must follow directions received from the bank, broker or other nominee that holds the shares to change its voting instructions.

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Quorum and Required Vote

The presence, in person or by proxy, at the special meeting of the holders of a majority of the shares of Nuvelo common stock outstanding and entitled to vote at the special meeting is necessary to constitute a quorum at the meeting. If Nuvelo stockholders do not vote by proxy or in person at the special meeting, the shares of common stock of such stockholders will not be counted as present for the purpose of determining a quorum. Abstentions and broker non-votes will be counted towards a quorum.

The affirmative vote of the holders of a majority of the shares of Nuvelo s common stock present in person or represented by proxy and voting on such matter at the special meeting is required for approval of Proposals No. 1 and No. 4. The affirmative vote of holders of a majority of the issued and outstanding shares of Nuvelo s common stock as of the record date for the special meeting is required for approval of Proposals No. 2 and No. 3.

For Proposals No. 1 and No. 4, which require the approval of a majority of the shares of Nuvelo s common stock present in person or represented by proxy and voting on such matter at the special meeting, a failure to submit a proxy card or vote at the special meeting, or an abstention, vote withheld or broker non-votes will have no effect on the outcome of such proposals. For Proposals No. 2 and No. 3, which require the approval of holders of a majority of the outstanding shares of Nuvelo s common stock, a failure to vote by proxy or in person at the special meeting, or an abstention, vote withheld or broker non-vote for such proposal, will have the same effect as a vote against the approval Proposals No. 2 and No. 3.

At the record date for the special meeting, the directors and executive officers of Nuvelo owned approximately % of the outstanding shares of Nuvelo common stock entitled to vote at the meeting. Stockholders owning approximately shares of Nuvelo common stock, representing approximately % of the outstanding shares of Nuvelo common stock as of the record date, are subject to voting agreements and irrevocable proxies. Each such stockholder has agreed in the voting agreements to vote all shares of Nuvelo common stock owned by him, her or it as of the record date in favor of the issuance of shares of Nuvelo common stock in the merger and the to Nuvelo s amended and restated certificate of incorporation in order to effect a reverse stock split of the issued and outstanding shares of Nuvelo s common stock.

Solicitation of Proxies

In addition to solicitation by mail, the directors, officers, employees and agents of Nuvelo may solicit proxies from Nuvelo s stockholders by telephone, other electronic means or in person. Directors, officers, employees and agents of Nuvelo will not receive any additional compensation for their services, but Nuvelo will reimburse them for their out-of-pocket expenses. Nuvelo also will make arrangements with banks, brokers, nominees, custodians and fiduciaries who are record holders of Nuvelo s common stock for the forwarding of solicitation materials to the beneficial owners of Nuvelo s common stock. Nuvelo will reimburse these banks, brokers, nominees, custodians and fiduciaries for the reasonable out-of-pocket expenses they incur in connection with the forwarding of solicitation materials and in obtaining voting instructions from these owners.

Nuvelo has retained Georgeson, Inc., a proxy solicitation firm, to assist in the solicitation of proxies by mail, telephone or other electronic means or in person for a fee of approximately $25,000, plus disbursements and a fee for each completed call.

Other Matters

As of the date of this proxy statement/prospectus/consent solicitation, the Nuvelo board of directors does not know of any business to be presented at the Nuvelo special meeting other than as set forth in the notice accompanying this proxy statement/prospectus/consent solicitation. If any other matters should come before the special meeting, it is intended that the shares represented by proxies will be voted with respect to such matters in accordance with the judgment of the persons voting the proxies.

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NUVELO PROPOSAL NO. 1 APPROVAL OF ISSUANCE OF SHARES OF NUVELO COMMON STOCK IN THE MERGER

THE MERGER

This section and the section entitled The Merger Agreement in this proxy statement/prospectus/consent solicitation describe the material aspects of the merger, including the merger agreement. While Nuvelo and ARCA believe that this description covers the material terms of the merger and the merger agreement, it may not contain all of the information that is important to you. You should read carefully this entire proxy statement/prospectus/consent solicitation for a more complete understanding of the merger and the merger agreement, including the merger agreement attached as Annex A, the amendment to the merger agreement attached as Annex B, the opinion of Jefferies and Company, Inc. attached as Annex E, and the other documents to which you are referred herein. See the section entitled Where You Can Find More Information in this proxy statement/prospectus/consent solicitation.

General Description of the Merger

Nuvelo, ARCA, and Dawn Acquisition Sub, Inc., a Delaware corporation and wholly-owned subsidiary of Nuvelo, entered into an Agreement and Plan of Merger dated as of September 24, 2008, which the parties amended by that Amendment No. 1 to Agreement and Plan of Merger and Reorganization, dated October 28, 2008, by and among Nuvelo, Inc., ARCA and Dawn Acquisition Sub, Inc., and which, unless otherwise indicated, is referred to in this proxy statement/prospectus/consent solicitation as the merger agreement. The merger agreement contains the terms and conditions of the proposed business combination of Nuvelo and ARCA. Pursuant to the merger agreement, on the terms and conditions set forth therein, Dawn Acquisition Sub, Inc., will be merged with and into ARCA, with ARCA surviving the merger as a wholly-owned subsidiary of Nuvelo. Upon the terms and subject to the conditions set forth in the merger agreement, Nuvelo has agreed to issue, and holders of ARCA capital stock will receive, shares of Nuvelo common stock such that following the consummation of the transactions contemplated by the merger agreement, current stockholders of Nuvelo shall own approximately 33% of the common stock of the combined company, and current ARCA stockholders shall own or have the right to acquire approximately 67% of the common stock of the combined company after giving effect to the exercise of all outstanding options and warrants to purchase ARCA capital stock, primarily on a treasury method basis, and without giving effect to the exercise of any options or warrants to purchase Nuvelo common stock. The actual number of shares of Nuvelo common stock to be issued in respect of each share of common stock of ARCA will be determined by dividing an aggregate of 109,009,278 shares of Nuvelo common stock by the number of shares of ARCA common stock outstanding and deemed outstanding pursuant to the formula set forth in the merger agreement and described below under the heading The Merger Agreement. In addition, Nuvelo will assume options and warrants to purchase shares of ARCA capital stock.

Background of the Merger

Historical Background for Nuvelo

Nuvelo has reviewed, from time to time, various business opportunities to further develop and commercialize its compounds as well as opportunities for growth and expansion, including potential business collaboration and acquisition opportunities.

At a meeting of Nuvelo s board of directors on March 14, 2008 at which certain members of management were also present, management recommended, and the Nuvelo board of directors approved discontinuing the clinical development of alfimeprase as a result of disappointing clinical trial results and approved a plan to restructure the company. These decisions were described in Nuvelo s Report on Form 8-K and press release of March 17, 2008.

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At a meeting of Nuvelo s board of directors on April 8, 2008, at which certain members of management and a representative of Cooley Godward Kronish LLP, or Cooley, Nuvelo s legal counsel, were also present, the board discussed a variety of business opportunities, including potential corporate partnering, licensing and acquisition opportunities and directed management to pursue various strategic alternatives and identify potential counterparties for a strategic transaction. Thereafter, Nuvelo engaged Jefferies & Company, Inc., or Jefferies, to assist it in evaluating its alternatives and render a fairness opinion should Nuvelo decide to proceed with a transaction.

In early April 2008, Jefferies and Nuvelo management developed a list of 33 potential parties to be contacted regarding a possible business combination with Nuvelo, including four companies that had previously approached Nuvelo regarding such a transaction. In mid-April 2008, Jefferies began contacting these parties to explore their interest in engaging in such discussions.

Beginning in May 2008, public information packages were sent to potential counterparties that had expressed an interest in engaging in business combination discussions. In mid-May 2008, at the direction of the Nuvelo board of directors, Jefferies began obtaining confidentiality agreements from potential counterparties that were interested in receiving non-public information regarding Nuvelo in order to evaluate a potential transaction. Between May 14, 2008 and August 28, 2008, eight potential counterparties executed such a confidentiality agreement.

At a Nuvelo board meeting on June 4, 2008, at which members of management and representatives of Cooley and Jefferies were also present, the board considered the status of discussions with potential counterparties. The Nuvelo board of directors instructed management, working with Jefferies, to distribute a process letter to interested parties describing the next steps to be taken by those interested in continuing discussions with Nuvelo. A process letter describing these steps was sent to the then-interested parties on June 9, 2008. As described below, the process letter was sent to ARCA on June 10, 2008.

Beginning on June 9, 2008, Nuvelo, Jefferies and representatives of potential counterparties engaged in a due diligence review in connection with a possible transaction, with the various potential counterparties and their representatives engaging in diligence calls on a variety of matters relating to the parties. Beginning June 18, 2008, access to an electronic data room containing information relating to Nuvelo was granted to potential counterparties, including ARCA.

Beginning on July 2, 2008, Nuvelo began receiving initial indication of interest letters. By July 16, 2008, Nuvelo had received four initial indication of interest letters, including one from ARCA, as further discussed below.

Historical Background for ARCA

Since its inception, ARCA s management team has, on an ongoing basis, evaluated various strategic options to maximize value for its stockholders, including potential merger transactions with other companies. During this process, which continued into mid-2008, ARCA held numerous discussions with various parties that included both domestic and foreign public pharmaceutical and biotechnology companies. ARCA held discussions with several parties under confidentiality agreements.

In March 2008, ARCA management initiated discussions with J.P. Morgan to assist the company in raising a new round of private equity financing from outside venture capital firms and other sources, as well as help ARCA explore other strategic alternatives including the potential sale or merger of the company. Over the next several weeks, ARCA and J.P. Morgan prepared marketing materials to be used in discussions with potential investors, potential acquirors and merger partners, including domestic and foreign public pharmaceutical and biotechnology companies.

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On May 2, 2008, at a meeting of the board of directors of ARCA, the board authorized the engagement of J.P. Morgan as its financial advisor with respect to a possible sale or merger and as placement agent with respect to a possible private placement of securities.

During June, July and August 2008, ARCA and J.P. Morgan held numerous discussions with various parties that included potential investors, as well as both domestic and foreign public pharmaceutical and biotechnology companies.

During the same period, ARCA management and its board of directors came to the determination that, due to a number of factors, a reverse merger with Nuvelo was an attractive strategic alternative for ARCA, including the fact that it would provide the cash resources that could be used to finance the development and commercialization of ARCA s product candidate, enhance ARCA s product development pipeline, and add significant experience to the ARCA management team.

Background of Development of Transaction Between Nuvelo and ARCA

In January 2007, Ted W. Love, M.D., Nuvelo s chairman and chief executive officer, met on a nonconfidential basis with Richard B. Brewer, ARCA s president and chief executive officer, and several other executives from each company, to introduce Nuvelo and to learn more about ARCA s business. Mr. Brewer and Dr. Love had known each other professionally for a number of years, having previously worked together at Genentech. This initial discussion led to further discussions over the next several months under a confidentiality agreement, during which the parties performed due diligence and discussed a potential merger transaction. These discussions were terminated in June 2007 while they were still informal and nonbinding, in light of the companies respective product development goals as well as differing views as to valuation.

On May 2, 2008, at the direction of the Nuvelo board of directors, Jefferies contacted Mr. Brewer regarding the possibility of a transaction involving ARCA and Nuvelo.

On June 10, 2008 Mr. Brewer contacted Dr. Love expressing interest in discussing a possible business combination of ARCA and Nuvelo. The following day, Jefferies sent ARCA the process letter which had been sent to other interested parties.

On June 24, 2008, Nuvelo management met with ARCA management by teleconference to provide an overview on each company s respective business.

On July 2, 2008, members of the ARCA board of directors and ARCA management met by teleconference with representatives of J.P. Morgan to discuss the terms of a proposed preliminary indication of interest regarding a merger transaction to be submitted to Nuvelo. On July 3, 2008, Mr. Brewer submitted ARCA s non-binding indication of interest to Dr. Love.

At a Nuvelo board meeting on July 16, 2008, at which members of management and representatives of Cooley and Jefferies were also present, Jefferies discussed with the board of directors the four indications of interest that had been submitted to date. At one point during the meeting, representatives of ARCA joined the call to discuss ARCA, its business and its products. At another point during the meeting, another party that had submitted an indication of interest joined the meeting to discuss its business and products. The board of directors instructed management and Jefferies to send the four interested parties a second round process letter and draft acquisition agreement on which interested parties should comment in connection with submitting second round proposals.

On August 1, 2008, the second round process letter and draft acquisition agreement were sent to four potential counterparties.

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On August 18, 2008, members of the ARCA board of directors and ARCA management met by teleconference with representatives of J.P. Morgan to discuss the terms of a proposed firm indication of interest regarding a merger transaction to be submitted to Nuvelo. On the evening of August 18, 2008, on behalf of Mr. Brewer, representatives of J.P. Morgan submitted ARCA s firm indication of interest to Dr. Love and to representatives from Jefferies, which included ARCA s proposed revisions to a draft merger agreement.

By August 22, 2008, two second round indications of interest had been received, including the one from ARCA. Only ARCA submitted comments on the proposed acquisition agreement. The other two potential counterparties that had received the second bid process letter indicated that they would not be submitting second round proposals. At a Nuvelo board meeting on August 22, 2008, at which members of management and representatives of Cooley and Jefferies were also present, representatives of Cooley made a presentation regarding the fiduciary duties of the Nuvelo board of directors in the context of the proposed transaction and the terms of the proposed acquisition agreement from ARCA. Representatives of Jefferies also discussed the terms proposed by the two potential counterparties. Following discussion, the Nuvelo board of directors was of the view that the ARCA proposal was substantially superior to the other proposal and instructed management, with the assistance of Jefferies and Cooley, to negotiate the terms of a possible transaction with ARCA.

From August 27, 2008 to September 24, 2008, Nuvelo and ARCA, together with their respective outside legal counsel and financial advisors, continued their mutual due diligence and engaged in negotiations regarding the provisions of the merger agreement and related agreements, including, among other things, the potential adjustments to the number of shares of Nuvelo common stock to be issued in the merger and the net cash requirements of Nuvelo and ARCA. The parties reached final agreement on these and other issues over the course of numerous discussions involving members of Nuvelo and ARCA management and legal counsel.

On August 18, 2008, financial advisors to a potential counterparty that had not previously submitted an indication of interest contacted Jefferies to discuss the possibility of a potential transaction with Nuvelo and the advisors to this counterparty and representatives of Jefferies had a related discussion on August 27, 2008. The potential counterparty submitted a preliminary indication of interest on September 3, 2008. Representatives of Jefferies and the management of Nuvelo discussed the contents of this indication of interest and in light of the absence of compelling terms and the advanced discussions with ARCA, determined not to proceed with discussions relating to a potential transaction with the potential counterparty.

On September 5, September 14 and September 18, 2008, ARCA s board of directors met to review the status of the negotiations regarding the proposed transaction with Nuvelo.

At a Nuvelo board meeting on September 15, 2008, at which members of management and representatives of Cooley and Jefferies were also present, representatives of Cooley made a presentation regarding the current status of the terms of the proposed merger agreement with ARCA. Representatives of Jefferies also discussed the financial terms of the proposed transaction.

On September 24, 2008, the board of directors of ARCA held a meeting by teleconference to discuss and approve the proposed merger with Nuvelo. Prior to the meeting, the board of directors of ARCA received copies of the transaction documents and other related documents. ARCA management, together with representatives from Hogan & Hartson LLP, ARCA s legal advisor, summarized the terms of the merger agreement for the board of directors and answered questions posed by members of the board. Following the discussion, ARCA s board of directors approved the proposed merger with Nuvelo and the merger agreement and all other agreements related to the merger in substantially the form presented to the ARCA board, with such changes as ARCA management deemed necessary or advisable.

On September 24, 2008, the board of directors of Nuvelo held a meeting, at which certain members of management and representatives of Cooley and Jefferies were also present, during which the Nuvelo board of directors received an update from Cooley and Jefferies on the status of the proposed transaction. During the meeting, a representative of Cooley presented a summary of the terms of the draft merger agreement and related

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agreements and the resolution of the issues in the agreements that were open as of the last board of directors meeting. Representatives of Jefferies made a presentation regarding the financial terms of the proposed transaction. Jefferies then provided the board of directors with its oral opinion, subsequently confirmed in writing on such date, to the effect that, as of that date and based upon and subject to the various assumptions made, procedures followed, matters considered and limitations described in its opinion, the Exchange Ratio, representing the amount of shares of Nuvelo common stock to be exchanged for ARCA capital stock in the merger pursuant to the terms of the merger agreement, was fair, from a financial point of view, to Nuvelo. The Nuvelo board of directors, having deliberated regarding the terms of the proposed transaction, unanimously determined that the issuance of Nuvelo common stock in the merger and the proposed amendment to Nuvelo s amended and restated certificate of incorporation are advisable and fair to, and in the best interests of, Nuvelo and its stockholders, unanimously authorized and approved the execution, delivery and performance of the merger agreement by Nuvelo and unanimously approved the merger and the proposed amendment to Nuvelo s amended and restated certificate of incorporation and unanimously recommended the approval of the issuance of Nuvelo common stock in the merger and the proposed amendment to Nuvelo s amended and restated certificate of incorporation by the Nuvelo stockholders.

The merger agreement and related documents were executed later in the day on September 24, 2008. Before the opening of the market on September 25, 2008, the parties announced the execution of the merger agreement.

Reasons for the Merger

Mutual Reasons for the Merger

Nuvelo and ARCA believe that the combined company resulting from the merger will have the following potential advantages:

- the combined company will be a larger cardiovascular focused biotechnology company with a near term commercial opportunity represented by ARCA s product candidate, Gencaro, and longer term product development opportunities represented by Nuvelo s product candidate, NU 172;
- the combined company will be more securely capitalized to commercialize its late stage product candidate and develop its pipeline of longer term product candidates; and
- there are significant potential synergies and cost savings that Nuvelo and ARCA believe can be achieved by consolidating the infrastructures of the two companies and allowing management to fully leverage the combined research, development and administrative capabilities across multiple potential product candidates.

Nuvelo s Reasons for the Merger

In evaluating the merger, Nuvelo s board of directors consulted with senior management and Nuvelo s legal and financial advisors, and, in the course of reaching its determination to approve the merger, the merger agreement and the other transactions contemplated by the merger agreement, Nuvelo s board of directors considered a number of factors, including the following:

- historical and current information concerning Nuvelo s business, including the termination of its former lead product candidate, alfimeprase, and negative trends in its financial condition, operations and competitive position;
- current financial market conditions, and historical market prices, volatility and trading information with respect to Nuvelo s common stock;
- Nuvelo s limited prospects if it were to remain an independent, standalone company as a result of factors such as the absence of a late-stage product candidate, its declining cash balance, the expenses and fixed costs associated with its operations and its prospects

for development and commercialization of Nuvelo s early stage product candidates, particularly given its limited resources;

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the belief that the combination with ARCA would result in a combined company with the potential for enhanced future growth and value as compared to Nuvelo as an independent, standalone company;

the opportunity for Nuvelo s stockholders to participate in the potential future value of the combined company;

Nuvelo s board of directors view as to the potential for other third parties to enter into strategic relationships with or acquire Nuvelo on favorable terms, if at all, based on the interest expressed by other third parties during the strategic alternatives review process undertaken by Nuvelo;

historical and current information concerning ARCA s business, financial performance, financial condition, operations and management, including the results of a due diligence investigation of ARCA conducted by Nuvelo s management and advisors;

management s belief that the merger was more favorable to Nuvelo s stockholders than any other alternative reasonably available to Nuvelo and its stockholders, including the alternative of remaining an independent, standalone company;

the opinion of Jefferies to the Nuvelo board of directors that, as of September 24, 2008 and subject to the various assumptions made, procedures followed, matters considered and limitations described in the opinion, the Exchange Ratio, representing the amount of shares of Nuvelo common stock to be exchanged for ARCA capital stock in the merger pursuant to the terms of the merger agreement, was fair, from a financial point of view, to Nuvelo, as more fully described below under the caption Opinion of Nuvelo s Financial Advisor; and

the terms and conditions of the merger agreement, including:

- the determination that the relative percentage ownership of the combined company by Nuvelo s stockholders and ARCA s stockholders is consistent with Nuvelo s perceived valuations of each company at the time Nuvelo s board of directors approved the merger agreement;
- the non-solicitation provisions limiting ARCA s ability to engage in discussions or negotiations regarding, or furnish to any person any information with respect to, assist or participate in any effort or attempt by any person with respect to, or otherwise cooperate in any way with, an alternative acquisition proposal;
- Nuvelo s rights under the merger agreement to pursue alternative acquisition proposals received independently under specified circumstances;
- the absence of any terms providing for an adjustment to the exchange ratio based on the amount of cash or working capital at closing for Nuvelo provided that Nuvelo complies in all material respects with certain covenants with respect to expenditures and minimum cash balances;
- the requirement that holders of the requisite amount of ARCA s capital stock necessary to approve the merger agreement enter into voting agreements providing that such stockholders vote in favor of adoption of the merger agreement and against any proposal made in opposition to, or in competition with, the merger;

Nuvelo s board of directors belief that the $947,112 termination fee and obligation to reimburse expenses up to $500,000 payable to ARCA in the circumstances set forth in the merger agreement was reasonable in the context of termination fees that were payable in other comparable transactions and would not be likely to preclude another party from making a superior acquisition proposal; and

the qualification of the merger as a reorganization for U.S. federal income tax purposes, with the result that in the merger neither Nuvelo s nor ARCA s stockholders will recognize gain or loss for U.S. federal income tax purposes.

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In the course of its deliberations, Nuvelo s board of directors also considered a variety of risks and other countervailing factors related to entering into the merger agreement, including the following:

- the risk that the merger might not be completed in a timely manner or at all due to failure to satisfy the closing conditions, some of which are outside of Nuvelo s control;
- if the merger is not completed, the potential adverse effect of the public announcement of the merger on Nuvelo s business, including its ability to attract and retain key personnel and its overall competitive position;
- the immediate and substantial dilution of the equity interests and voting power of Nuvelo s stockholders upon completion of the merger;
- the ability of Nuvelo s current stockholders to significantly influence the combined company s business after the completion of the merger;
- the risk that the combined company may be unable to raise needed additional capital in and that such additional capital, even if available, will be further dilutive to Nuvelo s stockholders and may be at a lower valuation than reflected in the merger;
- the restrictions that the merger agreement imposes on soliciting competing acquisition proposals;
- the fact that Nuvelo would be obligated to pay a $947,112 termination fee to ARCA and reimburse ARCA s expenses of up to $500,000 if the merger agreement is terminated under certain circumstances;
- the restrictions on the conduct of Nuvelo s business prior to the completion of the merger, which require Nuvelo to carry on its business in the usual, regular and ordinary course in substantially the same manner as previously conducted, subject to specific additional restrictions, including restrictions relating to expenditures outside an agreed upon budget or which would result in lower than anticipated cash balances at the end of each completed fiscal quarter and interim stub period prior to the effective time of the merger, which restrictions may delay or prevent Nuvelo from pursuing business opportunities that would otherwise be in its best interests as a standalone company;
- the requirement that Nuvelo receive approval from Nasdaq for the re-listing of Nuvelo s common stock in connection with the merger based on the initial listing requirements of any of the Nasdaq Global Select Market, Nasdaq Global Market or Nasdaq Capital Market;
- the challenges and costs of combining administrative operations and the substantial expenses to be incurred in connection with the merger, including the risks that delays or difficulties in completing the administrative integration and such other expenses, as well as the additional public company expenses and obligations that ARCA will be subject to in connection with the merger that it has not previously been subject to, could adversely affect the combined company s operating results and preclude the achievement of some benefits anticipated from the merger;

the possible volatility, at least in the short term, of the trading price of Nuvelo s common stock resulting from the announcement and pendency of the merger;

the possible earlier than anticipated loss of key management or other personnel of Nuvelo;

the risk of diverting management s attention from day-to-day operations to implement the merger;

the interests of Nuvelo s executive officers and directors in the transactions contemplated by the merger agreement, as described in the section of this proxy statement/prospectus/consent solicitation entitled Interests of Nuvelo s Directors and Executive Officers in the Merger ; and

various other applicable risks associated with the business of Nuvelo and the combined company and the merger, including those described in the section of this proxy statement/prospectus/consent solicitation entitled Risk Factors.

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The foregoing discussion of the factors considered by Nuvelo s board of directors is not intended to be exhaustive, but does set forth the principal factors considered by Nuvelo s board of directors. Nuvelo s board of directors collectively reached the unanimous conclusion to approve the merger agreement in light of the various factors described above and other factors that each member of Nuvelo s board of directors deemed relevant. In view of the wide variety of factors considered by the members of Nuvelo s board of directors in connection with their evaluation of the merger agreement and the complexity of these matters, Nuvelo s board of directors did not consider it practical, and did not attempt, to quantify, rank or otherwise assign relative weights to the specific factors it considered in reaching its decision. Nuvelo s board of directors made its decision based on the totality of information presented to and considered by it. In considering the factors discussed above, individual directors may have given different weights to different factors.

Nuvelo s board of directors unanimously determined that the merger agreement and the merger are advisable, fair to and in the best interests of Nuvelo s stockholders and unanimously approved the merger agreement and the issuance of the Nuvelo common stock pursuant to the merger agreement.

The foregoing discussion of Nuvelo s board of directors considerations concerning the merger is forward looking in nature. This information should be read in light of the discussions under the heading Forward-Looking Information.

ARCA s Reasons for the Merger

In the course of deliberations, ARCA s board reviewed ARCA s historical, present and projected financials under various scenarios, and its historical and short and long-term strategic objectives, the opportunities in the marketplace that ARCA is pursuing and the risks associated therewith.

In evaluating the merger, ARCA s board of directors consulted with senior management and ARCA s legal and financial advisors, and in the course of reaching its determination to approve the merger, the merger agreement and the other transactions contemplated by the merger agreement, ARCA s board of directors considered a number of factors, including, but not limited to:

- ARCA s additional capital requirements, which ARCA anticipates can be met with Nuvelo s available cash, together with ARCA s other cash resources, to fund ARCA s projected operating requirements through the end of 2009, beyond the expected date of FDA approval of Gencaro; and, given market conditions, the benefits of this option over others considered by ARCA to finance its operations, such as an equity offering;

- Nuvelo s longer term product development opportunities represented by its product candidate, NU172, would be complimentary to Gencaro;

- ARCA s ability to leverage Nuvelo s other non-cardiovascular candidates and research platforms and its experienced clinical, regulatory and administrative employees as a compliment to ARCA s own employees;

- the merger with Nuvelo will enhance the combined company s access to capital, providing ARCA with a greater range of options than if it continued as a privately-held company;

- the terms and conditions of the merger agreement, including without limitation the following:

  - the determination that the expected relative ownership interests of ARCA stockholders and Nuvelo stockholders in the combined company is reasonable, based on the board of directors judgment of the relative valuations of the two companies;

that the terms of the merger agreement are reasonable, including the parties representations, warranties and covenants and the conditions to the parties respective obligations, such as the condition that Nuvelo conduct its operations pre-closing in accordance with a budget agreed-to by the parties;

the qualification of the merger as a reorganization for U.S. federal income tax purposes, with the result that in the merger neither Nuvelo s nor ARCA s stockholders will recognize gain or loss for U.S. federal income tax purposes;

that appraisal rights would be available to non-consenting ARCA stockholders under the DGCL; and

the fact that Nuvelo would be obligated to pay a $947,112 termination fee to ARCA and reimburse ARCA s expenses up to $500,000 if the merger agreement is terminated under certain circumstances.

In the course of its deliberations, ARCA s board of directors also considered a variety of risks and other countervailing factors related to entering into the merger agreement, including the following:

the risk that the merger might not be completed in a timely manner, or at all, due to failure to satisfy the closing conditions, some of which are outside of ARCA s control, and if the merger is not completed, the potential adverse effect of the public announcement of the merger on ARCA s business, including its ability to attract new sources of capital, retain key personnel and its maintaining its overall competitive position;

the restrictions on ARCA s conduct of business prior to the completion of the merger, which subject to certain limitations, may delay or prevent ARCA from pursuing business opportunities that would otherwise be in its best interests as a standalone company;

the substantial expenses to be incurred in connection with the merger and the fact that ARCA would be obligated to pay a $1,922,924 termination fee to Nuvelo and reimburse Nuvelo s expenses up to $500,000 if the merger agreement is terminated under certain circumstances;

expenses and obligations that the combined company would be subject to as a result of being a public company could adversely affect the combined company s operating results and preclude the achievement of some benefits anticipated from the merger;

the possible loss of key management, scientific or other personnel of either of the combining companies as a result of management changes and other changes associated with integrating the businesses;

the risk that integrating the combined companies will divert management s attention from other strategic priorities;

the interests of ARCA s executive officers and directors in the transactions contemplated by the merger agreement, as described in the section of this proxy statement/prospectus/consent solicitation entitled Interests of ARCA s Directors and Executive Officers in the Merger ; and

various other applicable risks associated with the business of ARCA, Nuvelo and the combined company and the merger, including those described in the section of this proxy statement/prospectus/consent solicitation entitled Risk Factors.

The foregoing discussion of the factors considered by ARCA s board of directors is not intended to be exhaustive, but sets forth the principal factors considered by ARCA s board of directors. ARCA s board of directors collectively reached the unanimous conclusion to approve the merger agreement in light of the various factors described above and other factors that each member of ARCA s board of directors deemed relevant. In view of the wide variety of factors considered by the members of ARCA s board of directors in connection with their evaluation of the merger agreement and the complexity of these matters, ARCA s board of directors did not consider it practical, and did not attempt, to quantify, rank or otherwise assign relative weights to the specific factors it considered in reaching its decision. ARCA s board of directors made its decision based on the totality of information presented to and considered by it. In considering the factors discussed above, individual directors

may have given different weights to different factors.

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ARCA s board of directors unanimously determined that the merger agreement and the merger are advisable, fair to and in the best interests of ARCA s stockholders and unanimously approved the merger agreement and the amendment of ARCA s Restated Charter in accordance with the terms of the merger agreement.

The foregoing discussion of ARCA s board of directors considerations concerning the merger is forward looking in nature. This information should be read in light of the discussions under the heading Forward-Looking Information.

Opinion of Nuvelo s Financial Advisor

Jefferies served as Nuvelo s financial advisor in connection with the proposed transaction. On September 24, 2008, Jefferies delivered to the board of Nuvelo its oral opinion, subsequently confirmed in writing on such date, to the effect that, as of that date and based upon and subject to the various assumptions made, procedures followed, matters considered and limitations described in its opinion, the Exchange Ratio, representing the amount of shares of Nuvelo common stock to be exchanged for ARCA capital stock in the merger pursuant to the terms of the merger agreement, was fair, from a financial point of view, to Nuvelo.

The full text of Jefferies written opinion, dated September 24, 2008, is attached as *Annex E* to this proxy statement/prospectus/consent solicitation and is incorporated into this proxy statement/prospectus/consent solicitation by reference. You are encouraged to read carefully Jefferies entire opinion. It describes the assumptions made, procedures followed, factors considered and limitations on the review undertaken by Jefferies in rendering its opinion. The following is a summary of the material aspects of Jefferies opinion and the methodology that Jefferies used to render its opinion. This summary is qualified in its entirety by reference to the full text of the opinion.

Jefferies opinion was provided for the use and benefit of the board of directors of Nuvelo in its consideration of the merger. Jefferies opinion does not address the relative merits of the transactions contemplated by the merger agreement as compared to any alternative transaction or opportunity that might be available to Nuvelo, nor does it address the underlying business decision by Nuvelo to engage in the merger or the terms of the merger agreement or the documents referred to therein. Furthermore, Jefferies opinion does not constitute a recommendation as to how any holder of Nuvelo common stock should vote on the merger or any matter related thereto. In addition, Jefferies opinion does not address, the fairness to, or any other consideration of, the holders of any class of securities or the creditors or other constituencies of Nuvelo or ARCA. The opinion also does not address the fairness of the amount or nature of, or any other aspects relating to, any compensation to be received by any officers, directors or employees of any parties to the merger or any class of such persons, relative to the Exchange Ratio (representing the shares of Nuvelo common stock to be exchanged for ARCA capital stock in the merger pursuant to the terms of the merger agreement) or otherwise.

Jefferies assumed, with the Nuvelo board s consent, for purposes of its opinion that (i) the capitalization of ARCA immediately prior to the effective time of the merger shall be as set forth in Section 2.3 of the merger agreement, but after giving effect to receipt by ARCA of $8,750,000 in total consideration for the issuance of 6% convertible promissory notes of ARCA and related warrants to purchase ARCA common stock providing for 20% warrant coverage issued in connection with the Note and Warrant Purchase Agreement, and (ii) the exchange ratio in the merger (regardless of the value of Nuvelo s common stock at the effective time of the merger) will always result in the conversion of all outstanding shares of ARCA capital stock (including the shares of ARCA common stock issuable upon exercise of the note warrants) and all outstanding ARCA securities that are convertible or exchangeable into ARCA capital stock (other than out-of-the-money ARCA options and warrants) into not more than, in the aggregate, 67% of the outstanding Nuvelo common stock, on a fully diluted basis using the treasury stock method, at the effective time of the merger. For purposes of its opinion, Jefferies ignored, with the Nuvelo board s consent, the value of ARCA options and warrants that will be out-of-the-money when converted into Nuvelo securities at the effective time of the merger. Based on a price per share of Nuvelo s common stock of $0.39 (representing the five day average closing price of Nuvelo s common stock as of

September 19, 2008), 6,471,077 shares of Nuvelo s common stock underlying out-of-the-money options and warrants of existing Nuvelo holders and 849,882 shares of Nuvelo s common stock underlying out-of-the-money options and warrants of Nuvelo would be exchanged for ARCA options and warrants in the merger.

In connection with its opinion, Jefferies, among other things:

- reviewed a draft of the merger agreement, dated September 24, 2008, and the exhibits thereto;
- reviewed certain publicly available financial and other information about Nuvelo and ARCA;
- reviewed certain information furnished to Jefferies by Nuvelo and ARCA, respectively, including financial forecasts and analyses, relating to the business, operations, earnings, cash flow, assets, liabilities and prospects of Nuvelo and ARCA, respectively;
- held discussions with members of senior management of Nuvelo and ARCA concerning the matters described in the second and third bullet points above;
- reviewed certain publicly available information, including share trading price history and valuation multiples, of Nuvelo and certain publicly traded companies that Jefferies deemed comparable to Nuvelo;
- performed a liquidation analysis for Nuvelo based on information furnished to Jefferies by Nuvelo s management;
- compared the proposed financial terms of the proposed transaction with the financial terms of certain other transactions that Jefferies deemed relevant;
- performed a discounted cash flow analysis for Nuvelo and ARCA, utilizing pro forma financial information prepared by, and furnished to Jefferies by, the management of Nuvelo and ARCA, respectively;
- considered the pro forma impact of the proposed transaction, taking into account, among other things, product pipeline and ability to raise capital; and
- conducted such other financial studies, analyses and investigations as Jefferies deemed appropriate including Jefferies assessment of general economic, market and monetary conditions.

In Jefferies review and analysis and in rendering its opinion, Jefferies assumed and relied upon, but did not make, and has not assumed any responsibility for, any independent investigation or verification of, the accuracy and completeness of the financial and other information that was supplied or otherwise made available by Nuvelo or ARCA or that was publicly available to Jefferies (including without limitation, the information described above), or that was otherwise reviewed by Jefferies. In its review, Jefferies did not make any independent evaluation or appraisal of any of the assets or liabilities of, nor did Jefferies conduct a physical inspection of any of the properties or facilities of, Nuvelo or ARCA. In addition, Jefferies was not furnished with, nor does Jefferies assume any responsibility to obtain, any such evaluations or appraisals. Jefferies did not evaluate the solvency or fair value of Nuvelo or ARCA under any state or federal laws relating to bankruptcy, insolvency or similar matters. Jefferies also has undertaken no independent analysis of any pending or threatened litigation, regulatory action, possible unasserted claims or other contingent liabilities, to which Nuvelo, ARCA or any of their affiliates is a party, or may be subject, and with the Nuvelo Board s consent, Jefferies opinion made no assumption concerning, and therefore did not consider, the possible assertion of claims, outcomes or damages arising out of such matters.

With respect to the financial forecasts provided to and examined by it (including forecasts of Nuvelo and ARCA and pro forma forecasts of Nuvelo and ARCA as a combined company), Jefferies noted that projecting future results of any company is inherently subject to uncertainty. Nuvelo and ARCA have informed Jefferies, however, and Jefferies has assumed, that such financial forecasts were reasonably prepared on bases reflecting the best currently available estimates and good faith judgments of the management of Nuvelo as to the future financial performance of Nuvelo, and ARCA as to the future financial performance of ARCA. Jefferies assumed,

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with the Nuvelo board s consent, that the financial results (including the anticipated pro forma financial effects) reflected in such forecasts will be realized at the times and in the amounts projected by Nuvelo and ARCA. In addition, Jefferies has assumed, with the Nuvelo board s consent, that the information provided to it by Nuvelo in connection with its liquidation analysis for Nuvelo was accurate and complete and based on reasonable assumptions reflecting the good faith judgment of management. Jefferies expressed no opinion as to such financial forecasts, the information provided to Jefferies in connection with its liquidation analysis or the assumptions on which the foregoing are made. Jefferies also expressed no opinion as to the viability of the combined company following the merger, including the potential for or timing of commercialization of any product or service, the nature and extent of the combined company s financing needs or the ability of the combined company to satisfy any such financing needs.

Jefferies opinion is based on economic, monetary, regulatory, market and other conditions existing and which could be evaluated as of the date of its opinion. Jefferies assumed, with the Nuvelo s board consent, for purposes of computing the exchange ratio that the Parent Trading Price (as defined in the merger agreement) was $0.39, the five day average closing share price of Nuvelo as of September 19, 2008. Jefferies expressed no opinion as to the price at which the shares of Nuvelo common stock will trade at any future time. Jefferies assumed no responsibility to update or revise its opinion based on circumstances or events occurring after the date of its opinion and disclaimed any undertaking or obligation to advise any person of any change in any fact or matter affecting its opinion of which Jefferies becomes aware after the date of its opinion. All references to the merger agreement, the Note and Warrant Purchase Agreement and other agreements in any discussion of Jefferies fairness opinion in this proxy statement/prospectus/consent solicitation refer to such agreements as in effect on the date of Jefferies fairness opinion.

Jefferies has made no independent investigation of any legal or accounting matters affecting Nuvelo or ARCA, and assumed the correctness in all respects material to its analysis of all legal and accounting advice given to Nuvelo and its board of directors, including, without limitation, advice as to the legal, accounting and tax consequences of the terms of, and transactions contemplated by, the merger agreement to Nuvelo and its stockholders. In addition, in preparing its opinion, Jefferies did not take into account any tax consequences of the transaction to Nuvelo or ARCA. Jefferies assumed that the final form of the merger agreement would be substantially similar to, and would not differ in any material respect from, the last draft reviewed by it. In addition, Jefferies assumed that the merger will be consummated in accordance with the terms of the merger agreement, without waiver, modification or amendment of any material term, condition or agreement and that, in the course of obtaining the necessary regulatory or third party approvals, consents, and releases (contractual or otherwise) for the merger, no delay, limitations, restrictions or conditions, including any divestiture requirements or amendments or modifications, will be imposed that would have an adverse effect on Nuvelo, ARCA or the contemplated benefits of the merger. Jefferies further assumed, with the Nuvelo board s consent, for purposes of its opinion that ARCA shall have received prior to the merger aggregate proceeds of at least $8,750,000 from the sale and issuance of the ARCA convertible notes and ARCA warrants pursuant to the Note and Warrant Purchase Agreement. Jefferies also assumed that the shares of Nuvelo common stock to be issued in the merger to the stockholders of ARCA will be listed on the Nasdaq Global Market.

The following is a summary of the material financial analyses performed by Jefferies in connection with its opinion. The financial analyses summarized below include information presented in tabular format. To fully understand Jefferies analyses, the tables must be read together with the text of each summary. The tables alone do not constitute a complete description of the financial analyses.

This summary is not intended to be an exhaustive description of the analyses performed by Jefferies. Jefferies did not attribute any particular weight to any analysis, methodology or factor considered by it, but rather made qualitative judgments as to the significance and relevance of each analysis and factor; accordingly, the analyses performed by Jefferies must be considered as a whole. Considering any portion of such analyses and of the factors considered, without considering all analyses and factors, could create a misleading or incomplete view of the process underlying the conclusions expressed in Jefferies opinion.

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Transaction Overview

Jefferies observed that pursuant to the merger agreement approximately 23.275 million shares of ARCA capital stock (including the shares of ARCA common stock issuable upon exercise of the note warrants) and ARCA securities that are convertible or exchangeable into approximately 4.103 million shares of ARCA capital stock (other than out-of-the-money ARCA options and warrants) would convert into not more than, in the aggregate, 109,009,278 shares of Nuvelo common stock at the effective time of the merger, representing approximately 67% of the outstanding Nuvelo common stock, on a fully diluted basis using the treasury stock method.

Nuvelo Stand-Alone Valuation

As an initial step, Jefferies analyzed the value of Nuvelo as a stand-alone company, which valuations were then compared to a pro forma valuation of Nuvelo and ARCA as a combined company and the corresponding relative interests of ARCA and Nuvelo stockholders, after giving effect to the merger. To perform the stand-alone valuation, Jefferies reviewed the share trading price history of Nuvelo and performed (i) a comparable company analysis, (ii) a liquidation analysis of Nuvelo and a (iii) discounted cash flow analysis, in each case, as more fully described below. Jefferies analyses below assume 53,691,137 shares of Nuvelo common stock outstanding on a fully diluted basis as of August 31, 2008. As illustrated below, the range of implied values per share of Nuvelo common stock on a stand-alone basis under the valuation methodologies described below was $0.42 to $0.86 per share, the former of which was the low end of the range of share prices of Nuvelo common stock for the 90-day period ending September 19, 2008 and the latter of which was the high end of the range of per share values derived from Jefferies discounted cash flow analysis.

Current Market Valuation. Jefferies noted that the 90-day average closing share price of Nuvelo common stock for the period ending September 19, 2008 and the current share price for Nuvelo common stock as of September 19, 2008 were $0.57 and $0.42 per share, respectively.

Comparable Companies Analysis. Jefferies reviewed and compared certain trading, financial and operating data of Nuvelo to similar publicly available trading, financial and operating data for the following companies that, like Nuvelo, have encountered clinical delays, negative clinical results or similar major program setbacks or delays:

Inhibitex Inc.

Memory Pharmaceuticals Corp.

Panacos Pharmaceuticals Inc.

Replidyne, Inc.

Telik Inc.

Vanda Pharmaceuticals, Inc.

The financial data analyzed as part of this analysis included the following:

	($ Millions)		
	Mean	**Median**	**Nuvelo**
Market Capitalization	$ 25.2	$ 23.6	$ 22.5
Debt	$ 5.8	$ 0.6	

Cash	$ 16.8	$ 53.3	$ 70.0
Total Enterprise Value*	$ (19.3)	$ (26.5)	$ (47.5)
Cash / Market Cap	195.6%	197.6%	310.7%

* Total Enterprise Value is defined as market capitalization plus debt less cash and cash equivalents.

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Jefferies noted that the foregoing analysis produced an absolute value of mean and median of public comparable companies market valuation between $23.6 million and $25.2 million, representing an implied price per share of Nuvelo common stock in the range of $0.44 to $0.47.

Liquidation Value Analysis. Jefferies reviewed certain trading, financial and operating data of Nuvelo to determine Nuvelo s liquidation value based on Nuvelo s estimated closing cash balance as of December 31, 2008, net of relevant severance, lease and other liabilities based on estimates and information provided by management of Nuvelo.

Estimated Cash Balance at Closing*	$56.5 million
Total Estimated Liabilities**	($28.0) ($31.0) million
Liquidation Value	$25.5 $28.5 million
Liquidation Value (per share)	$0.48 $0.53

* Represents cash estimates as of December 31, 2008 (including restricted cash) prepared by Nuvelo s management, which estimates were not independently verified by Jefferies.

** Based on an estimate provided by Nuvelo s management, consisting of severance payments (estimated as average salary for three months for employees and one year for three members of the management team), Nuvelo s San Carlos facility lease obligation and Nuvelo s Sunnyvale facility lease obligation, each as of December 31, 2008, and estimated liabilities for trailing cost of clinical trials, other trailing expenses and legal expenses.

The liquidation value is intended to represent the value per share of Nuvelo common stock available to stockholders were Nuvelo to be liquidated and its assets used to satisfy its liabilities to its creditors. Jefferies noted that the liquidation analysis produced an implied price per share of Nuvelo common stock in the range of $0.48 to $0.53.

Discounted Cash Flow Analysis. Jefferies performed a discounted cash flow analysis of Nuvelo based on forecasts by Nuvelo s management to calculate the estimated present value of stand-alone, unlevered after-tax free cash flow that Nuvelo could generate during the calendar years 2008-2018 and the value of Nuvelo at the end of that period. Jefferies applied a range of revenue exit multiples from 2.00x to 3.00x to Nuvelo s 2018 estimated revenue to derive an assumed value of the cash flows for all periods after the projected period, which is referred to as a terminal value. The present value of the cash flow and terminal value were calculated using discount rates ranging from 37.0% to 43.0%. Assuming an exit multiple of 2.5x with a terminal value based on 2018 projected revenue and the foregoing discount rate range, Jefferies noted that the discounted cash flow analysis produced an implied price per share of Nuvelo common stock in the range of $0.44 to $0.86, after adjustment for $56.5 million in estimated cash at closing of the merger.

ARCA Stand-Alone Valuation

Jefferies also analyzed the value of ARCA as a stand-alone company by performing (i) a comparable companies analysis, (ii) a comparable initial public offering, or IPO, analysis and (iii) a discounted cash flow analysis. As illustrated below, these analyses produced an enterprise value range for ARCA on a stand-alone basis of $130 million to $640 million, the former of which was the low end of the range of enterprise values derived from Jefferies comparable companies analysis and the latter of which was the high end of the range of per share values derived from Jefferies discounted cash flow analysis.

Comparable Companies Analysis. Jefferies reviewed and compared certain trading, financial and operating data of ARCA to publicly available information for the following public biopharmaceutical companies which, like ARCA, either have a cardiovascular focus or have recently filed a new drug application with the FDA:

AMAG Pharmaceuticals, Inc.

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ARYx Therapeutics, Inc.

Cypress Bioscience, Inc.

Cytokinetics Inc.

Momenta Pharmaceuticals Inc.

Nile Therapeutics, Inc.

The financial data analyzed as part of this analysis included the following:

	($ Millions)	
	Mean	Median
Market Cap	$ 340.4	$ 234.8
Debt	$ 5.1	$ 3.3
Cash	$ 115.1	$ 107.5
Total Enterprise Value*	$ 230.4	$ 132.8
Total Enterprise Value / Revenue** (latest twelve months ending June 30, 2008)	11.4x	13.3x
Total Enterprise Value / Revenue** (2008E)	12.0x	7.8x
Total Enterprise Value / Revenue** (2009E)	8.2x	4.3x

* Total Enterprise Value is defined as market capitalization plus debt less cash and cash equivalents.

** Projections from Bloomberg estimates.

Jefferies noted that the foregoing analysis produced an absolute value of mean and median of public comparable companies total enterprise value between $132.8 million and $230.4 million.

Comparable IPO Analysis. Jefferies reviewed and compared certain trading, financial and operating data of ARCA to publicly available financial data for the following companies that completed an initial public offering of their common stock during the period from January 1, 2004 to October 9, 2007. Jefferies selected companies which, like ARCA, were seeking to market a lead product that was approved or close to approval by the FDA at the time of their initial public offering:

		($ Millions)	
Company	Date	Gross Proceeds	Pre-Money Valuation
Targanta Therapeutics	10/9/2007	$ 57.5	$ 152.2
Jazz Pharmaceuticals	5/31/2007	$ 108.0	$ 333.9
Neurogesx	5/1/2007	$ 44.0	$ 93.4
Emergent BioSolutions	11/14/2006	$ 62.5	$ 280.3
Osiris	8/3/2006	$ 38.5	$ 260.0
Replidyne	6/27/2006	$ 45.0	$ 219.3
Aspreva Pharmaceuticals	3/3/2005	$ 79.2	$ 283.2
Momenta Pharmaceuticals	6/21/2004	$ 34.8	$ 124.9
Santarus	3/31/2004	$ 54.0	$ 200.9
	Mean	$ 58.2	$ 216.4

	Median	$ 54.0	$ 219.3

Jefferies noted that the foregoing analysis produced an absolute value of mean and median of initial public offering companies pre-money valuation between $216.4 million and $219.3 million.

Discounted Cash Flow Analysis. Jefferies performed a discounted cash flow analysis of ARCA based on ARCA forecasts provided by ARCA s management to calculate the estimated present value of stand-alone, unlevered after-tax free cash flow that ARCA could generate during the calendar years 2008-2013 and the value

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of ARCA at the end of that period. Jefferies applied a range of revenue exit multiples from 2.00x to 3.00x to ARCA s 2013 estimated revenue to derive a terminal value. The present value of the cash flow and terminal value was calculated using discount rates ranging from 27.0% to 33.0%. Assuming an exit multiple of 2.5x with a terminal value based on 2013 projected revenue and the foregoing discount rate range, Jefferies noted that the discounted cash flow analysis produced an implied ARCA enterprise value of approximately $577.0 million.

Relative Contribution Analysis

Based on information provided by management of each of Nuvelo and ARCA, Jefferies compared the contribution of each of Nuvelo and ARCA to the combined company expected to result from the completion of the merger. The implied contribution was based on estimated cash at closing, projected revenue and projected operating income. Estimates of operating income, however, were determined to not be a meaningful metric given that the forecasts provided by Nuvelo s management projected no operating income for Nuvelo until 2014.

Using the foregoing metrics, Jefferies computed the implied contribution of Nuvelo and ARCA to the combined entity as follows:

Financial Metric	Relative Contribution (Nuvelo / ARCA)	Implied % of Combined Equity (Nuvelo / ARCA)
Cash	89.1% /10.9%	89.1% /10.9%
Estimated 2009 Revenue	100.0% / 0.0%	89.2% /10.8%*
Estimated 2010 Revenue	0.3% / 99.7%	22.2% /78.2%*
Estimated 2011 Revenue	0.1% / 99.9%	7.4% / 92.6%*
Estimated 2012 Revenue	0.1% / 99.9%	4.6% / 95.4%*
Estimated 2013 Revenue	9.9% / 90.1%	13.1% / 86.9%*

* Calculated by applying a 2.5x revenue multiple (derived from comparable large-cap public biopharma companies) to each company s revenue. Implied equity value was calculated by adjusting for net debt.

By examining these metrics, Jefferies derived the implied value of the contributions by Nuvelo to the combined company on a percentage basis, which it then compared to the implied ownership percentage of the Nuvelo stockholders in the combined company. In all instances reflected in the comparisons above (other than relative contributions of cash at the effective time of the merger and estimated 2009 revenue), Jefferies noted that Nuvelo s share of the value of the combined company (based on a 33%/67% split as provided by the terms of the merger agreement) exceeded its implied percentage of the combined company.

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Relative Valuation Comparison

Using (i) the stand-alone equity valuations of Nuvelo and ARCA derived from the comparable public companies analysis and (ii) the stand-alone equity valuations of Nuvelo and ARCA calculated by adding each company s estimated cash at closing to the derived enterprise value from the discounted cash flow analysis, Jefferies also derived a total equity valuation of the combined company. Using this total equity valuation, Jefferies then derived the implied equity value of Nuvelo (based on anticipated pro forma ownership of 33% for Nuvelo) in the aggregate and on a per share basis (based on 53,619,137 shares of Nuvelo outstanding as of August 31, 2008). Jefferies also used the total equity valuation to derive the implied enterprise value of Nuvelo (adjusted for $56.5 million in estimated cash at closing).

Metric	Nuvelo	ARCA	Total Equity Valuation (Nuvelo + ARCA)	Implied Nuvelo Equity Value	Implied Nuvelo Enterprise Value	Implied Nuvelo Equity Value per Share
Equity Valuation Derived from Comparable Public Companies Analysis			**(In Millions)**			
Low*	$ 23.6	$ 234.8	$ 258.4	$ 85.3	$ 28.8	$ 1.59
High*	$ 25.2	$ 340.4	$ 365.6	$ 120.7	$ 64.1	$ 2.25
Equity Valuation Derived from Discounted Cash Flow Analysis **			**(In Millions)**			
Low	$ 23.7	$ 526.9	$ 550.6	$ 181.7	$ 125.2	$ 3.38
High	$ 46.1	$ 646.9	$ 693.0	$ 228.7	$ 172.2	$ 4.26

* High and low values were based on mean and median values from Nuvelo and ARCA s public company comparables.

** Equity value was calculated by adding each company s estimated cash at closing to the derived enterprise value from the discounted cash flow analysis.

Jefferies noted that the relative valuation comparison produced an implied value per share of Nuvelo common stock in the range of $1.59 to $4.26 as compared to the range of implied values per share of Nuvelo common stock on a stand-alone basis of $0.42 to $0.86 per share.

Pro Forma Combined Company Discounted Cash Flow Analysis

Jefferies analyzed the pro forma valuation of Nuvelo and ARCA as a combined company after giving effect to the merger. Jefferies prepared a pro forma income statement and calculated free cash flow to be generated by the combined company based on assumptions provided by Nuvelo and ARCA which Jefferies assumed reflected the good faith judgment of such companies management. Jefferies then compared Nuvelo s stand-alone valuations to Nuvelo s share of the value of the combined company (based on a 33%/67% split as provided by the terms of the merger agreement) based on a pro forma combined company discounted cash flow analysis.

Jefferies performed a discounted cash flow analysis of the combined company based on the Nuvelo and ARCA forecasts to calculate the estimated present value of unlevered after-tax free cash flow that the combined company could generate during the calendar years 2008-2013. Jefferies applied a range of revenue exit multiples from 2.00x to 3.00x to the combined company s 2013 estimated revenue to derive a terminal value. The present value of the cash flow and terminal value was calculated using discount rates ranging from 30.0% to 40.0%. Using an exit multiple of 2.5x and a discount rate of 35% (representing the middle of the range of revenue exit multiples and discount rates), the discounted cash flow analysis based on the Nuvelo and ARCA forecasts produced an implied enterprise value of $442.2 million. Jefferies then adjusted the total enterprise value for $63.4 million of combined estimated cash at closing to determine the total equity valuation of the combined company. Jefferies determined the implied Nuvelo equity value based on anticipated pro forma ownership of 33% of the combined company by the

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Nuvelo stockholders. Jefferies then compared the implied Nuvelo equity value to the stand-alone equity value methodologies for Nuvelo to determine the implied Nuvelo enterprise value.

Pro Forma DCF Valuation	Total Enterprise Valuation (Nuvelo + ARCA)	Total Equity Valuation (Nuvelo + ARCA)	Implied Nuvelo Equity Value (In Millions)	Relative to Standalone DCF Equity Value	Implied Nuvelo Enterprise Value*
Low	$ 373.8	$ 437.2	$ 144.3	$ 23.7	$ 87.8
Midpoint	$ 442.2	$ 505.6	$ 166.9	$ 33.4	$ 110.4
High	$ 525.8	$ 589.2	$ 194.4	$ 46.1	$ 137.9

* Adjusted for $56.5 million of estimated cash of Nuvelo at closing of the merger.

Jefferies noted that the pro forma combined company discounted cash flow analysis produced an implied value per share of Nuvelo common stock in the range of $2.69 to $3.63 as compared to the range of implied values per share of Nuvelo common stock on a stand-alone basis of $0.42 to $0.86 per share.

Miscellaneous

No company or transaction used in the analyses described above is identical to Nuvelo, ARCA, or the proposed transaction. In selecting and evaluating the comparable companies and transactions, Jefferies made certain judgments and assumptions regarding industry performance, general business, economic, market and financial conditions and other matters, many of which are beyond Nuvelo s control and the control of Jefferies, such as (i) the impact of competition on Nuvelo or ARCA or the industry generally, (ii) industry growth, (iii) acceptance of products and success of products in the market and (iv) the absence of any material adverse change in the financial condition and prospects of Nuvelo or ARCA, the industry or in the financial markets in general. Mathematical analysis, such as determining the average or median, is not in itself a meaningful method of using comparable companies or comparable transactions data.

Jefferies is an internationally recognized investment banking and advisory firm. Jefferies, as part of its investment banking business, is regularly engaged in the valuation of businesses and their securities in connection with mergers and acquisitions, negotiated underwritings, competitive biddings, secondary distributions of listed and unlisted securities, private placements, financial restructurings and other financial services. Nuvelo selected Jefferies to act as its financial advisor because of Jefferies qualifications, reputation and experience. Pursuant to an engagement letter between Nuvelo and Jefferies dated May 12, 2008, Jefferies was paid a $50,000 fee upon its engagement by Nuvelo and a $500,000 fee upon delivery of its opinion. Jefferies also will receive a minimum $950,000 transaction fee contingent upon consummation of the merger, which amount may increase in the event that the transaction value (computed based on the aggregate amount of cash held by Nuvelo at closing and the fair market value of any securities issued by Nuvelo to ARCA stockholders in the merger) exceeds $100.0 million (which increase shall equal 1.5% of any such excess). Nuvelo has agreed to indemnify Jefferies against liabilities arising out of or in connection with the services rendered and to be rendered by it in connection with the engagement and to reimburse Jefferies for out-of-pocket expenses incurred by Jefferies in connection with its engagement. In the ordinary course of its business, Jefferies and its affiliates may trade or hold securities of Nuvelo and/or its affiliates for their own account and for the accounts of their customers and, accordingly, may at any time hold long or short positions in those securities. During the two years preceding the date of its opinion, Jefferies provided financial advisory services to Nuvelo in connection with an unrelated matter and received a customary retainer fee and reimbursement for its out-of-pocket expenses in connection therewith. In addition, Jefferies may seek to, in the future, provide financial advisory and financial services to Nuvelo, ARCA, and/or their respective affiliates, for which Jefferies would expect to receive compensation.

The computation of the applicable exchange ratio relating to the number of shares of Nuvelo common stock to be exchanged for ARCA common stock and other securities in the merger was determined by arms -length

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negotiations between Nuvelo and ARCA, in consultation with their respective financial advisors and other representatives, and was not established by such financial advisors.

Officers and Directors of the Combined Company Following the Merger

Richard B. Brewer is president and chief executive officer of ARCA, and upon closing of the merger, Mr. Brewer will be chief executive officer and chairman of the board of directors of the combined company. Following the merger, in addition to Mr. Brewer, Michael R. Bristow, M.D., Ph.D., currently chairman, and chief science and medical officer of ARCA, will be chief science and medical officer and a director of the combined company, Christopher D. Ozeroff, currently executive vice president and general counsel of ARCA, will be executive vice president and general counsel of the combined company, Lee Bendekgey, currently senior vice president, chief financial officer, and general counsel of Nuvelo, will be chief financial officer of the combined company and Randall St. Laurent, currently executive vice president of commercial operations of ARCA, will be the combined company s executive vice president of commercial operations.

The combined company will initially have a ten member board of directors, comprised of three individuals who are currently members of the Nuvelo board of directors, Ted W. Love, M.D., Mary K. Pendergast and Burton E. Sobel, M.D., and seven individuals who are currently members of the ARCA board of directors, Mr. Brewer, Dr. Bristow, Jean-François Formela, M.D., J. William Freytag, Ph.D., David G. Lowe, Ph.D., Linda Grais, M.D. and John L. Zabriskie, Ph.D. Each of these members of the board of directors will serve in one of three classes to be agreed upon by Nuvelo and ARCA prior to the closing of the merger.

Interests of Nuvelo s Executive Officers and Directors in the Merger

In considering the recommendation of the Nuvelo board of directors with respect to issuing shares of Nuvelo common stock as contemplated by the merger agreement, Nuvelo stockholders should be aware that certain members of the board of directors and executive officers of Nuvelo have interests in the merger that are different from, or in addition to, their interests as Nuvelo stockholders. These interests present a conflict of interest. The Nuvelo board of directors was aware of these conflicts of interest during its deliberations on the merits of the merger and in making its decision in approving the merger, the merger agreement and the related transactions.

Ownership Interest

Assuming that the merger had been consummated on October 15, 2008, the beneficial ownership and other equity interests in the combined company immediately following the merger of Dr. Love, Ms. Pendergast, and Dr. Sobel, each of whom is expected to serve as a director of the combined company, would have been as set forth below:

Name	Total Options Held	Options Exercisable Within 60 Days	Total Shares Beneficially Owned	Beneficial Ownership Percentage
Ted W. Love	2,466,664	2,466,664	2,538,439	1.67%
Mary K. Pendergast	99,166	99,166	99,832	*
Burton E. Sobel	57,500	57,500	57,500	*

* Represents beneficial ownership of less than 1% of the combined company s common stock.

Assuming that the merger had been consummated on October 15, 2008, all directors and executive officers of Nuvelo, together with their affiliates, would have beneficially owned approximately 2.30% of the shares of Nuvelo s common stock after taking into effect of the acceleration of vesting of all unvested stock options granted to the executive officers pursuant to the Nuvelo executive change of control and severance benefit plan.

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Dr. Love s Employment Agreement

Nuvelo entered into an employment agreement and related addendum, or the Love Employment Agreement, with Dr. Love, its chairman and chief executive officer, in January 2001, and has subsequently amended and restated the addendum to his employment agreement in April 2007 and January 2008. Dr. Love participated in the negotiation and approval of the terms of the merger on behalf of Nuvelo. Upon the closing of the merger, it is anticipated that Dr. Love will continue to serve as a director of Nuvelo but that his employment by Nuvelo will be terminated and that he will be entitled to the severance and other benefits set forth in the Love Employment Agreement and described below.

Pursuant to the terms of the Love Employment Agreement, as amended, in the event of a change of control of Nuvelo, all Nuvelo stock options and stock awards held by Dr. Love will become fully vested.

In addition, if Dr. Love s employment is terminated without cause, or for good reason, both as defined in the Love Employment Agreement or upon the death of Dr. Love while an employee with Nuvelo then:

- the vesting of any options granted to Dr. Love within the first four years of his employment with Nuvelo, on his initial options will be fully accelerated;
- the time period during which Dr. Love or his heirs will be able to exercise these initial options will be extended by up to an additional 18 months;
- the vesting of any equity awards made to Dr. Love after April 30, 2007 will be accelerated by an additional 24 months, such that any awards that would have vested in the 24 months following Dr. Love s termination will be deemed immediately vested;
- Dr. Love or his heirs will be paid 24 months of his then current base salary, in one lump sum; and
- Nuvelo will pay premiums necessary to continue health insurance benefits for Dr. Love and his family for 18 months at the same level of benefits and the same cost to Dr. Love or his heirs as immediately prior to his termination. Nuvelo will also pay, in one lump sum, the cost of such coverage for an additional six months, provided that Dr. Love has elected continuation of coverage under federal COBRA and analogous state law such that continuation of coverage shall be considered to have been provided pursuant to such laws.

If Dr. Love s employment is terminated without cause or for good reason within 12 months of a change in control of Nuvelo, then, in addition to the benefits described above, Dr. Love will be entitled to a lump sum payment equal to two times his target bonus for the year in which his termination occurred.

As a condition to receipt of any of the termination benefits described above, Dr. Love will be required to provide a general release in favor of Nuvelo. Nuvelo and Dr. Love have agreed in certain circumstances to reduce the amount of his benefits under the Love Employment Agreement to achieve the best after-tax result for Dr. Love. Nuvelo and Dr. Love also agreed that the payment of benefits under the Love Employment Agreement may be adjusted in certain circumstances so that such benefits are not subject to Section 409A(a)(1) of the Internal Revenue Code.

Executive Change of Control and Severance Benefit Plan

The Nuvelo board of directors approved an executive change in control and severance benefit plan, or the severance plan, in December 2004. The severance plan provides for the payment of severance benefits and/or change in control benefits to Nuvelo s eligible employees. All of Nuvelo s employees at the level of vice president or above have been designated by the Nuvelo board as participants in the severance plan. Nuvelo s board may also designate additional individuals as participants. To the extent a participant is entitled to greater benefits under his or her employment agreement with Nuvelo, such additional benefits supersede the benefits payable pursuant to the severance plan. Currently, the only executive officers of Nuvelo who are eligible

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participants under the severance plan are Dr. Love, Mr. Bendekgey and Mr. Kersten. Mr. Bendekgey participated in the negotiation and approval of the terms of the merger on behalf of Nuvelo. Although it is contemplated that Mr. Bendekgey will continue to serve as chief financial officer of the combined company for a transition period following the merger, it currently contemplated that Mr. Bendekgey s employment will be terminated following this transition period and that he will be entitled to the severance and benefits set forth in the severance plan.

The severance plan describes a change in control in Nuvelo as any one of the following events:

- a sale or other disposition of all or substantially all of the assets of Nuvelo;
- a merger, consolidation, or similar transaction involving Nuvelo where, immediately after the transaction, the stockholders of Nuvelo immediately prior to the transaction do not directly or indirectly own, voting securities representing at least 50% of the combined outstanding voting power of the surviving entity;
- any person, entity, or group becomes the beneficial owner of securities of Nuvelo representing at least 50% of the combined voting power of Nuvelo s then-outstanding securities, other than by virtue of a merger, consolidation, or similar transaction; or
- the individuals who, at the beginning of any period of two years or less, constituted the Board cease, for any reason, to constitute at least a majority of the Board, unless the election or nomination for election of each new director was approved by the vote of at least a majority of the directors then still in office who were directors at the beginning of the two year period.

Pursuant to the severance plan, if a change in control occurs, all Nuvelo stock options and stock awards held by a severance plan participant will become fully vested. The Nuvelo stock options and stock awards held by a severance plan participant will also become fully vested if the participant is terminated without cause or constructively terminated within one month preceding a change in control.

In addition, if a participant is terminated without cause or constructively terminated one month before or one year after a change in control, he or she will also be entitled to cash severance and benefits as follows:

- payment equivalent to twelve months salary, paid over a twelve month period;
- payment equal to the highest cash bonus received by the individual in any consecutive 11 month period within the preceding 36 months; and
- reimbursement of premiums paid for continued medical coverage pursuant to COBRA for up to 12 months.

In addition, if a participant is terminated without cause or constructively terminated outside the context of a change in control, he or she will be entitled to 12 months of vesting of all stock options and stock awards held by him or her, and cash severance and benefits as follows:

- payment equivalent to twelve months salary, paid over a twelve month period; and
- reimbursement of premiums paid for continued medical coverage pursuant to COBRA for up to 12 months.

For the purposes of the severance plan, constructive termination includes a material diminution in authority, position, or responsibilities, a reduction in base salary, a change in the business location of more than 35 miles, a material breach by Nuvelo of any provisions of the severance plan, or any enforceable written agreement between Nuvelo and the participant, or any failure by Nuvelo to obtain assumption of the severance

plan by a successor. Cause includes a refusal or failure to follow the directions of the Nuvelo board of directors or individual to whom the participant reports, failure to perform duties in a satisfactory manner, or crimes involving moral turpitude, fraud, or dishonesty.

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Summary of Potential Payments in Connection with the Merger

Promptly following the effective time of the merger, the executive management team of the combined company is expected to be composed primarily of current ARCA executives. Accordingly, it is contemplated that Nuvelo s executive officers will be entitled to severance and other benefits in connection with the termination of their employment within the context of a change of control as provided under the Love Employment Agreement and the severance plan, as applicable.

The following table sets forth information regarding payments and benefits that each executive officer of Nuvelo would receive in connection with the consummation of the merger pursuant to the terms of the Love Employment Agreement or the severance plan described above, as applicable, assuming that the merger had been consummated on October 15, 2008 and, as applicable, such executive s employment was terminated on such date.

Name	Cash Payments(1)	Value of Benefits	Value of Options with Accelerated Vesting(2)	Value of Restricted Stock Units with Accelerated Vesting
Ted W. Love	$ 1,834,000	$ 44,788	$ 3,595,304	$
Lee Bendekgey	501,449	22,394	705,478	
Brian Kersten	330,382	22,394	121,662	4,933

(1) Amounts represent severance and bonuses payable to the executives.

(2) Amounts represent the fair value of unvested stock options that would be accelerated assuming that the merger was consummated on October 15, 2008. The fair value was determined on the grant date of the respective options in accordance with Statement of Financial Accounting Standards No. 123(R) (revised 2004), *Share Based Payment* , and, therefore, is not indicative of the value that would be ultimately realized by the executives upon exercise of their options. As of October 15, 2008, the closing price of the Nuvelo s common stock was $0.37, and the exercise prices of all stock options held by the executives as of that date were above $0.37. Accordingly, the executives would not receive any benefits from the acceleration of stock option vesting as provided in the severance plan if the merger was consummated on October 15, 2008.

Voting Agreements

In connection with the execution of the merger agreement, Dr. Love, Mr. Bendekgey, and Mark Perry, a director of Nuvelo, entered into agreements with ARCA that provide, among other things, that they will vote in favor of the issuance of Nuvelo common stock pursuant to the merger agreement and the amendment of Nuvelo s amended and restated certificate of incorporation to give effect to the reverse stock split and grant to ARCA an irrevocable proxy to vote all of their shares of Nuvelo common stock in favor of such proposals and against any proposal made in opposition to, or in competition with, such proposals. See Other Agreements Relating to the Merger Voting Agreements.

Interests of ARCA s Executive Officers and Directors in the Merger

In considering the recommendation of the ARCA board of directors with respect to adopting the merger agreement, ARCA stockholders should be aware that certain members of the board of directors and executive officers of ARCA have interests in the merger that may be different from, or in addition to, interests they may have as ARCA stockholders or the interests of other ARCA stockholders. As discussed below, certain of ARCA s directors and executive officers hold options to purchase ARCA common stock that will be assumed in the merger and, with their affiliates, own a controlling interest in the voting securities of ARCA. Certain of ARCA s directors, including Dr. Formela, Dr. Lowe, Dr. Grais and Mr. Lefkoff, are affiliates of ARCA investors that hold convertible promissory notes and warrants, and shares of ARCA s redeemable convertible preferred

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stock, whose interest may be different from the interests of the ARCA common stockholders. Each of the Nuvelo and ARCA boards of directors were aware of these potential conflicts of interest and considered them, among other matters, in reaching their respective decisions to approve the merger agreement and the merger, and to recommend that their respective stockholders approve the Nuvelo and ARCA proposals, as applicable.

Stock Options

Under the terms of the merger agreement, at the effective time of the merger, each outstanding and unexercised option to purchase shares of ARCA common stock that were granted under ARCA s 2004 Stock Incentive Plan, or the ARCA Option Plan, whether vested or unvested, will be assumed by Nuvelo and will become an option to acquire, on the same terms and conditions as were applicable under the stock option agreement by which such option is evidenced and the stock option plan under which such option was issued, shares of Nuvelo common stock. See The Merger Stock Options and The Merger Warrants below.

The table below sets forth, as of October 15, 2008, information with respect to options held by each of ARCA s current executive officers and directors.

Name	Total Options Held	Vested	Unvested	Weighted Average Exercise Price Per Share
Executive Officers:				
Richard B. Brewer(1)	992,000	992,000(4)	0	$ 0.15
Michael R. Bristow, M.D., Ph.D.(1)	44,286	0	44,286	$ 0.01
Christopher D. Ozeroff	24,562	0	24,562	$ 0.01
Randall St. Laurent	180,000	0	180,000	$ 0.31
Patrick Wheeler(2)	185,000	8,125	176,875	$ 0.284
Directors:				
Francis J. Bullock(3)	107,383	50,140	57,243	$ 0.413
John L. Zabriskie, Ph.D.	107,383	51,595	55,788	$ 0.413
J. William Freytag, Ph.D.	107,000	37,000	70,000	$ 0.287

(1) These executive officers are also directors of ARCA.

(2) This executive officer will not serve as an executive officer of the combined company following the merger.

(3) This director will not serve on the board of directors of the combined company following the merger.

(4) These options are subject to certain repurchase rights held by ARCA pursuant to the stock option agreement between Mr. Brewer and ARCA, as described under Executive Compensation and Other Information Richard B. Brewer Employment and Retention Agreement; Stock Option Agreements; Restricted Stock Agreement.

Ownership Interests

As of October 15, 2008, all directors and executive officers of ARCA, together with their affiliates, beneficially owned approximately 88.49% of the shares of ARCA capital stock. See ARCA Security Ownership of Certain Beneficial Owners and Management below. ARCA cannot complete the merger unless the merger agreement is adopted by the affirmative vote of (a) the holders of a majority of the shares of ARCA common stock and ARCA preferred stock outstanding on the record date and entitled to consent as a single class and on an as-converted basis, and (b) a majority of the Principal Series Preferred Stockholders, which include Atlas Venture, Skyline Ventures, InterWest Ventures and Boulder Ventures. Each of the Principal Series Preferred Stockholders had the right to nominate one director for election to ARCA s board of directors and nominated Dr. Formela, Dr. Lowe, Dr. Grais and Mr. Lefkoff, respectively, as their representatives on ARCA s current board of directors. Certain ARCA officers and directors, and their affiliates, have also entered into voting

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agreements in connection with the merger, including Richard B. Brewer, Patrick M. Wheeler, Michael R. Bristow, M.D., Ph.D., Christopher D. Ozeroff, Francis J. Bullock, Lansing Brown Investments, LLC, Skyline Venture Partners Qualified Purchaser Fund IV, L.P., InterWest Partners IX, LP, Atlas Venture Fund VII, L.P., Boulder Ventures IV (Annex), L.P., and Boulder Ventures IV, L.P. For a more detailed discussion of the voting agreements see Other Agreements Related to the Merger Voting Agreements on page 123 of this proxy statement and consent solicitation/prospectus.

Assuming that the merger had been consummated on October 27, 2008 at an exchange ratio of 3.2934, and based on their beneficial ownership and equity interests in ARCA as of October 15, 2008, the beneficial ownership and other equity interests in the combined company immediately following the merger of Mr. Brewer, Dr. Bristow, Mr. Ozeroff, Mr. St. Laurent, Dr. Formela, Dr. Freytag, Dr. Grais, Dr. Zabriskie and Dr. Lowe, each of whom is expected to serve as an executive officer or a director of the combined company, would have been as set forth below:

Name	Total Shares Beneficially Owned	Total Options Held	Options Exercisable Within 60 Days	Warrants	Beneficial Ownership Percentage
Richard B. Brewer	1,646,700	3,267,053	3,267,053	0	3.22%
Michel R. Bristow, M.D., Ph.D.	5,738,135	145,852	145,852	0	3.69
Christopher D. Ozeroff	1,565,808	80,892	80,892	0	1.10
Randall St. Laurent	0	592,812	0	0	0.00
Jean-Francois Formela	27,532,676	0	0	1,488,110	19.23
J. William Freytag, Ph.D.	0	352,894	159,318	0	0.11
Linda Grais, M.D.	13,810,752	0	0	592,012	9.60
John L. Zabriskie, Ph.D.	575,545	353,655	207,463	0	0.52
David G. Lowe, Ph.D.	17,247,913	0	0	739,349	11.98

See Security Ownership of Certain Beneficial Owners and Management Following the Merger below.

Summary of Potential Payments in Connection with the Merger

ARCA has entered into employment and retention agreements, stock option agreements and/or restricted stock agreements with each of its executive officers. See Executive Compensation and Other Information Employment Agreements and Potential Payment Upon Termination or Change of Control. With the exception of the restricted stock agreement between ARCA and Mr. Brewer, the consummation of the merger will not result in the payment of any severance or the acceleration of any benefits of any of the executive officers. ARCA has also entered into stock option agreements with certain of its directors described in the table above under *Stock Options*. The consummation of the merger will not result in the acceleration of any vesting of the stock subject to these options. Mr. Brewer s restricted stock agreement, as amended in October 2008, provides that all 500,000 shares subject to the agreement will vest in full upon the closing of the merger. See Executive Compensation and Other Information ARCA s Compensation Discussion and Analysis.

Limitations of Liability and Indemnification

In addition to the indemnification required in ARCA s amended and restated bylaws, ARCA entered into indemnification agreements with each of its directors. These agreements provide for the indemnification of the directors of ARCA for all reasonable expenses and liabilities incurred in connection with any action or proceeding brought against them by reason of the fact that they are or were agents of ARCA. ARCA believes that these bylaw provisions and indemnification agreements are necessary to attract and retain qualified persons as directors.

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Stock Options

ARCA has granted options to purchase shares of its common stock under the ARCA Option Plan. Each outstanding option to purchase shares of ARCA common stock that is not exercised prior to the effective time of the merger will be assumed by Nuvelo at the effective time of the merger in accordance with the terms of the ARCA Option Plan under which the option was issued and the terms of the stock option agreement by which the option is evidenced, including the vesting terms. Each assumed option will become an option to purchase shares of Nuvelo common stock. The number of shares of Nuvelo common stock subject to each assumed option will be determined by multiplying the number of shares of ARCA common stock underlying the option prior to the effective time of the merger by an exchange ratio determined pursuant to the merger agreement. Any resulting fractional shares will be rounded down to the nearest whole number of shares of Nuvelo common stock. The per share exercise price for the assumed options will be determined by dividing the per share exercise price of the option as in effect immediately prior to the effective time of the merger by the exchange ratio and rounding that result up to the nearest whole cent.

Warrants

ARCA has issued warrants to purchase shares of its Series B-1 preferred stock and Series B-2 preferred stock to Silicon Valley Bank and warrants to purchase shares of its common stock to certain other stockholders of ARCA who participated in a convertible note bridge financing that closed on October 10, 2008. Each outstanding warrant to purchase shares of ARCA Series B-1 preferred stock, Series B-2 preferred stock and common stock will be assumed by Nuvelo at the effective time of the merger in accordance with its terms and will become a warrant to purchase shares of Nuvelo common stock. The number of shares of Nuvelo common stock subject to each assumed warrant will be determined by multiplying the number of shares of ARCA capital stock that was subject to each warrant prior to the effective time of the merger by an exchange ratio determined pursuant to the merger agreement. Any resulting fractional shares will be rounded down to the nearest whole number of shares of Nuvelo common stock. The per share exercise price for the assumed warrants will be determined by dividing the per share exercise price of the warrant as in effect immediately prior to the effective time of the merger by the exchange ratio and rounding that result up to the nearest whole share. For further discussion regarding the terms of the warrants, see Other Agreements Related to the Merger Note and Warrant Purchase Agreement.

ARCA Preferred Stock

In accordance with the Series A Preferred Stock Purchase Agreement dated February 22, 2006, the Series B Preferred Stock Purchase Agreement dated May 31, 2007 and the Supplemental Agreement to Series B Preferred Stock Purchase Agreement dated December 28, 2007, ARCA issued shares of its preferred stock to certain investors named in the purchase agreements. Each share of Series A preferred stock will convert immediately prior to the merger into one share of ARCA common stock. Each share of Series B-1 and Series B-2 preferred stock will convert immediately prior to the merger into a number of shares of ARCA common stock equal to the original issue price for such share divided by the then effective conversion price for the Series B-1 or Series B-2 share, as applicable. The issuance of the notes and warrants under the Note and Warrant Purchase Agreement will result in adjustments to the conversion prices for the Series B-1 and Series B-2 preferred stock in accordance with the anti-dilution provisions in ARCA s Restated Charter. The amount of the adjustments depends on the actual conversion price for the notes, which will not be determined until the closing of the merger. See Other Agreements Related to the Merger Note and Warrant Purchase Agreement. However, in no event will the conversion price for the notes be less than $1.6265 and in no event will the adjusted conversion prices for the Series B-1 and Series B-2 preferred stock be less than $2.00, as set forth in ARCA s Restated Certificate.

Assuming that the note conversion price will be $1.6265 and the conversion prices for the Series B-1 and Series preferred stock will be $2.00, then (i) the Series B-1 preferred stock s conversion price will be $1.219875 per share, and (ii) the Series B-2 preferred stock s conversion price will be $1.6265 per share.

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Convertible Promissory Notes and Warrants

ARCA issued convertible promissory notes and warrants to certain stockholders as is more fully described in Other Agreements Related to the Merger Note and Warrant Purchase Agreement.

Regulatory Approvals

As of the date of this proxy statement/prospectus/consent solicitation, neither Nuvelo nor ARCA is required to obtain approvals or clearances from any antitrust regulatory authorities in the United States or other countries to consummate the merger. In the United States, Nuvelo must comply with applicable federal and state securities laws and the rules and regulations of Nasdaq, in connection with the issuance of shares of Nuvelo common stock in the merger and the filing of a registration statement, of which this proxy statement/prospectus/consent solicitation is a part, with the SEC. As of the date hereof, the registration statement has not become effective. Nuvelo intends to file an initial listing application with the Nasdaq Global Market pursuant to Nasdaq s reverse merger rules to effect the initial listing of Nuvelo s common stock issuable in connection with the merger.

Appraisal Rights

If the merger is completed, ARCA stockholders who do not consent to approve the merger are entitled to appraisal rights under Section 262 of the DGCL, or Section 262, provided that they comply with the conditions established by Section 262.

The discussion below is not a complete summary regarding an ARCA s stockholder s appraisal rights under the DGCL and is qualified in its entirety by reference to the text of the relevant provisions of the DGCL, which are attached to this proxy statement/prospectus/consent solicitation as *Annex H*. Stockholders intending to exercise appraisal rights should carefully review *Annex H*. Failure to follow precisely any of the statutory procedures set forth in *Annex H* may result in a termination or waiver of these rights. This summary does not constitute legal or other advice, nor does it constitute a recommendation that ARCA stockholders exercise their appraisal rights under the DGCL.

Under Section 262, where a merger is adopted by stockholders by written consent in lieu of a meeting of stockholders under Section 228 of the DGCL, either one of the constituent corporations before the effective date of the merger or the surviving corporation, within 10 days after the effective date of the merger, must notify each stockholder of the constituent corporation entitled to appraisal rights of the approval of the merger and that appraisal rights are available. Following receipt of written consents signed by the requisite stockholders to approve the proposals, ARCA will notify those of ARCA s stockholders who did not execute a written consent that the proposals have been adopted and of the availability of appraisal rights in connection with the merger in compliance with the requirements of Section 262. If you, as an ARCA stockholder, wish to consider exercising your appraisal rights, you should carefully review the text of Section 262 contained in *Annex H* attached hereto because failure to timely and properly comply with the requirements of Section 262 will result in the loss of your appraisal rights under the DGCL.

Holders of shares of ARCA capital stock who desire to exercise their appraisal rights must deliver a written demand for appraisal to ARCA within 20 days after the mailing of the notice by ARCA of the approval of the merger by written consent. Stockholders who would like to exercise appraisal rights must not have previously delivered a written consent approving the merger. A demand for appraisal must reasonably inform ARCA of the identity of the stockholder and that such stockholder intends to demand appraisal of the shares of ARCA capital stock held by the stockholder. Failure to deliver a written consent to the merger will not in and of itself constitute a written demand for appraisal rights satisfying the requirements of Section 262.

If you execute and deliver a written consent or if you fail to deliver a written demand for appraisal within the time period specified above and the merger is completed, you will be entitled to receive the merger

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consideration for your shares of ARCA capital stock as provided for in the merger agreement, but you will have no appraisal rights with respect to your shares of ARCA capital stock.

To be effective, a demand for appraisal by a holder of shares of ARCA capital stock must be made by, or in the name of, the registered stockholder, fully and correctly, as the stockholder s name appears on the stockholder s stock certificate(s). Beneficial owners who do not also hold the shares of record may not directly make appraisal demands to ARCA. The beneficial owner must, in these cases, have the registered owner, such as a broker, bank or other nominee, submit the required demand in respect of those shares. If shares are owned of record in a fiduciary capacity, such as by a trustee, guardian or custodian, execution of a demand for appraisal should be made by or for the fiduciary; and if the shares are owned of record by more than one person, as in a joint tenancy or tenancy in common, the demand should be executed by or for all joint owners. An authorized agent, including an authorized agent for two or more joint owners, may execute the demand for appraisal for a stockholder of record; however, the agent must identify the record owner or owners and expressly disclose the fact that, in executing the demand, he or she is acting as agent for the record owner. A record owner, such as a broker, who holds shares as a custodian for others, may exercise the record owner s right of appraisal with respect to the shares held for one or more beneficial owners, while not exercising this right for other beneficial owners. In that case, the written demand should state the number of shares as to which appraisal is sought. Where no number of shares is expressly mentioned, the demand will be presumed to cover all shares held in the name of the record owner. In addition, the stockholder must continuously hold the shares of record from the date of making the demand through the effective time of the merger.

If you hold your shares of ARCA capital stock in a brokerage account or in other custodian form and you wish to exercise appraisal rights, you should consult with your bank, broker or other custodian to determine the appropriate procedures for the making of a demand for appraisal by the custodian.

At any time within 60 days after the effective time of the merger, any stockholder who has demanded an appraisal has the right to withdraw the demand and accept the terms of the merger by delivering a written withdrawal of the stockholder s demands for appraisal. If, following a demand for appraisal, you have withdrawn your demand for appraisal in accordance with Section 262, you will have the right to receive the merger consideration for your shares of ARCA capital stock.

Within 120 days after the effective date of the merger, any stockholder who has delivered a demand for appraisal in accordance with Section 262 will, upon written request to the surviving corporation, be entitled to receive a written statement setting forth the aggregate number of shares not voted in favor of the merger agreement and with respect to which demands for appraisal rights have been received and the aggregate number of holders of these shares. This written statement will be mailed to the requesting stockholder within 10 days after the stockholder s written request is received by the surviving corporation or within 10 days after expiration of the period for delivery of demands for appraisal, whichever is later. Within 120 days after the effective date of the merger, either the surviving corporation or any stockholder who has delivered a demand for appraisal in accordance with Section 262 may file a petition in the Delaware Court of Chancery demanding a determination of the fair value of the shares held by such stockholder. Upon the filing of the petition by a stockholder, service of a copy of the petition must be made upon the surviving corporation. The surviving corporation has no obligation to file a petition in the Delaware Court of Chancery in the event there are dissenting stockholders, and ARCA, which will be the surviving corporation, has no present intent to file a petition in the Delaware Court of Chancery. Accordingly, the failure of a stockholder to file a petition within the period specified could nullify the stockholder s previously written demand for appraisal.

If a petition for appraisal is duly filed by a stockholder and a copy of the petition is delivered to the surviving corporation, the surviving corporation will then be obligated, within 20 days after receiving service of a copy of the petition, to provide the Delaware Court of Chancery with a duly verified list containing the names and addresses of all stockholders who have demanded an appraisal of their shares and with whom agreements as to the value of their shares have not been reached by the surviving corporation. After notice to dissenting

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stockholders who demanded appraisal of their shares, the Delaware Court of Chancery is empowered to conduct a hearing upon the petition, and to determine those stockholders who have complied with Section 262 and who have become entitled to the appraisal rights provided thereby. The Delaware Court of Chancery may require the stockholders who have demanded appraisal for their shares to submit their stock certificates to the Register in Chancery for notation thereon of the pendency of the appraisal proceedings; and if any stockholder fails to comply with that direction, the Delaware Court of Chancery may dismiss the proceedings as to that stockholder.

After determination of the stockholders entitled to appraisal of their shares, the Delaware Court of Chancery will appraise the fair value of the shares owned by those stockholders. This value will be exclusive of any element of value arising from the accomplishment or expectation of the merger, but will include a fair rate of interest, if any, upon the amount determined to be the fair value. When the value is determined, the Delaware Court of Chancery will direct the payment of the value, with interest thereon accrued during the pendency of the proceeding, if the Delaware Court of Chancery so determines, to the stockholders entitled to receive the same, upon surrender by the holders of the certificates representing those shares.

In determining fair value, and, if applicable, a fair rate of interest, the Delaware Court of Chancery is required to take into account all relevant factors. In *Weinberger v. UOP, Inc.*, the Delaware Supreme Court discussed the factors that could be considered in determining fair value in an appraisal proceeding, stating that proof of value by any techniques or methods which are generally considered acceptable in the financial community and otherwise admissible in court should be considered, and that fair price obviously requires consideration of all relevant factors involving the value of a company.

Section 262 provides that fair value is to be exclusive of any element of value arising from the accomplishment or expectation of the merger. In Cede & Co. v. Technicolor, Inc., the Delaware Supreme Court stated that this exclusion is a narrow exclusion [that] does not encompass known elements of value, but which rather applies only to the speculative elements of value arising from such accomplishment or expectation. In Weinberger, the Delaware Supreme Court construed Section 262 to mean that elements of future value, including the nature of the enterprise, which are known or susceptible of proof as of the date of the merger and not the product of speculation, may be considered.

You should be aware that the fair value of your shares as determined under Section 262 could be more than, the same as or less than the value that you are entitled to receive under the terms of the merger agreement.

Costs of the appraisal proceeding may be imposed upon the surviving corporation and the stockholders participating in the appraisal proceeding by the Delaware Court of Chancery as the Court deems equitable in the circumstances. Upon the application of a stockholder, the Delaware Court of Chancery may order all or a portion of the expenses incurred by any stockholder in connection with the appraisal proceeding, including, without limitation, reasonable attorneys fees and the fees and expenses of experts, to be charged pro rata against the value of all shares entitled to appraisal. In the absence of such a determination of assessment, each party bears its own expenses. Any stockholder who had demanded appraisal rights will not, after the effective time of the merger, be entitled to vote shares subject to that demand for any purpose or to receive payments of dividends or any other distribution with respect to those shares, other than with respect to payment as of a record date prior to the effective time; however, if no petition for appraisal is filed within 120 days after the effective time of the merger, or if the stockholder delivers a written withdrawal of his or her demand for appraisal and an acceptance of the terms of the merger within 60 days after the effective time of the merger, then the right of that stockholder to appraisal will cease and that stockholder will be entitled to receive the merger consideration for shares of his or her ARCA capital stock pursuant to the merger agreement. Any withdrawal of a demand for appraisal made more than 60 days after the effective time of the merger may only be made with the written approval of the surviving corporation. No appraisal proceeding in the Delaware Court of Chancery will be dismissed as to any stockholder without the approval of the court.

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Failure to follow the steps required by Section 262 for perfecting appraisal rights may result in the loss of appraisal rights. In view of the complexity of Section 262, stockholders who may wish to dissent from the merger and pursue appraisal rights should consult their legal advisors.

Material U.S. Federal Income Tax Consequences of the Merger

The following discussion summarizes the material U.S. federal income tax consequences of the merger that are expected to apply generally to ARCA stockholders upon an exchange of their ARCA capital stock for Nuvelo common stock and cash in lieu of fractional shares of Nuvelo common stock. This summary is based upon current provisions of the Internal Revenue Code of 1986, as amended, or the Code, existing Treasury Regulations, and current administrative rulings and court decisions, all of which are subject to change and to differing interpretations, possibly with retroactive effect. Any change could alter the tax consequences to Nuvelo, ARCA, or the stockholders of ARCA, as described in this summary. This summary is not binding on the Internal Revenue Service, or the IRS, and there can be no assurance that the IRS (or a court, in the event of an IRS challenge) will agree with the conclusions stated herein. No ruling has been or will be requested from the IRS in connection with the merger. The discussion below does not address the following: the tax consequences of the mergers under U.S. federal non-income tax laws or under state, local, or foreign tax laws; the tax consequences of transactions effectuated before, after, or at the same time as the mergers, whether or not they are in connection with the merger, including, without limitation, transactions in which ARCA shares are acquired or Nuvelo shares are disposed of; the tax consequences to holders of options issued by ARCA that are assumed, replaced, exercised, or converted, as the case may be, in connection with the merger; or the tax consequences of the receipt of Nuvelo shares other than in exchange for ARCA shares.

No attempt has been made to comment on all U.S. federal income tax consequences of the merger that may be relevant to particular holders of ARCA capital stock that are subject to special treatment under U.S. federal income tax laws, including, without limitation:

- dealers, brokers and traders in securities;
- foreign persons or entities;
- tax-exempt entities;
- financial institutions, regulated investment companies, real estate investment trusts or insurance companies;
- partnerships or limited liability companies that are not treated as corporations for U.S. federal income tax purposes, subchapter S corporations and other pass-through entities and investors in such entities;
- holders who are subject to the alternative minimum tax provisions of the Code;
- holders who acquired their shares in connection with stock option or stock purchase plans or in other compensatory transactions;
- holders who hold shares that constitute small business stock within the meaning of Section 1202 of the Code;
- holders with a functional currency other than the U.S. dollar;

holders who hold their shares as part of an integrated investment such as a hedge or as part of a hedging, straddle or other risk reduction strategy; or

holders who do not hold their shares as capital assets within the meaning of Section 1221 of the Code (generally, property held for investment will be a capital asset).

Accordingly, holders of ARCA capital stock are advised and expected to consult their own tax advisors regarding the U.S. federal income tax consequences of the merger in light of their personal circumstances and the consequences of the merger under U.S. federal non-income tax laws and state, local, and foreign tax laws.

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It is a condition to the consummation of the transaction that each of Hogan & Hartson L.L.P., outside counsel to ARCA, and Cooley Godward Kronish LLP, outside counsel to Nuvelo, render a tax opinion to their respective clients to the effect that the merger will qualify as a reorganization pursuant to Section 368(a) of the Code. The tax opinion of Hogan & Hartson L.L.P., and the tax opinion of Cooley Godward Kronish LLP, discussed in this section are each conditioned upon certain assumptions stated in their respective tax opinions and certain customary representations being delivered by ARCA, Dawn Acquisition Sub, Inc., and Nuvelo.

In addition, stockholders of ARCA should be aware that as the tax opinions discussed in this section are not binding on the IRS, the IRS could adopt a contrary position and a contrary position could be sustained by a court. In addition, if any of the representations or assumptions upon which the closing tax opinions of Hogan & Hartson L.L.P., and Cooley Godward Kronish LLP are based are inconsistent with the actual facts, the tax consequences of the merger could be adversely affected. Assuming that the merger will be treated for U.S. federal income tax purposes as a reorganization within the meaning of Section 368 of the Code, the following material U.S. federal income tax consequences will result:

- Nuvelo, Dawn Acquisition Sub, Inc., ARCA and the Nuvelo stockholders will not recognize any gain or loss solely as a result of the merger;

- ARCA stockholders will not recognize any gain or loss upon receipt of solely Nuvelo common stock in exchange for their ARCA capital stock, other than with respect to cash received in lieu of fractional shares of Nuvelo common stock;

- the aggregate tax basis of the shares of Nuvelo common stock received by a ARCA stockholder in the merger (including any fractional share deemed received, as described below) will be equal to the aggregate tax basis of the shares of ARCA capital stock surrendered in exchange therefor;

- the holding period of the shares of Nuvelo common stock received by a ARCA stockholder in the merger will include the holding period of the shares of ARCA capital stock surrendered in exchange therefor; and

- generally, cash payments received by ARCA stockholders in lieu of fractional shares of Nuvelo common stock will be treated as if such fractional shares were issued in the merger and then redeemed by Nuvelo for cash resulting in a recognition of gain or loss equal to the difference, if any, between the stockholder s basis in the fractional share and the amount of cash received. The gain or loss recognized by stockholders will be a capital gain and will be long term capital gain if the stockholder s holding period for his, her, or its ARCA capital stock is more than one year;

ARCA stockholders that owned at least one percent (by vote or value) of the total outstanding stock of ARCA or ARCA stock with a tax basis of $1 million or more are required to attach a statement to their tax returns for the year in which the merger is completed that contains the information listed in Treasury Regulations Section 1.368-3(b). Such statement must include the stockholder s tax basis in the stockholder s ARCA common and preferred stock and the fair market value of such stock.

For purposes of the above discussion of the bases and holding periods for shares of ARCA capital stock and Nuvelo common stock, stockholders who acquired different blocks of ARCA capital stock at different times for different prices must calculate their basis, gains and losses, and holding periods separately for each identifiable block of such stock exchanged, converted, canceled or received in the merger.

The above discussion does not apply to ARCA stockholders who properly perfect appraisal rights. Generally, a ARCA stockholder who perfects appraisal rights with respect to such stockholder s shares of ARCA common or preferred stock will recognize capital gain or loss equal to the difference between such stockholder s tax basis in those shares and the amount of cash received in exchange for those shares.

Certain noncorporate ARCA stockholders may be subject to backup withholding, at a rate of 28%, on cash received pursuant to the merger. Backup withholding will not apply, however, to an ARCA stockholder who

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(1) furnishes a correct taxpayer identification number and certifies that the ARCA stockholder is not subject to backup withholding on IRS Form W-9 or a substantially similar form, (2) provides a certification of foreign status on an appropriate Form W-8 or successor form, or (3) is otherwise exempt from backup withholding. If an ARCA stockholder does not provide a correct taxpayer identification number on IRS Form W-9 or a substantially similar form, the ARCA stockholder may be subject to penalties imposed by the IRS. Amounts withheld, if any, are generally not an additional tax and may be refunded or credited against the ARCA stockholder s U.S. federal income tax liability, provided that the ARCA stockholder timely furnishes the required information to the IRS.

Anticipated Accounting Treatment

The merger will be treated by Nuvelo as a reverse merger and will be accounted for as a business combination using the purchase method of accounting in accordance with GAAP. For accounting purposes, ARCA is considered to be acquiring Nuvelo in this transaction. Therefore, the aggregate consideration paid in connection with the merger, together with the direct costs of acquisition paid by ARCA, will be allocated to Nuvelo s tangible and intangible assets and liabilities based on their fair market values. The unaudited pro forma condensed combined financial statements included in this proxy statement/prospectus/consent solicitation have been prepared in accordance with Article 11 of Regulation S-X, assuming the merger will close on or prior to December 31, 2008, and is recorded as a purchase pursuant to SFAS 141. However, if the acquisition were to be consummated in 2009, SFAS 141R would apply and would materially change the accounting treatment.

Under SFAS 141R, the following items likely would have a material impact on accounting for the business combination: (1) the asset related to in-process research and development would be treated as an indefinite-lived intangible asset and capitalized, reviewed for impairment in accordance with SFAS 142, and if the related development is completed, considered a finite-lived asset and amortized to the statement of operations, and if the development is abandoned, would be written off; (2) the excess of fair values of acquired net assets over the purchase price (if any) will not be allocated to reduce the carrying values of various asset, but instead, will be recorded as an ordinary gain in the statement of operations as opposed to an extraordinary gain; (3) acquisition-related costs would not be part of the purchase price and, as a result, the impact to the pro forma balance sheet would be to reduce the purchase price and the related excess of fair value of acquired net assets over purchase price, with a corresponding decrease to pro forma retained earnings; and (4) restructuring costs would be expensed as incurred.

Vote Required; Recommendation of Board of Directors

The affirmative vote of the holders of a majority of the Nuvelo common stock having voting power present in person or represented by proxy at the special meeting is required to approve the issuance of Nuvelo common stock pursuant to the Agreement and Plan of Merger and Reorganization, dated September 24, 2008, by and among Nuvelo, Inc., Dawn Acquisition Sub, Inc., and ARCA biopharma, Inc., as amended by that Amendment No. 1 to Agreement and Plan of Merger and Reorganization, dated October 28, 2008, by and among Nuvelo, Inc., Dawn Acquisition Sub, Inc., and ARCA biopharma, Inc., as described in the attached proxy statement/prospectus/consent solicitation.

A failure to submit a proxy card or vote at the special meeting, or an abstention, vote withheld or broker non-vote will have no effect on the outcome of Proposal No. 1.

NUVELO S BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT NUVELO STOCKHOLDERS VOTE FOR PROPOSAL NO. 1 TO APPROVE THE ISSUANCE OF NUVELO COMMON STOCK PURSUANT TO THE AGREEMENT AND PLAN OF MERGER AND REORGANIZATION, DATED SEPTEMBER 24, 2008, BY AND AMONG NUVELO, INC., DAWN ACQUISITION SUB, INC., AND ARCA BIOPHARMA, INC. AS AMENDED BY THAT AMENDMENT NO. 1 TO AGREEMENT AND PLAN OF MERGER AND REORGANIZATION, DATED OCTOBER 28, 2008, BY AND AMONG NUVELO, INC., DAWN ACQUISITION SUB, INC., AND ARCA BIOPHARMA, INC.

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THE MERGER AGREEMENT

The following description describes the material terms of the merger agreement. This description of the merger agreement is qualified in its entirety by reference to the full text of the merger agreement which is attached as Annex A to this proxy statement/prospectus/consent solicitation and the full text of the of the amendment to the merger agreement which is attached as Annex B to this proxy statement/prospectus/consent solicitation, both of which are incorporated herein by reference. The merger agreement and amendment have been included to provide you with information regarding their terms. We encourage you to read the entire merger agreement and amendment. The merger agreement and amendment are not intended to provide any other factual information about Nuvelo or ARCA. Such information can be found elsewhere in this proxy statement/prospectus/consent solicitation and in the case of Nuvelo, in the other public filings of Nuvelo made with the SEC, which are available without charge at www.sec.gov.

The merger agreement contains representations and warranties that Nuvelo and merger sub, on the one hand, and ARCA, on the other hand, have made to one another as of specific dates. These representations and warranties have been made for the benefit of the other parties to the merger agreement and may be intended not as statements of fact but rather as a way of allocating the risk to one of the parties if those statements prove to be incorrect. In addition, the assertions embodied in the representations and warranties are qualified by information in confidential disclosure schedules exchanged by the parties in connection with signing the merger agreement. While Nuvelo and ARCA do not believe that these disclosure schedules contain information required to be publicly disclosed under the applicable securities laws, other than information that has already been so disclosed, the disclosure schedules do contain information that modifies, qualifies and creates exceptions to the representations and warranties set forth in the attached merger agreement. Accordingly, you should not rely on the representations and warranties as current characterizations of factual information about Nuvelo or ARCA, because they were made as of specific dates, may be intended merely as a risk allocation mechanism between Nuvelo and merger sub and ARCA and are modified by the disclosure schedules.

General

Nuvelo, ARCA, and Dawn Acquisition Sub, Inc., a Delaware corporation and wholly-owned subsidiary of Nuvelo, entered into an Agreement and Plan of Merger dated as of September 24, 2008, as amended by that Amendment No. 1 to Agreement and Plan of Merger and Reorganization, dated October 28, 2008, which, as amended, unless otherwise indicated, is referred to in this proxy statement/prospectus/consent solicitation as the merger agreement. The merger agreement contains the terms and conditions of the proposed business combination of Nuvelo and ARCA. Pursuant to the merger agreement, on the terms and conditions set forth therein, Dawn Acquisition Sub, Inc., will be merged with and into ARCA, with ARCA surviving the merger as a wholly-owned subsidiary of Nuvelo. After completion of the merger, current stockholders of Nuvelo will own approximately 33% of the common stock of the combined company, and current ARCA stockholders will own 67% of the common stock of the combined company, after giving effect to shares issuable pursuant to ARCA s outstanding options and warrants, primarily on a treasury stock basis, and without giving effect to shares issuable pursuant to Nuvelo s outstanding options and warrants.

Closing of the Merger

The closing of the transactions contemplated by the merger agreement will occur no later than the fifth business day after the last of the conditions to the transaction have been satisfied or waived. Concurrently with, or as soon as practicable after the closing, ARCA will file a certificate of merger with the Secretary of State of the State of Delaware. The transaction will become effective upon the filing of this certificate or at another time as may be designated by Nuvelo and specified in the certificate of merger.

Merger Consideration

At the effective time of the merger, each share of ARCA capital stock not held by Nuvelo, any subsidiary of Nuvelo or any subsidiary of ARCA, shall be converted into a right to receive a number of shares of Nuvelo

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common stock equal to the Exchange Ratio. The Exchange Ratio shall equal: (i) 109,009,278 *divided by* (ii) the sum of (A) the number of shares of ARCA common stock issued and outstanding immediately prior to the effective time of the merger, (B) the number of shares of ARCA common stock issuable upon the conversion of each share of ARCA preferred stock issued and outstanding immediately prior to the effective time of the merger (as calculated in accordance with ARCA s certificate of incorporation in effect immediately prior to the effective time of the merger), (C) the number of Treasury Method Shares of ARCA Common Stock Outstanding, and (D) the number of shares of ARCA common stock issuable pursuant to or upon conversion of any convertible notes or other rights outstanding as of immediately prior to the effective time (whether or not currently exercisable) to acquire shares of ARCA capital stock, *including* the notes issued pursuant to the convertible note purchase agreement by and between ARCA and certain of its stockholders dated September 24, 2008, or the Note and Warrant Purchase Agreement, and the warrants to purchase ARCA capital stock issued pursuant to the Note and Warrant Purchase Agreement but *excluding* other options and warrants to purchase ARCA capital stock, or issuable upon conversion of any ARCA preferred stock issuable pursuant to or upon conversion of any convertible notes or other rights outstanding as of immediately prior to effective time of the merger.

For purposes of determining the Exchange Ratio, the Treasury Method Shares of ARCA Common Stock Outstanding shall be equal to (i) the product of the number of shares of ARCA common stock underlying each option and warrant to purchase ARCA capital stock (other than warrants issued in connection with the Note and Warrant Purchase Agreement) that is outstanding and unexercised as of immediately prior to the effective time of the merger multiplied by the difference between (A) the ARCA Share Value and (B) the per share exercise price for each such ARCA option or warrant that is outstanding and unexercised as of immediately prior to the effective time of the merger; divided by (ii) the ARCA Share Value (ignoring any ARCA option or warrant that has a per share exercise price that is greater than or equal to the ARCA Share Value as of the effective time of the merger). The ARCA Share Value shall be equal to the product of (i) the average closing price of Nuvelo s common stock on Nasdaq for the five consecutive trading days immediately preceding the date upon which the merger is consummated, or Nuvelo Closing Price, and (ii) the Exchange Ratio.

Pursuant to the terms of the merger agreement, ARCA and Nuvelo have agreed upon a methodology to determine the Exchange Ratio as defined above. For illustration purposes, assuming the merger closed on October 27, 2008, and assuming the respective capitalizations of Nuvelo and ARCA as of September 30, 2008, the Exchange Ratio would have been 3.2934 shares of Nuvelo common stock per share of ARCA capital stock. The Exchange Ratio shall be determined as of immediately prior to the effective time of the merger and is subject to change based upon the number of shares of ARCA capital stock outstanding and issuable upon exercise of outstanding options and warrants, the Nuvelo Closing Price and certain other transactions affecting the value of Nuvelo s common stock.

Immediately after the merger, based on the Exchange Ratio, existing ARCA stockholders will own approximately 67% of the common stock of the combined company and Nuvelo stockholders will own approximately 33% of the common stock of the combined company, after giving effect to the issuance of shares of ARCA capital stock issuable upon exercise of options and warrants to purchase ARCA capital stock outstanding immediately prior to the effective time, primarily on a treasury stock basis, and without giving effect to options and warrants to purchase Nuvelo common stock outstanding immediately prior to the effective time. As described above, the number of shares of ARCA capital stock issuable pursuant to outstanding options and warrants to purchase capital stock immediately prior to the effective time (other than warrants issued in connection with the Note and Warrant Purchase Agreement) will be determined by calculating the Treasury Method Shares of ARCA Common Stock Outstanding.

The merger agreement does not include a price-based termination right, and while changes in the Nuvelo Closing Price will affect the number of Treasury Shares Method of ARCA Common Stock Outstanding and the number of shares of ARCA capital stock issuable in connection with the Note and Warrant Purchase Agreement, no changes in the Nuvelo Closing Price are expected to have a material effect on the relative ownership of the current ARCA stockholders and current Nuvelo stockholders as described above. Accordingly, the market value

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of the shares of Nuvelo common stock issued pursuant to the merger will depend on the market value of the shares of Nuvelo common stock at the time the merger closes, and could vary significantly from the market value on the date of this proxy statement/prospectus/consent solicitation.

The Exchange Ratio is subject to adjustment to account for the effect of the reverse stock split of Nuvelo s common stock.

Assumption of ARCA Stock Options and Warrants

Each option and warrant to purchase ARCA capital stock outstanding at the effective time of the merger shall be assumed by Nuvelo. Each such option or warrant shall be converted into a option or warrant, as applicable, to acquire that number of shares of Nuvelo common stock equal to the product obtained by multiplying (i) the number of shares of ARCA capital stock subject to such option or warrant by (y) the Exchange Ratio, rounded down to the nearest whole share of Nuvelo common stock. Each such option or warrant shall have a purchase price per share of Nuvelo common stock equal to the quotient obtained by dividing (i) the per share purchase price of ARCA capital stock subject to such option or warrant by (ii) the Exchange Ratio rounded up to the nearest whole cent. Each such option or warrant shall otherwise be subject to the same terms and conditions (including as to vesting and exercisability) as were applicable under the respective option warrant to purchase ARCA capital stock immediately prior to the effective time of the merger.

Fractional Shares

No fractional shares of Nuvelo common stock will be issuable pursuant to the merger to ARCA stockholders. Instead, each ARCA stockholder who would otherwise be entitled to receive a fraction of a share of Nuvelo common stock, after aggregating all fractional shares of Nuvelo common stock issuable to such stockholder, will be entitled to receive in cash the dollar amount, rounded to the nearest whole cent, without interest, determined by multiplying such fraction by the closing price of a share of Nuvelo common stock as quoted on the Nasdaq Global Market, on the date the merger becomes effective.

Exchange of ARCA Stock Certificates

The merger agreement provides that, at the effective time of the merger, Nuvelo will deposit with an exchange agent reasonably acceptable ARCA stock certificates representing the shares of Nuvelo common stock issuable to the ARCA stockholders and a sufficient amount of cash to make payments in lieu of fractional shares.

Promptly after the effective time of the merger, the exchange agent will mail to each record holder of ARCA capital stock immediately prior to the effective time of the merger a letter of transmittal and instructions for surrendering and exchanging the record holder s ARCA stock certificates for shares of Nuvelo common stock. Upon surrender of a ARCA stock certificate for exchange to the exchange agent, together with a duly signed letter of transmittal and such other documents as the exchange agent or Nuvelo may reasonably require, the ARCA stock certificate surrendered will be cancelled and the holder of the ARCA stock certificate will be entitled to receive the following:

- a certificate representing the number of whole shares of Nuvelo common stock that such holder has the right to receive pursuant to the provisions of the merger agreement; and
- cash in lieu of any fractional share of Nuvelo common stock.

If any ARCA stock certificate has been lost, stolen or destroyed, Nuvelo may, in its discretion, and as a condition to the delivery of any shares of Nuvelo common stock, require the owner of such lost, stolen or destroyed certificate to deliver an affidavit claiming such certificate has been lost, stolen or destroyed and post a bond indemnifying Nuvelo against any claim that may be made against Nuvelo, the exchange agent or ARCA with respect to such certificate.

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From and after the effective time of the merger, until it is surrendered, each ARCA stock certificate will be deemed to represent only the right to receive shares of Nuvelo common stock, and cash in lieu of any fractional share of Nuvelo common stock. No dividends or other distributions with respect to Nuvelo common stock with a record date after the effective time of the merger shall be paid or otherwise delivered to the holder of any unsurrendered ARCA stock certificate with respect to the shares of Nuvelo common stock that such holder has a right to receive in the merger until such holder surrenders such ARCA stock certificate.

Amended and Restated Certificate of Incorporation of Nuvelo

The merger agreement provides that Nuvelo s stockholders must approve, as a condition to closing the merger, an amendment to Nuvelo s amended and restated certificate of incorporation to effect a reverse stock split of the issued and outstanding shares of Nuvelo s common stock, which requires the affirmative vote of holders of a majority of Nuvelo s issued and outstanding common stock as of the record date for the special meeting. Upon the effectiveness of the amendment to Nuvelo s certificate of incorporation, the outstanding shares of Nuvelo s common stock will be reclassified and combined into a lesser number of shares such that one share of Nuvelo s common stock will be issued for a specified number of shares, which shall be greater than one and equal to or less than 50, of outstanding Nuvelo common stock, with the exact number within the range to be determined by Nuvelo s board of directors prior to the effective time of such amendment and publicly announced by Nuvelo. As applicable Nasdaq Global Market initial listing standards require Nuvelo to have, among other things, a $5.00 per share minimum bid price, the reverse stock split is necessary in order to consummate the merger. The merger agreement further provides, as a condition to closing the merger, that the amendment to Nuvelo s amended and restated certificate of incorporation to effect the reverse stock split of the issued and outstanding shares of Nuvelo s common stock shall have been accepted for filing by the Secretary of State of the State of Delaware.

Conditions to the Completion of the Merger

In addition to the approval and filing of the amendment of Nuvelo s amended and restated certificate of incorporation, each party s obligation to complete the merger is subject to the satisfaction or waiver by each of the parties, at or prior to the merger, of various conditions, which include the following:

- all representations and warranties of the other party in the merger agreement must be true and correct on the date of the merger agreement and as of the closing date of the merger as if made on the closing date, or as of a particular date if such representations and warranties address matters as of that particular date, disregarding materiality qualifications limiting the scope of representations and warranties; except that such inaccuracies will be disregarded if they collectively would not reasonably be expected to have a material adverse effect (as discussed in the section of this proxy statement/prospectus/consent solicitation entitled The Merger Agreement Material Adverse Effect) on the party making the representations and warranties;

- all of the covenants and obligations contained in the merger agreement that Nuvelo, Dawn Acquisition Sub, Inc., and ARCA are required to comply with or to perform at or prior to the closing shall have been complied with and performed in all material respects;

- the registration statement on Form S-4, of which this proxy statement/prospectus/consent solicitation is a part, must have been declared effective by the SEC in accordance with the Securities Act and must not be subject to any SEC stop order or proceeding or threatened proceeding seeking a stop order;

- the initial listing application on the Nasdaq Global Select Market, the Nasdaq Global Market or the Nasdaq Capital Market shall have been conditionally approved, and the shares of Nuvelo common stock to be issued in the merger shall be conditionally approved for listing on the Nasdaq Global Select Market, the Nasdaq Global Market or the Nasdaq Capital Market, both subject only to the completion of the merger and completion by Nuvelo of any reverse stock split required by Nasdaq;

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since the signing of the merger agreement, there shall not have occurred and be continuing and material adverse effect with respect to the other party, and no event shall have occurred or circumstance shall exist that, in combination with any other events or circumstances, would reasonably be expected to have or result in a material adverse effect with respect to the other party;

the requisite stockholders of Nuvelo must have approved the issuance of the Nuvelo common stock pursuant to the merger agreement and the requisite stockholders of ARCA must have approved the merger and adopted the merger agreement;

the other party to the merger agreement party must have received all required third-party and governmental consents, and such consents must be in full force and effect at the closing of the merger;

the other party must have delivered certain certificates and other documents required under the merger agreement for the closing of the merger;

no temporary restraining order, preliminary or permanent injunction or other order preventing the consummation of the merger shall have been issued by any court of competent jurisdiction or other governmental body and remain in effect, and there shall not be any legal requirement enacted or deemed applicable to the merger that makes consummation of the merger illegal;

there shall be no pending or threatened any legal proceeding in which a governmental body is or is threatened to become a party:

challenging or seeking to restrain, prohibit, rescind or unwind the consummation of the merger or any of the transactions contemplated by the merger agreement;

relating to the merger or any of the transactions contemplated by the merger agreement and seeking to obtain from Nuvelo or ARCA any damages or other relief that would reasonably be expected to be material to Nuvelo or ARCA;

seeking to prohibit or limit in any material respect Nuvelo s ability to vote, transfer, receive dividends with respect to or otherwise exercise ownership rights with respect to the stock of the surviving corporation;

that could materially and adversely affect the right or ability of Nuvelo or ARCA to own any of the material assets or operate the business of ARCA;

seeking to compel any of ARCA or Nuvelo to dispose of or hold separate any material assets or business as a result of the Merger or any of the transactions contemplated by the merger agreement;

seeking to impose (or that could result in the imposition of) any criminal sanctions or liability on Nuvelo or ARCA.

In addition, the obligation of Nuvelo and the merger sub to complete the merger is further subject to ARCA obtaining the necessary written consent of its stockholders to, effective upon the closing date, terminate the following agreements of ARCA: Amended and Restated Stockholders Agreement, dated as of May 31, 2007; Amended and Restated Investor Rights Agreement, dated as of May 31, 2007; Amended and Restated Right of First Refusal and Co-Sale Agreement, dated as of May 31, 2007; and the Amended and Restated Voting Agreement, dated as of May 31, 2007 which are referred to collectively as the ARCA Stockholder Agreements.

Conduct of Business Prior to the Merger

Except as expressly contemplated or permitted by the merger agreement, as set forth in the disclosure schedules to the merger agreement, as required by law, or as approved in advance by the other party in writing, Nuvelo and ARCA have agreed that each will:

conduct their businesses in the ordinary course, in accordance with past practices and in compliance with all applicable laws, rules and regulations;

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pay its debts and taxes when due;

pay or perform all material obligations when due; and

use reasonable best efforts, consistent with past practices and policies, to:

preserve intact its present business organization;

keep available the services of its present officers and employees; and

preserve its relationships with customers, suppliers, distributors, licensors, licensees and others with which it has significant business dealings.

Except as expressly contemplated or permitted by the merger agreement, as set forth in the disclosure schedules to the merger agreement, in certain circumstances as contemplated in each company s operating budget, or without the prior written consent of the other, which consent shall not be unreasonably withheld, both Nuvelo and ARCA have also agreed that they will refrain from doing any of the following prior to the effectiveness of the merger:

propose to adopt any amendments to or amend its certificate of incorporation or bylaws or comparable organizational documents;

authorize for issuance, issue, sell, deliver or agree or commit to issue, sell or deliver (whether through the issuance or granting of options, warrants, other equity-based (whether payable in cash, securities or other property or any combination of the foregoing) commitments, subscriptions, rights to purchase or otherwise) any of its securities or any securities of any of its subsidiaries, except for (i) the issuance and sale of shares of common stock pursuant to stock options or restricted stock units outstanding prior to the date hereof, and (ii) grants of purchase rights under Nuvelo s employee stock purchase plan for the three month offering periods commencing September 1, 2008 and December 1, 2008 pursuant to terms substantially similar with respect to the determination of offering price and participation limits as in effect for the offering period commenced September 1, 2008;

amend any of its securities (including options, warrants and similar rights) or any securities of any of its subsidiaries; provided, however, that Nuvelo or ARCA may dissolve and/or merge into any of their subsidiaries certain other subsidiaries that are not material to it and its subsidiaries, taken as a whole;

incur any indebtedness or guarantee any indebtedness for borrowed money or issue or sell any debt securities or guarantee any debt securities or other obligations of others or create a encumbrance over any of its assets;

declare, set aside or pay any dividend or other distribution of property in respect of any shares of capital stock, make any other actual, constructive or deemed distribution of property in respect of the shares of capital stock or effect or commit to any stock repurchase or redemption of its capital stock;

propose or adopt a plan of complete or partial liquidation, dissolution, merger, consolidation, restructuring, recapitalization or other reorganization of it or any of its Subsidiaries (other than the transactions contemplated hereby); provided, however, that Nuvelo or ARCA may dissolve and/or merge into any of their subsidiaries certain other subsidiaries that are not material to it and its

subsidiaries, taken as a whole;

forgive any loans of any party, including its employees, officers or directors or any employees, officers or directors of any of its subsidiaries, or any of its affiliates;

increase the compensation payable or to become payable to its officers, employees or consultants, or grant any severance or termination pay to, or enter into any severance agreement with any director, officer, consultant or other employee, or establish, adopt, enter into or amend any collective bargaining, bonus, profit sharing, thrift, compensation, stock option, restricted stock, pension, retirement, deferred compensation, employment, termination, severance or other plan, agreement, trust,

fund, policy or arrangement for the benefit of any such director, officer, consultant or employee, except the parties may make any amendments to existing employee benefit plans to the extent necessary to maintain their compliance with applicable legal requirements (including any amendments necessary or desirable to comply with Section 409A of the Code so as to avoid the imposition of additional tax with respect thereto) and the parties may make grants of equity awards as provided in the merger agreement;

acquire, sell, lease, license or dispose of any material property or assets in any single transaction or series of related transactions, except for (i) transactions pursuant to existing contracts, or (ii) transactions in the ordinary course of business consistent with past practice;

except as may be required by applicable legal requirements or GAAP, make any change in any of the accounting principles or practices used by it;

make or change any material tax election, adopt or change any tax accounting method, settle or compromise any material tax liability, or consent to the extension or waiver of the limitations period applicable to a material tax claim or assessment;

enter into any material contract;

amend in any material respect (other than an amendment where the only material amendment is to the amount to be paid or received by Nuvelo or ARCA, as applicable, and does not increase the amount to be so paid, or decrease the amount to be so received, by more than $100,000) any material contract, or grant any release or relinquishment of any material rights under any material contract;

sell, assign, transfer, license or sublicense, pledge or otherwise encumber any intellectual property owned by Nuvelo or ARCA, as applicable (other than non-exclusive licenses in the ordinary course of business consistent with past practice);

acquire (by merger, consolidation or acquisition of stock or assets) any other Person or any equity interest therein;

mortgage, pledge or subject to encumbrance, any of its assets or properties;

authorize, incur or commit to incur any new capital expenditure(s) which in the aggregate exceed $100,000; *provided, however*, that the foregoing shall not limit any maintenance capital expenditures or capital expenditures required pursuant to existing contracts;

settle or compromise any pending or threatened legal proceeding or pay, discharge or satisfy or agree to pay, discharge or satisfy any liability;

initiate any material legal proceeding;

except as required by applicable legal requirements or GAAP, revalue in any material respect any of its properties or assets, including writing-off notes or accounts receivable other than in the ordinary course of business consistent with past practice;

authorize, incur or commit to any clinical trial or other action that would trigger obligations to make milestone or other payments or commitments which in the aggregate exceed $100,000; or

enter into a contract to do any of the foregoing or knowingly take any action which is reasonably expected to result in any of the conditions to the consummation of the transactions contemplated hereby not being satisfied, or knowingly take any action which would make any of its representations or warranties set forth in the merger agreement untrue or incorrect in any material respect, or that would materially impair its ability to consummate the transactions contemplated by the merger agreement in accordance with the terms therein.

In addition, during the time period from the signing of the merger agreement until the effective time of the merger, both Nuvelo and ARCA will use reasonable best efforts to control their revenues and expenditures within an operating budget as described in the merger agreement, and each shall provide the other with unaudited

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consolidated balance sheets, consolidated statements of operations, and a consolidated statement of cash flows, including a comparison of the month s results with the operating budget as described in the merger agreement, within 10 business days of the end of each month. Without the prior written consent of the other party:

- Nuvelo s net cash must not be less than 95 percent of the net cash amount forecast in its operating budget for (i) each fiscal quarter prior to the closing of the merger and (ii) if the closing occurs more than 45 days after the end of a fiscal quarter, the interim period from the start of the then current fiscal quarter to last day of the calendar month ending no less than 10 business days prior to the closing; and

- ARCA s net cash must not be less than the net cash amount forecast in its operating budget, minus $500,000, for (i) each fiscal quarter prior to the closing of the merger and (ii) if the closing occurs more than 45 days after the end of a fiscal quarter, the interim period from the start of the then current fiscal quarter to last day of the calendar month ending no less than 10 business days prior to the closing.

Limitation on Soliciting, Discussing or Negotiating Other Acquisition Proposals

Pursuant to the merger agreement, each of Nuvelo and ARCA agreed that, except as described below, they will not, during the pre-closing period, directly or indirectly:

- solicit, initiate, knowingly encourage, induce or facilitate the making, submission or announcement of any acquisition proposal or acquisition inquiry or take any action that would reasonably be expected to lead to an acquisition proposal or acquisition inquiry;

- furnish any nonpublic information regarding ARCA or Nuvelo, as the case may be, or any of its subsidiaries, to any person in connection with or in response to an acquisition proposal or acquisition inquiry;

- engage in discussions or negotiations with any person with respect to any acquisition proposal or acquisition inquiry;

- approve, endorse or recommend any acquisition proposal or acquisition inquiry; or

- enter into any letter of intent or similar document or any contract contemplating or otherwise relating to any acquisition transaction.

An acquisition inquiry means any inquiry, indication of interest or request for nonpublic information (other than an inquiry, indication of interest or request for nonpublic information made or submitted by Nuvelo or ARCA, as the case may be) that would reasonably be expected to lead to an acquisition proposal (as defined below).

An acquisition proposal means any offer or proposal (other than an offer or proposal made or submitted by Nuvelo or ARCA, as the case may be) contemplating or otherwise relating to any acquisition transaction (as defined below).

An acquisition transaction means any transaction or series of transactions involving:

- any merger, exchange, consolidation, business combination, issuance of securities, acquisition of securities, reorganization, recapitalization, takeover offer, tender offer, exchange offer or other similar transaction: (i) in which ARCA or Nuvelo, as the case may be or any material subsidiary of ARCA or Nuvelo, as the case may be is a constituent corporation or is otherwise involved; (ii) in which a Person or group (as defined in the Exchange Act and the rules promulgated thereunder) of Persons directly or indirectly acquires beneficial or record ownership of securities representing more than 20% of the outstanding voting securities of

ARCA or Nuvelo, as the case may be or any material subsidiary of ARCA or Nuvelo, as the case may be; or (iii) in which ARCA or Nuvelo, as the case may be, or any of its material subsidiaries issues securities representing more than 20% of the outstanding voting securities of ARCA or such material subsidiary of ARCA;

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any sale, lease, exchange, transfer, license, acquisition or disposition of any business or businesses or assets that constitute or account for 20% or more of the consolidated net revenues, consolidated net income or consolidated assets of ARCA and its subsidiaries or Nuvelo and its subsidiaries, as the case may be; or

any liquidation or dissolution of ARCA or any of its material subsidiaries or Nuvelo or any of its material subsidiaries, as the case may be.

Notwithstanding the foregoing, prior to obtaining the consent of their stockholders, either party may furnish information regarding such party to, and may enter into discussions or negotiations with, any third party in response to an unsolicited bona fide written acquisition proposal made or received after the date of the merger agreement, which such party s board of directors determines in good faith, after consultation with a nationally recognized independent financial advisor, constitutes or is reasonably likely to result in a superior offer, (as defined in the merger agreement and explained in this proxy statement/prospectus/consent solicitation), if:

neither such party nor any representative of such party has breached the no solicitation provisions of the merger agreement described above;

such party gives the other party at least two business days prior notice of the identity of the third party and of their intention to furnish information to, or enter into discussions or negotiations with, such third party before furnishing any information or entering into discussions or negotiations with such person, and such party receives from the third party an executed confidentiality agreement; and

at least two business days prior to the furnishing of any information to a third party, the other party furnishes the same information to the other party to the extent not previously furnished.

A superior offer means an unsolicited bona fide written offer by an unaffiliated third party to acquire pursuant to a tender offer, exchange offer, merger, consolidation or other business combination: (i) all or substantially all of the assets of a party; or (ii) more than 50% of the outstanding voting securities of a party and as a result of which the stockholders of that party immediately preceding such transaction would cease to hold at least 50% of the equity interests in the surviving or resulting entity of such transaction or any direct or indirect payment thereof, in exchange for consideration that is determined by the board of directors of that party, in its good faith judgment, after obtaining and taking into account the advice of an independent financial advisor of nationally recognized reputation, and after taking into account the likelihood and anticipated timing of consummation, to be more favorable from a financial point of view to a party s stockholders than the merger.

Change in Recommendation

The merger agreement provides that neither Nuvelo nor ARCA shall withdraw or modify, or adopt any resolution of the board of directors or any committee to withdraw or modify, in a manner adverse to the other party its recommendation to (i) issue shares of common stock in connection with the merger, (ii) approve the amendment to the Nuvelo amended and restated certificate of incorporation to effect the reverse stock split,, or (iii) approve the merger agreement, as the case may be. Notwithstanding the foregoing, Nuvelo or ARCA may withdraw or modify their recommendation in a manner adverse to the other party prior to the Nuvelo stockholder meeting or approval of the merger agreement by the ARCA stockholders, as the case may be, if:

the party seeking to withdraw or modify its recommendation, or the Modifying Party, has provided to other party, at least five business days prior to each meeting of Modifying Party s board of directors at which such board of directors considers the possibility of withdrawing its recommendation or modifying its recommendation in a manner adverse to the other party, written notice of such meeting together with reasonably detailed information regarding the circumstances giving rise to the consideration of such possibility; and

the Modifying Party s board of directors determines in good faith, after taking into account the advice of its outside legal counsel, that the withdrawal or modification of its recommendation is required in order for the Modifying Party s board of directors to comply with

its fiduciary obligations to its stockholders under applicable law.

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Meeting of Stockholders; Stockholder Consent

Nuvelo is obligated under the merger agreement to call, give notice of and hold a special meeting of its stockholders for the purposes of considering the issuance of shares of Nuvelo common stock and amendment to the Nuvelo s amended and restated certificate of incorporation. The meeting shall be held not later than 25 days after the registration statement of which this proxy statement/prospectus/consent solicitation is a part is declared effective. Subject to certain termination provisions, upon request of ARCA, Nuvelo shall proceed with holding the stockholder meeting despite Nuvelo s withdrawal or modification of its recommendation.

Within 72 hours after Nuvelo has provided ARCA with notice of the effectiveness of the registration statement of which this proxy statement is a part, ARCA shall solicit and obtain irrevocable written consents of its stockholders (i) approving the merger and related transactions, (ii) acknowledging that such approval is irrevocable and such stockholder is aware of its appraisal rights, and (iii) acknowledging that by its approval of the merger such stockholder waives its appraisal rights. Subject to certain termination provisions, upon request of Nuvelo, ARCA shall proceed with soliciting the stockholder consent despite ARCA s withdrawal or modification of its recommendation.

Other Agreements

Each of Nuvelo and ARCA has agreed to use its commercially reasonable efforts to:

- take, or cause to be taken, all actions necessary to complete the merger and other transactions contemplated by the merger agreement;
- file, as soon as practicable after the date of the merger agreement, all notices, reports and other documents required to be filed by such party with any governmental body with respect to the merger and the other transactions contemplated by the merger agreement and provide the other party any information that is required to effectuate such filings;
- obtain each consent (if any) required to be obtained (pursuant to any applicable legal requirement or contract, or otherwise) by such party in connection with the merger;
- lift any restraint, injunction or other legal bar to the merger;
- cause their respective legal advisors to deliver an opinion as to whether the merger qualifies as a reorganization within the meaning of Section 368 of the Code; and
- consult each other about any public statement or press release either will make concerning the merger.

Nuvelo and ARCA also have agreed:

- that Nuvelo will, in consultation with ARCA, file an application for initial inclusion on The Nasdaq Global Market or Nasdaq Capital Market in connection with the listing of Nuvelo s common stock pursuant to Nasdaq s reverse merger rules and use its reasonable best efforts to cause the shares issued in the merger to be approved for listing;
- that Nuvelo and ARCA shall jointly determine: (i) a course of action to approach Nasdaq with the objective of obtaining an extension of time for Nuvelo to regain compliance with Nasdaq Marketplace Rule 4450(a)(5) and (ii) the magnitude of the reverse stock split to be given effect by the amendment to Nuvelo s amended and restated certificate of incorporation;

that prior to the Nuvelo stockholder meeting, Nuvelo shall have taken or caused to be taken all necessary corporate action such that immediately after the effective time of the merger, the board of directors of Nuvelo shall be composed of the persons agreed upon by Nuvelo and ARCA pursuant to the merger agreement;

that ARCA shall use commercially reasonable efforts to cause to be delivered to Nuvelo a letter of KPMG LLP, dated no more than two business days before the date on which the registration statement

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of which this proxy statement/prospectus/consent solicitation is a part becomes effective (and reasonably satisfactory in form and substance to Nuvelo), that is customary in scope and substance for letters delivered by independent public accountants in connection with such registration statements;

that ARCA will obtain the necessary written consent of its stockholders to, effective upon the closing of the merger, terminate the ARCA Stockholder Agreements;

that Nuvelo shall use commercially reasonable efforts to solicit the consent of its stockholders to approve an amendment to Nuvelo s amended and restated certificate of incorporation to increase the number of authorized shares of Nuvelo common stock to 250 million;

that immediately prior to the effective time of the merger, Nuvelo shall file the amendments to its amended and restated certificate of incorporation approved by the Nuvelo stockholders with the Secretary of State of the State of Delaware to become effective immediately prior to the effective time of the merger; and

that, pursuant to Rule 16b-3(d) of the Exchange Act, the board of directors of Nuvelo will adopt a resolution approving the issuance pursuant to the merger of Nuvelo common stock to parties that are or will become officers and directors of Nuvelo and their affiliates so that such issuances are exempt from application of Section 16b of the Exchange Act.

Representations and Warranties

The merger agreement contains customary representations and warranties of Nuvelo and ARCA relating to, among other things:

subsidiaries, corporate organization, authority and qualifications;

capital structure;

financial statements and available cash, and with respect to Nuvelo, documents filed with the SEC and the accuracy of information contained in those documents;

absence of material changes or events;

title to assets;

receivables and customers;

equipment and leaseholds;

intellectual property rights and agreements;

material agreements, contracts and commitments;

absence of undisclosed liabilities;

permits and compliance with applicable laws;

tax matters;

employee and labor matters and employee benefit plans;

environmental matters;

insurance;

related party transactions;

legal proceedings and orders;

authorization to enter into the merger agreement and consummate the associated transactions;

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inapplicability of anti-takeover statutes;

stockholder votes required for approval of the merger agreement and associated transactions;

non-contravention of merger agreement with existing corporate documents or contracts;

the receipt of fairness opinions from financial advisors;

brokers and finders fees;

with respect to Nuvelo, valid issuance of the shares to be issued in the merger; and

the accuracy of information supplied in connection with this proxy statement/prospectus/consent solicitation and the registration statement of which it is a part.

Material Adverse Effect

Several of the representations, warranties, covenants and closing conditions of Nuvelo and ARCA in the merger agreement are qualified by reference to whether the item in question has had or could reasonably be expected to have a material adverse effect on the applicable company.

The merger agreement provides that material adverse effect means, when used in connection with Nuvelo: any effect that, considered together with all other effects, has a material adverse effect on the business, financial condition, operations or results of operations of Nuvelo and its subsidiaries taken as a whole or the ability of Nuvelo to consummate the merger or to perform any of its covenants or obligations under the merger agreement. None of the following shall constitute or be taken into account in determining whether there has been or will be, a material adverse effect with respect to Nuvelo:

effects resulting from conditions generally affecting the industries in which Nuvelo participates or the U.S. or global economy or capital markets as a whole, to the extent that such conditions do not have a disproportionate impact on Nuvelo and its subsidiaries taken as a whole;

changes in the trading price or trading volume of Nuvelo common stock (it being understood, however, that any effect causing or contributing to such changes in the trading price or trading volume of Nuvelo common stock may constitute a Nuvelo material adverse effect and may be taken into account in determining whether a Nuvelo material adverse effect has occurred);

any failure by Nuvelo or any of its subsidiaries to meet internal projections or forecasts or third party revenue or earnings predictions for any period ending (or for which revenues or earnings are released) on or after the date of the merger agreement (it being understood, however, that any effect causing or contributing to such failures to meet projections or predictions may constitute a Nuvelo material adverse effect and may be taken into account in determining whether a Nuvelo material adverse effect has occurred);

the execution, delivery, announcement or performance of the obligations under the merger agreement or the announcement, pendency or anticipated consummation of the merger;

any natural disaster or any acts of terrorism, sabotage, military action or war or any escalation or worsening thereof;

any changes (after the execution of the merger agreement) in GAAP or applicable legal requirements;

the taking of any action required by the merger agreement; and

any matter or event arising from certain investigations, ongoing litigation and settlement agreements previously disclosed to ARCA.

The merger agreement provides that material adverse effect means, when used in connection with ARCA: any effect that, considered together with all other effects, has a material adverse effect on: (i) the business,

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financial condition, operations or results of operations of ARCA and its subsidiaries taken as a whole; (ii) the ability of ARCA to consummate the merger or to perform any of its covenants or obligations under the merger agreement; or (iii) Nuvelo s ability to vote, transfer, receive dividends with respect to or otherwise exercise ownership rights with respect to the stock of the surviving corporation. None of the following shall constitute or be taken into account in determining whether there has been or will be, a material adverse effect with respect to ARCA:

- effects resulting from conditions generally affecting the industries in which ARCA participates or the U.S. or global economy or capital markets as a whole, to the extent that such conditions do not have a disproportionate impact on ARCA and its subsidiaries taken as a whole;
- any failure by ARCA or any of its subsidiaries to meet internal projections or forecasts or third party revenue or earnings predictions for any period ending (or for which revenues or earnings are released) on or after the date of the merger agreement (it being understood, however, that any effect causing or contributing to such failures to meet projections or predictions may constitute a ARCA material adverse effect and may be taken into account in determining whether a ARCA material adverse effect has occurred);
- the execution, delivery, announcement or performance of the obligations under the merger agreement or the announcement, pendency or anticipated consummation of the merger;
- any natural disaster or any acts of terrorism, sabotage, military action or war or any escalation or worsening thereof; any changes (after the execution of the merger agreement) in GAAP or applicable Legal Requirements;
- the taking of any action required by the merger agreement; and
- the FDA s failure to file ARCA s NDA for Gencaro (provided that the NDA is promptly re-submitted and accepted for filing by the FDA within 30 days); and
- the FDA s failure to determine the approvability of ARCA s NDA by the closing date of the merger.

Termination of the Merger Agreement

The merger agreement may be terminated prior to the effective time of the merger (whether before or after adoption of the merger agreement by ARCA s stockholders and whether before or after approval of the issuance of Nuvelo common stock in the merger by Nuvelo s stockholders):

- by mutual written consent of Nuvelo and ARCA, duly authorized by their respective boards of directors;
- by either Nuvelo or ARCA if the merger shall not have been consummated by the February 28, 2009; provided, however, that a party shall not be permitted to terminate the merger agreement on this basis if the failure to consummate the merger by such date is attributable to a failure on the part of such party to perform any covenant or obligation in the merger agreement required to be performed by such party at or prior to the effective time of the merger;
- by either Nuvelo or ARCA if a court of competent jurisdiction or other governmental body shall have issued a final and nonappealable order, or shall have taken any other final and nonappealable action, having the effect of permanently restraining, enjoining or otherwise prohibiting the consummation of the merger;

by either Nuvelo or ARCA if: (i) the Nuvelo stockholders meeting (including any adjournments and postponements thereof) shall have been held and Nuvelo s stockholders shall have taken a final vote on the issuance of shares of Nuvelo common stock in the merger; and (ii) the issuance of Nuvelo common stock in the merger shall not have been approved at the Nuvelo stockholders meeting (and shall not have been approved at any adjournment or postponement thereof);

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by Nuvelo if: (i) any of the representations and warranties of ARCA contained in the merger agreement shall have been inaccurate as of the date of the merger agreement or shall have become inaccurate as of a date subsequent to the date of the merger agreement (if made as of such subsequent date), provided, however, that any inaccuracies to such representations and warranties will be disregarded if such inaccuracies do not collectively constitute, and would not reasonably be expected to have or result in, a material adverse effect, or (ii) any of ARCA s covenants or obligations contained in the merger agreement shall have been breached such that the requirement that ARCA comply with or perform all of its covenants and obligations pursuant to the merger agreement in all material respects prior to the closing of the merger would not be satisfied; *provided, however,* that if an inaccuracy in any of ARCA s representations and warranties as of a date subsequent to the date of the merger agreement or breach of a covenant or obligation by ARCA is curable by ARCA, and ARCA is continuing to exercise commercially reasonable efforts to cure such inaccuracy or breach, then Nuvelo may not terminate the merger agreement on this basis on account of such inaccuracy or breach unless such inaccuracy or breach shall remain uncured for a period of 30 days commencing on the date that Nuvelo gives ARCA notice of such inaccuracy or breach;

by ARCA if: (i) any of the representations and warranties of Nuvelo or the merger sub contained in the merger agreement shall have been inaccurate as of the date of the merger agreement or shall have become inaccurate as of a date subsequent to the date of the merger agreement (if made as of such subsequent date) provided, however, that any inaccuracies to such representations and warranties will be disregarded if such inaccuracies do not collectively constitute, and would not reasonably be expected to have or result in, a material adverse effect, or (ii) any of Nuvelo s covenants or obligations contained in the merger agreement shall have been breached such that the requirement that Nuvelo comply with or perform all of its covenants and obligations pursuant to the merger agreement in all material respects prior to the closing of the merger would not be satisfied; *provided, however,* that if an inaccuracy in any of Nuvelo s or the merger sub s representations and warranties as of a date subsequent to the date of the merger agreement or breach of a covenant or obligation by Nuvelo is curable by Nuvelo or the merger sub, and Nuvelo is continuing to exercise commercially reasonable efforts to cure such inaccuracy or breach, then ARCA may not terminate the merger agreement on this basis on account of such inaccuracy or breach unless such inaccuracy or breach shall remain uncured for a period of 30 days commencing on the date that ARCA gives Nuvelo notice of such inaccuracy or breach;

by Nuvelo immediately prior to entering into a definitive agreement with respect to a superior offer, provided that (i) the Nuvelo board of directors has withdrawn or modified recommendation in accordance with the terms and conditions of the merger agreement and authorized Nuvelo to enter into a definitive agreement for a transaction that constitutes a superior offer, (ii) immediately prior to the termination of the merger agreement, Nuvelo pays to ARCA the termination fee described below, and (iii) immediately following such termination Nuvelo enters into a definitive agreement to effect such superior offer; or

by ARCA immediately prior to entering into a definitive agreement with respect to a superior offer, provided that (i) the ARCA board of directors of has withdrawn or modified its recommendation in accordance with the terms and conditions of the merger agreement and authorized ARCA to enter into a definitive agreement for a transaction that constitutes a superior offer, (ii) immediately prior to the termination of the merger agreement, ARCA pays to Nuvelo the termination fee described below, and (iii) immediately following such termination of ARCA enters into a definitive agreement to effect such superior offer.

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Termination Fees

Fees Payable by Nuvelo

Nuvelo must pay ARCA a nonrefundable fee of $947,112 and reimburse ARCA for up to $500,000 in actual out of pocket legal, accounting and investment advisory fees paid or payable in connection with the transactions contemplated by the merger agreement if:

- the merger agreement is terminated by Nuvelo immediately prior to Nuvelo entering into definitive agreement for a transaction that constitutes a superior offer; or
- the merger agreement is terminated by Nuvelo or ARCA if the stockholders of Nuvelo do not approve the issuance of Nuvelo common stock and the resulting change in control of Nuvelo at the Nuvelo special meeting of stockholders, and all of the following conditions are met:
  - prior to the Nuvelo special meeting of stockholders, an acquisition proposal with respect to Nuvelo has been publicly made and not withdrawn;
  - within nine months of the termination of the merger agreement, Nuvelo enters into a definitive agreement to consummate an acquisition transaction with a party other than ARCA; and
  - such acquisition transaction is consummated pursuant to a definitive agreement.

Fees Payable by ARCA

ARCA must pay Nuvelo a nonrefundable fee of $1,922,924 and reimburse Nuvelo for up to $500,000 in actual out of pocket legal, accounting and investment advisory fees paid or payable in connection with the transactions contemplated by the merger agreement if the merger agreement is terminated by ARCA immediately prior to ARCA entering into a definitive agreement for a transaction that is a superior offer.

Amendment and Waiver of the Merger Agreement

Amendment

The merger agreement may be amended with the approval of the respective boards of directors of ARCA and Nuvelo at any time (whether before or after the adoption of the merger agreement by ARCA s stockholders and whether before or after approval of the issuance of Nuvelo common stock in the merger by Nuvelo s stockholders); provided, however, that: (i) after any such adoption of the merger agreement by ARCA s stockholders, no amendment shall be made which by law requires further approval of ARCA s stockholders without the further approval of ARCA s stockholders; and (ii) after any such approval of the issuance of Nuvelo common stock in the merger by Nuvelo s stockholders, no amendment shall be made which by law or any rule or regulation of Nasdaq requires further approval of Nuvelo s stockholders without the further approval of Nuvelo s stockholders. The merger agreement may not be amended except by an instrument in writing signed on behalf of each of the parties to the merger agreement.

Waiver

At any time prior to the effective time of the merger, Nuvelo or ARCA may: (i) extend the time for the performance of any of the obligations or other acts of the other parties to the merger agreement; (ii) waive any inaccuracy in or breach of any representation, warranty, covenant or obligation of the other party in the merger agreement or in any document delivered pursuant to the merger agreement; and (iii) waive compliance with any covenant, obligation or condition for the benefit of such party contained in the merger agreement; with the following exceptions:

no failure on the part of Nuvelo or ARCA to exercise any power, right, privilege or remedy under the merger agreement, and no delay on the part of Nuvelo or ARCA in exercising any power, right,

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privilege or remedy under the merger agreement, shall operate as a waiver of such power, right, privilege or remedy; and no single or partial exercise of any such power, right, privilege or remedy shall preclude any other or further exercise thereof or of any other power, right, privilege or remedy; and

neither Nuvelo nor ARCA shall be deemed to have waived any claim arising out of the merger agreement, or any power, right, privilege or remedy under the merger agreement, unless the waiver of such claim, power, right, privilege or remedy is expressly set forth in a written instrument duly executed and delivered on behalf of Nuvelo or ARCA; and any such waiver shall not be applicable or have any effect except in the specific instance in which it is given.

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OTHER AGREEMENTS RELATED TO THE MERGER

Voting Agreements

The following description of the voting agreements describes the material terms of the voting agreements. This description of the voting agreements is qualified in its entirety by reference to the form of Nuvelo voting agreement which is attached as Annex C and by reference to the form of ARCA voting agreement which is attached as Annex D to this proxy statement/prospectus/consent solicitation and is incorporated herein by reference. We encourage you to read the entire form of voting agreements.

In order to induce Nuvelo to enter into the merger agreement, several ARCA stockholders entered into voting agreements and irrevocable proxies with Nuvelo pursuant to which, among other things, each of these stockholders agreed, solely in his capacity as a stockholder, to vote all of his shares of ARCA capital stock and other ARCA securities:

- in favor of the merger, the execution and delivery by ARCA of the merger agreement and the adoption and approval of the merger agreement and the terms thereof, in favor of each of the other actions contemplated by the merger agreement and in favor of any action in furtherance of any of the foregoing;
- against any action or agreement that would result in a breach of any representation, warranty, covenant or obligation of ARCA in the merger agreement;
- against the following actions:
  - any extraordinary corporate transaction, such as a merger, consolidation or other business combination involving ARCA or any subsidiary of ARCA;
  - any sale, lease or transfer of a material amount of assets of ARCA or any subsidiary of ARCA;
  - any reorganization, recapitalization, dissolution or liquidation of ARCA or any subsidiary of ARCA;
  - any change in a majority of the board of directors of ARCA;
  - any amendment to ARCA s certificate of incorporation or bylaws which would in any manner frustrate, prevent, or nullify the merger, the merger agreement or any transactions contemplated by the merger agreement or change in any manner the voting rights of any class of ARCA s capital stock;
  - any material change in the capitalization of ARCA or the ARCA s corporate structure; and
  - any other action which is intended, or could reasonably be expected, to impede, interfere with, delay, postpone, discourage or adversely affect the merger or any of the other transactions contemplated by the merger agreement or the voting agreement.

These ARCA stockholders also granted Nuvelo an irrevocable proxy to their respective shares in accordance with the voting agreement. These ARCA stockholders may vote their shares of ARCA capital stock on all other matters not referred to in such proxy.

Under these voting agreements executed by ARCA stockholders, subject to certain exceptions, such stockholders also have agreed not to sell or transfer ARCA capital stock and securities held by them, or any voting rights with respect thereto, until the earlier of the termination of the merger agreement or the completion of the merger. To the extent that any such sale or transfer is permitted pursuant to the exceptions included in the voting agreement, each person to which any shares of ARCA capital stock or securities are so sold or transferred must agree in writing to be bound by the terms and provisions of the voting agreement.

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Also under these voting agreements, if ARCA shall solicit action by written consent of its stockholders to approve matters covered by the voting agreement, such stockholders have agreed to take all actions required by the voting agreement as soon as reasonably practicable following receipt of any such written consent solicitation, which in no event shall be later than the later of (i) 72 hours after the registration statement which includes this proxy statement/prospectus/consent solicitation is declared effective or (ii) 24 hours after receipt of such written consent solicitation. ARCA stockholders that executed these voting agreements also waived their ability to exercise any appraisal or similar rights in connection with the merger or any related transaction. Additionally, such ARCA stockholders have agreed not to engage in certain actions that would solicit, encourage or support acquisition transactions other than the merger.

As of September 24, 2008, the stockholders of ARCA that entered into voting agreements owned in the aggregate 3,553,635 shares of ARCA common stock and 16,785,136 shares of ARCA preferred stock, representing approximately 84.97% of the outstanding capital stock of ARCA, including approximately 92.11% of ARCA s outstanding preferred stock, on an as converted basis, of ARCA. All of these stockholders are executive officers, directors, or entities affiliated with such persons, or 5% stockholders, of ARCA, and include the Principal Series Preferred Stockholders.

In addition, in order to induce ARCA to enter into the merger agreement, several Nuvelo stockholders entered into voting agreements and irrevocable proxies with ARCA pursuant to which, among other things, each of these stockholders agreed, solely in his capacity as a stockholder, to vote all of his shares of Nuvelo common stock:

- in favor of issuance of the shares of Nuvelo common stock in the merger;
- in favor of the amendment to Nuvelo s amended and restated certificate of incorporation to effect a reverse stock split of the issued and outstanding shares of Nuvelo common stock;
- against any action or agreement that would result in a breach of any representation, warranty, covenant or obligation of Nuvelo in the merger agreement; and
- against the following actions:
  - any extraordinary corporate transaction, such as a merger, consolidation or other business combination involving Nuvelo or any subsidiary of Nuvelo;
  - any sale, lease or transfer of a material amount of assets of Nuvelo or any subsidiary of Nuvelo;
  - any reorganization, recapitalization, dissolution or liquidation of Nuvelo or any subsidiary of Nuvelo;
  - any change in a majority of the board of directors of Nuvelo;
  - any amendment to Nuvelo s certificate of incorporation or bylaws other than the amendment to Nuvelo s amended and restated certificate of incorporation;
  - any material change in the capitalization of Nuvelo or the Nuvelo s corporate structure; and

any other action which is intended, or could reasonably be expected, to impede, interfere with, delay, postpone, discourage or adversely affect the merger or any of the other transactions contemplated by the merger agreement or the voting agreement.

These Nuvelo stockholders also granted ARCA an irrevocable proxy to their respective shares in accordance with the voting agreement. These Nuvelo stockholders may vote their shares of Nuvelo common stock on all other matters not referred to in such proxy.

Nuvelo stockholders that executed these voting agreements have agreed not to engage in certain actions that would solicit, encourage or support acquisition transactions other than the merger.

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As of September 24, 2008, the stockholders of Nuvelo that entered into voting agreements owned in the aggregate number of shares of Nuvelo common stock representing approximately 4.3% of the outstanding Nuvelo common stock.

Note and Warrant Purchase Agreement

As agreed to in the merger agreement, ARCA entered into a Note and Warrant Purchase Agreement dated September 24, 2008, as amended October 10, 2008, with certain holders of ARCA preferred stock pursuant to which ARCA sold, for an aggregate consideration of $8.75 million, its 6% Convertible Promissory Notes due March 31, 2009, or the Notes, and warrants, or the Warrants, to purchase a number of shares of ARCA s common stock as determined pursuant to the Warrants. The outstanding principal and accrued interest on the Notes will convert into that number of shares of ARCA common stock immediately prior to the closing of the merger equal to the amount of unpaid principal and interest due as of the date of conversion divided by the conversion price. The conversion price is equal to the lesser of: (i) $3.253 or (ii) the product of (a) the average closing price of Nuvelo common stock on the Nasdaq Global Market for the five consecutive trading days immediately preceding (but not including) the date the merger is consummated and (b) the Exchange Ratio; provided, however that in no event will the conversion price be less than $1.6265. The number of shares of ARCA common stock subject to the Warrants issued in the convertible bridge note financing is calculated by dividing (i) 20% of the sum of the principal amount of each Note plus the consideration paid for the associated Warrants by (ii) the conversion price for the Notes. The Warrants have an exercise price equal to the conversion price and have a five-year exercise period. Assuming the lowest conversion price possible under the Notes, the Warrants will be exercisable for an aggregate of 1,075,933 shares of ARCA common stock.

In connection with the closing of the Note and Warrant Purchase Agreement, ARCA amended its Restated Certificate to (i) increase the authorized number of shares of ARCA common stock to 40,000,000 shares, and (ii) make certain technical changes with respect to the merger, including alterations to the anti-dilution provisions of certain preferred stockholders of ARCA, as set forth in the Certificate of Amendment to the Restated Certificate.

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NUVELO PROPOSAL NO. 2

AMENDMENT TO AMENDED AND RESTATED CERTIFICATE OF INCORPORATION

TO EFFECT A REVERSE STOCK SPLIT OF NUVELO S COMMON STOCK

Overview

The Nuvelo board of directors has unanimously approved a proposal to amend its amended and restated certificate of incorporation to effect a reverse stock split of the issued and outstanding shares of its common stock. The board has recommended that this proposal be presented to its stockholders for approval. The text of the form of proposed amendment to Nuvelo s amended and restated certificate of incorporation to effect a reverse stock split of the issued and outstanding shares of Nuvelo s common stock is attached to this proxy statement/prospectus/consent solicitation as *Annex F*.

The proposed amendment to Nuvelo s amended and restated certificate of incorporation would effect a reverse stock split whereby a number of outstanding shares of Nuvelo s common stock between and including 1 and 50, such number consisting only of whole shares, will be combined into one share of Nuvelo s common stock, with this exact number within the range to be determined by the Nuvelo board of directors, subject to its obligation under the merger agreement to agree with ARCA on such determination. The Nuvelo board of directors believes that stockholder approval of an amendment granting the board this discretion, rather than approval of a specified ratio, provides the Nuvelo board of directors with appropriate flexibility to react to then-current market conditions and, therefore, is in the best interests of Nuvelo and its stockholders.

By approving this amendment, stockholders will approve a series of amendments to Nuvelo s amended and restated certificate of incorporation pursuant to which any whole number of outstanding shares of Nuvelo s common stock between and including 1 and 50 would be combined into one share of Nuvelo s common stock, and authorize the Nuvelo board of directors to file only one such amendment, as determined by the Nuvelo board of directors in the manner described herein, and to abandon each amendment not selected by the Nuvelo board of directors. The Nuvelo board of directors may also elect not to undertake any reverse stock split.

If approved by the stockholders, and following such approval, the Nuvelo board of directors determines that effecting a reverse stock split is in the best interests of Nuvelo and its stockholders, the reverse stock split will become effective upon filing one such amendment with the Secretary of State of the State of Delaware. The amendment filed thereby will contain the number of shares selected by the Nuvelo board of directors within the limits set forth in this proposal to be combined into one share of Nuvelo s common stock.

If the board elects to effect a reverse stock split following stockholder approval, the number of issued and outstanding shares of common stock would be reduced in accordance with an exchange ratio determined by the Nuvelo board of directors within the limits set forth in this proposal. Except for adjustments that may result from the treatment of fractional shares as described below, each stockholder will hold the same percentage of Nuvelo s outstanding common stock immediately following the reverse stock split as such stockholder held immediately prior to the reverse stock split. The par value of Nuvelo s common stock would remain unchanged at $0.001 per share.

Reasons for the Reverse Stock Split

The Nuvelo board of directors believes that a reverse stock split may be desirable for a number of reasons. First, the Nuvelo board of directors believes that a reverse stock split may allow Nuvelo to remain listed on the Nasdaq Global Market. Second, the Nuvelo board of directors believes that a reverse stock split could improve the marketability and liquidity of Nuvelo s common stock.

Nuvelo s common stock is currently quoted on the Nasdaq Global Market. According to applicable Nasdaq rules, in a transaction constituting a reverse merger in which an issuer combines with a non-Nasdaq entity, resulting in a change of control of the issuer and potentially allowing the non-Nasdaq entity to obtain a Nasdaq listing, the issuer must apply for initial inclusion on the applicable Nasdaq market. The merger agreement

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requires, as a condition to closing of the merger, that Nuvelo have received conditional approval to list the shares issuable in connection with the merger on the Nasdaq Global Market, Nasdaq Global Select Market or Nasdaq Capital Market. The listing standards of the Nasdaq Global Market require, among other things, a $5.00 per share minimum bid upon the effective time of the merger and the listing standards of the Nasdaq Capital Market require, among other things, a $4.00 per share minimum bid upon the effective time of the merger. Nuvelo intends to file an initial listing application for the Nasdaq Global Market in connection with the merger. On October 27, 2008 Nuvelo s common stock closed at $0.33 per share. Therefore, the reverse stock split is necessary in order to consummate the merger.

In addition to initial listing requirement for the Nasdaq Global Market that Nuvelo must satisfy in connection with the merger, in order for Nuvelo common stock to continue to be quoted on the Nasdaq Global Market after the completion of the merger, Nuvelo must satisfy certain listing maintenance standards established by the Nasdaq Global Market. Among other things, if the closing bid price of Nuvelo s common stock is under $1.00 per share for 30 consecutive trading days and does not thereafter reach $1.00 per share or higher for a minimum of ten consecutive trading days during the 180 calendar days following notification by Nasdaq, Nasdaq may delist Nuvelo s common stock from trading on the Nasdaq Global Market. On May 1, 2008, Nuvelo received a letter from Nasdaq advising it that Nuvelo s common stock had not met the Nasdaq Global Market s minimum bid price requirement for 30 consecutive trading days and that, if Nuvelo was unable to demonstrate compliance with this requirement during the 180 calendar days ending October 28, 2008, its common stock would be delisted at that time, however, such delisting would be stayed pending any appeal Nuvelo makes to Nasdaq. On October 16, 2008, Nasdaq announced that it had suspended the enforcement of its rules requiring a minimum bid price of $1.00 per share through January 16, 2009. As a result of this suspension, Nuvelo does not expect to receive a staff determination letter with respect to the delisting of Nuvelo common stock unless it has failed to demonstrate compliance with the minimum bid requirement on or before January 30, 2009. In the event that Nuvelo receives a determination letter from the staff at Nasdaq with respect to its non-compliance with the minimum bid requirement, Nuvelo expects to appeal such determination and present a plan for compliance to Nasdaq that includes the consummation of the merger and the implementation of the reverse stock split. The Nuvelo board of directors expects that a reverse stock split of its common stock will increase the market price of its common stock so that Nuvelo is able to achieve the initial listing requirements for the Nasdaq Global Market upon completion of the merger and thereafter maintain compliance with the Nasdaq minimum bid price listing standard for the foreseeable future. Notwithstanding the foregoing, there can be no assurance that the market price per share following the merger and the reverse stock split will remain in excess of the minimum bid price for a sustained period of time. In addition, there can be no assurance that the Nuvelo common stock will not be delisted due to a failure to meet other continued listing requirements even if the market price per post-reverse split share of Nuvelo s common stock remains in excess of the minimum bid requirement.

The Nuvelo board of directors also believes that the increased market price of Nuvelo common stock expected as a result of implementing a reverse stock split will improve the marketability and liquidity of Nuvelo common stock and will encourage interest and trading in Nuvelo common stock. Because of the trading volatility often associated with low-priced stocks, many brokerage houses and institutional investors have internal policies and practices that either prohibit them from investing in low-priced stocks or tend to discourage individual brokers from recommending low-priced stocks to their customers. Some of those policies and practices may function to make the processing of trades in low-priced stocks economically unattractive to brokers. Additionally, because brokers commissions on low-priced stocks generally represent a higher percentage of the stock price than commissions on higher-priced stocks, the current average price per share of Nuvelo common stock can result in individual stockholders paying transaction costs representing a higher percentage of their total share value than would be the case if the share price were substantially higher. It should be noted that the liquidity of Nuvelo common stock may be harmed by the proposed reverse stock split given the reduced number of shares that would be outstanding after the reverse stock split. The Nuvelo board of directors is hopeful, however, that the anticipated higher market price will reduce, to some extent, the negative effects of the policies and practices of institutional investors and brokerage houses described above on the liquidity and marketability of the common stock.

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Effects of the Reverse Stock Split

After the effective date of the proposed reverse stock split, each stockholder will own a reduced number of shares of Nuvelo common stock. However, the proposed reverse stock split will affect all of Nuvelo s stockholders uniformly and will not affect any stockholder s percentage ownership interests in Nuvelo, except to the extent that the reverse stock split results in any of Nuvelo s stockholders owning a fractional share as described below. Proportionate voting rights and other rights and preferences of the holders of Nuvelo common stock will not be affected by the proposed reverse stock split (other than as a result of the payment of cash in lieu of fractional shares). For example, a holder of 2% of the voting power of the outstanding shares of Nuvelo common stock immediately prior to reverse stock split would continue to hold 2% of the voting power of the outstanding shares of Nuvelo common stock immediately after the reverse stock split. The number of stockholders of record will not be affected by the proposed reverse stock split (except to the extent that any stockholder holds only a fractional share interest and receives cash for such interest after the proposed reverse stock split).

The amendment to Nuvelo s amended and restated certificate of incorporation to effect the reverse stock split will not change the number of authorized shares of Nuvelo common stock. As a result, one of the effects of the reverse stock split will be to effectively increase the proportion of authorized shares which are unissued relative to those which are issued. This effective increase will occur even if the proposal to amend Nuvelo s amended and restated certificate to increase the authorized shares of common stock to 250 million is not approved. This could result in the combined company being able to issue more shares without further stockholder approval.

The proposed reverse stock split will reduce the number of shares of common stock available for issuance under Nuvelo s Stock Option Plan, Employee Stock Purchase Plan, Non-Employee Director Stock Option Plan, Non-Qualified Employee Stock Purchase Plan, 2002 Equity Incentive Plan, and 2004 Equity Incentive Plan in proportion to the exchange ratio selected by the Nuvelo board of directors within the limits set forth in this proposal. Nuvelo also has certain outstanding stock options and warrants to purchase shares of Nuvelo common stock. Under the terms of the outstanding stock options and warrants, the proposed reverse stock split will effect a reduction in the number of shares of common stock issuable upon exercise of such stock options and warrants in proportion to the exchange ratio of the reverse stock split and will effect a proportionate increase in the exercise price of such outstanding stock options and warrants. In connection with the proposed reverse stock split, the number of shares of common stock issuable upon exercise or conversion of outstanding stock options will be rounded to the nearest whole share and no cash payment will be made in respect of such rounding.

If a proposed reverse stock split is implemented, it will increase the number of stockholders of Nuvelo who own odd lots of less than 100 shares of Nuvelo common stock. Brokerage commission and other costs of transactions in odd lots are generally higher than the costs of transactions of more than 100 shares of common stock. Accordingly, a reverse stock split may not achieve the desired results of increasing marketability and liquidity of Nuvelo common stock that have been outlined above.

Nuvelo common stock is currently registered under Section 12(b) of the Securities Exchange Act of 1934, as amended, and Nuvelo is subject to the periodic reporting and other requirements of the Securities Exchange Act. The proposed reverse stock split will not affect the registration of the common stock under the Securities Exchange Act. If the proposed reverse stock split is implemented, and Nuvelo s initial listing application with the Nasdaq Global Market is approved, Nuvelo common stock will continue to be reported on the Nasdaq Global Market under the symbol NUVO (although Nasdaq would likely add the letter D to the end of the trading symbol for a period of 20 trading days to indicate that the reverse stock split has occurred). It is expected that following the merger, the combined company will change its name to ARCA biopharma, Inc and that its trading symbol will be changed. ARCA has reserved the ticker symbol ARCB for this purpose.

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Effective Date

The proposed reverse stock split would become effective on the date of filing of the certificate of amendment to Nuvelo s amended and restated certificate of incorporation with the office of the Secretary of State of the State of Delaware. Except as explained below with respect to fractional shares, on the effective date, shares of Nuvelo common stock issued and outstanding immediately prior to the effective date will be combined and converted, automatically and without any action on the part of the stockholders, into new shares of common stock in accordance with the reverse stock split ratio determined by the Nuvelo board of directors within the limits set forth in this proposal.

Payment for Fractional Shares

No fractional shares of common stock will be issued as a result of the proposed reverse stock split. Instead, Nuvelo stockholders who otherwise would be entitled to receive fractional shares, upon surrender to the exchange agent (as defined below) of such certificates representing such fractional shares, will be entitled to receive cash in an amount equal to the product obtained by multiplying (i) the closing sales price of Nuvelo common stock on the effective date of the reverse stock split as reported on the Nasdaq Global Market by (ii) the number of shares of Nuvelo common stock held by such Nuvelo stockholder that would otherwise have been exchanged for such fractional share interest.

Exchange of Stock Certificates

As soon as practicable after the effective date of the reverse stock split, stockholders will be notified that the reverse stock split has been effected. Nuvelo s transfer agent will act as exchange agent for purposes of implementing the exchange of stock certificates. Holders of pre-reverse stock split shares will be asked to surrender to the exchange agent certificates representing pre-reverse stock split shares in exchange for certificates representing post-reverse stock split shares in accordance with the procedures to be set forth in a letter of transmittal to be sent by Nuvelo. No new certificates will be issued to a Nuvelo stockholder until such Nuvelo stockholder has surrendered such stockholder s outstanding certificate(s) together with the properly completed and executed letter of transmittal to the exchange agent. **Nuvelo Stockholders should not destroy any stock certificate and should not submit any certificates until requested to do so.**

Accounting Consequences

The par value per share of Nuvelo common stock would remain unchanged at $0.001 per share after the reverse stock split. As a result, on the effective date of the reverse stock split, the stated capital on Nuvelo balance sheet attributable to the Nuvelo common stock will be reduced proportionally, based on the exchange ratio of the reverse stock split, from its present amount, and the additional paid-in capital account shall be credited with the amount by which the stated capital is reduced. The per share common stock net income or loss and net book value will be increased because there will be fewer shares of Nuvelo common stock outstanding. Nuvelo does not anticipate that any other accounting consequences would arise as a result of the reverse stock split.

Material U.S. Federal Income Tax Consequences of the Reverse Stock Split

The following is a summary of important tax considerations of the proposed reverse stock split. This summary is based upon current provisions of the Code, existing Treasury Regulations, and current administrative rulings and court decisions, all of which are subject to change and to differing interpretations, possibly with retroactive effect. Any change could alter the tax consequences to Nuvelo or Nuvelo stockholders, as described in this summary. This summary is not binding on the IRS, and there can be no assurance that the IRS (or a court, in the event of an IRS challenge) will agree with the conclusions stated herein. No ruling has been or will be requested from the IRS in connection with the reverse stock split. The discussion below does not address the

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following: the tax consequences of the reverse stock split under U.S. federal non-income tax laws or under state, local, or foreign tax laws; the tax consequences of transactions effectuated before, after, or at the same time as the reverse stock split, whether or not they are in connection with the reverse stock split, including, without limitation, transactions in which Nuvelo shares are acquired or disposed of and in particular the acquisition of common stock of Nuvelo in exchange for Capital Stock of ARCA in the reverse stock split; the tax consequences to holders of options issued by Nuvelo that are exercised, adjusted or converted, as the case may be, in connection with the reverse stock split; or the tax consequences of the receipt of Nuvelo shares other than in exchange for Nuvelo shares in the reverse stock split.

No attempt has been made to comment on all U.S. federal income tax consequences of the reverse stock split that may be relevant to particular holders of Nuvelo stock that are subject to special treatment under U.S. federal income tax laws, including, without limitation:

dealers, brokers and traders in securities;

foreign persons or entities;

tax-exempt entities;

financial institutions, regulated investment companies, real estate investment trusts or insurance companies;

partnerships or limited liability companies that are not treated as corporations for U.S. federal income tax purposes, subchapter S corporations and other pass-through entities and investors in such entities;

holders who are subject to the alternative minimum tax provisions of the Code;

holders who acquired their shares in connection with stock option or stock purchase plans or in other compensatory transactions;

holders who hold shares that constitute small business stock within the meaning of Section 1202 of the Code;

holders with a functional currency other than the U.S. dollar;

holders who hold their shares as part of an integrated investment such as a hedge or as part of a hedging, straddle or other risk reduction strategy;

holders who do not hold their shares as capital assets within the meaning of Section 1221 of the Code (generally, property held for investment will be a capital asset),

holders who will receive shares of Nuvelo common stock in exchange for ARCA capital stock in the merger.

Accordingly, holders of Nuvelo stock are advised and expected to consult their own tax advisors regarding the U.S. federal income tax consequences of the reverse stock split in light of their personal circumstances and the consequences of the reverse stock split under U.S. federal non-income tax laws and state, local, and foreign tax laws.

The reverse stock split is expected to qualify for one or more non-recognition provisions of the Code. Assuming the reverse stock split so qualifies, the following consequences will result:

No gain or loss will be recognized by Nuvelo as a result of the reverse stock split,

a Nuvelo stockholder who receives only Nuvelo stock in the reverse stock split generally will not recognize any gain or loss on the reverse stock split, and the aggregate tax basis of the post-reverse split shares received will be equal to the aggregate tax basis of the pre-reverse split shares exchanged therefor,

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a Nuvelo stockholder who receives both Nuvelo stock and cash in lieu of fractional in lieu of fractional shares of Nuvelo stock in the reverse stock split generally will recognize any gain inherent in the Nuvelo stock surrendered up to the amount of cash received, but will not recognize any loss. The aggregate tax basis of the post-reverse split shares received will be equal to the aggregate tax basis of the pre-reverse split shares exchanged therefor, increased by the amount of any gain recognized as a result of the reverse stock split.

the holding period of Nuvelo stock received in the reverse split shares received will include the holding period of the pre-reverse split shares exchanged,

a Nuvelo stockholder who receives only cash in exchange for Nuvelo stock in the reverse stock split generally will recognize gain or loss equal to the difference between such stockholder s tax basis in the shares of Nuvelo stock exchanged and the amount of cash received in exchange for those shares, and

any gain or loss recognized by a Nuvelo stockholder as a result of the reverse stock split will be a capital gain or loss and will be long term capital gain or loss if the stockholder s holding period for the shares of Nuvelo stock exchanged is more than one year.

Nuvelo stockholders that own at least one percent (by vote or value) of the total outstanding stock of Nuvelo prior to the reverse stock split or Nuvelo stock with a tax basis of $1 million or more may be required to attach a statement to their tax returns for the year in which the reverse stock split is completed that contains the information listed in Treasury Regulations Section 1.368-3(b). Such statement must include the stockholder s tax basis in the stockholder s Nuvelo stock and the fair market value of such stock.

For purposes of the above discussion of the bases and holding periods for shares of Nuvelo stock, and except as provide therein, stockholders who acquired different blocks of Nuvelo stock at different times for different prices must calculate their basis, gains and losses, and holding periods separately for each identifiable block of such stock exchanged, converted, canceled or received in the reverse stock split.

Certain noncorporate Nuvelo stockholders may be subject to backup withholding, at a rate of 28%, on cash received pursuant to the reverse stock split. Backup withholding will not apply, however, to a Nuvelo stockholder who (1) furnishes a correct taxpayer identification number and certifies that the Nuvelo stockholder is not subject to backup withholding on IRS Form W-9 or a substantially similar form, (2) provides a certification of foreign status on an appropriate Form W-8 or successor form, or (3) is otherwise exempt from backup withholding. If a Nuvelo stockholder does not provide a correct taxpayer identification number on IRS Form W-9 or a substantially similar form, the Nuvelo stockholder may be subject to penalties imposed by the IRS. Amounts withheld, if any, are generally not an additional tax and may be refunded or credited against the Nuvelo stockholder s U.S. federal income tax liability, provided that the Nuvelo stockholder timely furnishes the required information to the IRS.

No Appraisal Rights

Under the DCGL, Nuvelo stockholders are not entitled to dissenter s appraisal rights with respect to the proposed amendment to the Nuvelo amended and restated certificate of incorporation to effect the reverse stock split and Nuvelo will not independently provide Nuvelo stockholders with any such right.

Vote Required; Recommendation of Board of Directors

The affirmative vote of the holders of a majority of the Nuvelo common stock issued and outstanding is required to approve the proposal to amend its amended and restated certificate of incorporation to effect the reverse stock split.

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A failure to submit a proxy card or vote at the special meeting, or an abstention, vote withheld or broker non-vote will have the same effect as a vote against Proposal No. 2.

NUVELO S BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT NUVELO STOCKHOLDERS VOTE FOR PROPOSAL NO. 2 TO APPROVE THE PROPOSAL TO AMEND ITS AMENDED AND RESTATED CERTIFICATE OF INCORPORATION TO EFFECT A REVERSE STOCK SPLIT OF THE ISSUED AND OUTSTANDING SHARES OF ITS COMMON STOCK.

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NUVELO PROPOSAL NO. 3

AMENDMENT TO AMENDED AND RESTATED CERTIFICATE OF INCORPORATION

TO INCREASE THE AUTHORIZED SHARES OF NUVELO COMMON STOCK

Overview

The Nuvelo board of directors has unanimously approved a proposal to amend its amended and restated certificate of incorporation to increase the authorized shares of common stock of Nuvelo to 250 million shares. The board has recommended that this proposal be presented to its stockholders for approval. The text of the form of proposed amendment to Nuvelo s amended and restated certificate of incorporation to increase the authorized shares of common stock of Nuvelo to 250 million shares is attached to this proxy statement/prospectus/consent solicitation as *Annex G*.

Upon filing the certificate of amendment to Nuvelo s amended and restated certificate of incorporation to increase the number of authorized shares of common stock from 100 million to 250 million, the fourth paragraph of Article IV of Nuvelo s amended and restated certificate of incorporation will be as follows:

The total number of shares of all classes of stock this Corporation shall have authority to issue following the Effective Time is 255,000,000 consisting of 250,000,000 shares of Common Stock, par value $0.001 per share, and 5,000,000 shares of Preferred Stock, par value $0.001 per share. The Preferred Stock may be issued from time to time, in one or more series, each series to be appropriately designated by a distinguishing letter or title, prior to the issue of any shares thereof.

Reasons for the Increase in Authorized Shares

Although at present, apart from the shares to be issued pursuant to the merger, Nuvelo s board of directors has no other plans to issue the additional shares of common stock, it desires to have the shares available to provide additional flexibility to use its capital stock for business and financial purposes in the future. The additional shares may be used for various purposes without further stockholder approval. These purposes may include, among others:

raising capital;

providing equity incentives to employees, officers or directors;

establishing strategic relationships with other companies; and

expanding Nuvelo s business or product lines through the acquisition of other businesses or products.

The terms of additional shares of common stock will be identical to those of the currently outstanding shares of Nuvelo common stock. However, because holders of Nuvelo common stock have no preemptive rights to purchase or subscribe for any unissued stock of Nuvelo, the issuance of any additional shares of common stock authorized as a result of the increase in the number of authorized shares of common stock will reduce the current stockholders percentage of ownership interest in the total outstanding shares of common stock.

Effects of the Increase in Authorized Shares

The proposed increase in the authorized number of shares of common stock could have a number of effects on the stockholders of Nuvelo depending upon the exact nature and circumstances of any actual issuances of authorized but unissued shares. The increase could have an anti-takeover effect, in that additional shares could be issued (within the limits imposed by applicable law) in one or more transactions that could make a change in control or takeover of Nuvelo difficult. For example, additional shares could be issued by Nuvelo so as to dilute the stock ownership or voting rights of person seeking to obtain control of Nuvelo. Similarly, the issuance of additional shares to certain persons allied

with Nuvelo s management could have the effect of making it more difficult to remove Nuvelo s management by diluting the stock ownership or voting rights of persons seeking to cause such removal.

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At any time prior to the effectiveness of the filing of this proposed amendment to Nuvelo s restated certificate of incorporation to increase the number of authorized shares of common stock from 100,000,000 to 250,000,000, notwithstanding stockholder approval of this proposed amendment, Nuvelo s board of directors may abandon this proposed amendment without any further action by Nuvelo s stockholders.

Vote Required; Recommendation of Board of Directors

The affirmative vote of the holders of a majority of the Nuvelo common stock issued and outstanding is required to approve the proposal to amend its amended and restated certificate of incorporation increase the authorized shares of common stock of Nuvelo to 250 million shares.

A failure to submit a proxy card or vote at the special meeting, or an abstention, vote withheld or broker non-vote will have the same effect as a vote against Proposal No. 3.

NUVELO S BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT NUVELO STOCKHOLDERS VOTE FOR PROPOSAL NO. 3 TO APPROVE THE PROPOSAL TO AMEND ITS AMENDED AND RESTATED CERTIFICATE OF INCORPORATION TO INCREASE THE AUTHORIZED SHARES OF NUVELO COMMON STOCK TO 250 MILLION.

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NUVELO PROPOSAL NO. 4

APPROVAL OF POSSIBLE ADJOURNMENT

OF THE SPECIAL MEETING

Overview

If Nuvelo fails to receive a sufficient number of votes to approve Proposals 1 or 2, Nuvelo may propose to adjourn the special meeting, if a quorum is present, for a period of not more than 30 days for the purpose of soliciting additional proxies to approve Proposals 1 or 2. Nuvelo currently does not intend to propose adjournment at the special meeting if there are sufficient votes to approve Proposals 1 and 2.

Vote Required; Recommendation of Board of Directors

The affirmative vote of the holders of a majority of the Nuvelo common stock having voting power present in person or represented by proxy at the special meeting is required to approve the adjournment of the special meeting for the purpose of soliciting additional proxies to approve Proposals 1 or 2.

A failure to submit a proxy card or vote at the special meeting, or an abstention, vote withheld or broker non-vote will have no effect on the outcome of Proposal 4.

NUVELO S BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT NUVELO STOCKHOLDERS VOTE FOR PROPOSAL 4 TO ADJOURN THE SPECIAL MEETING, IF NECESSARY, IF A QUORUM IS PRESENT, TO SOLICIT ADDITIONAL PROXIES IF THERE ARE NOT SUFFICIENT VOTES IN FAVOR OF PROPOSALS 1 OR 2.

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WRITTEN CONSENT OF ARCA STOCKHOLDERS

ARCA is sending this proxy statement/prospectus/consent solicitation to you in connection with the solicitation of written consents in lieu of a meeting of ARCA stockholder by the ARCA board of directors. This proxy statement/prospectus/consent solicitation is first being furnished to ARCA s stockholders on or about , 2008.

ARCA PROPOSAL APPROVAL OF THE MERGER, MERGER AGREEMENT AND THE TRANSACTIONS CONTEMPLATED THEREBY

The purposes of this solicitation of written consent in lieu of a meeting of ARCA stockholders is to adopt the Agreement and Plan of Merger and Reorganization, dated September 24, 2008, by and among Nuvelo, Inc., Dawn Acquisition Sub, Inc., and ARCA biopharma, Inc., as amended by that Amendment No. 1 to Agreement and Plan of Merger and Reorganization, dated October 28, 2008, by and among Nuvelo, Inc., Dawn Acquisition Sub, Inc., and ARCA biopharma, Inc., and to approve the merger and the transactions contemplated thereby. A copy of the Agreement and Plan of Merger and Reorganization is attached as *Annex A* to the accompanying proxy statement/prospectus/consent solicitation and a copy of Amendment No.1 to Agreement and Plan of Merger and Reorganization is attached as *Annex B* to the accompanying proxy statement/prospectus/consent solicitation. In addition, by consenting to the adoption of the merger agreement, and approving the merger and transactions contemplated thereby, each ARCA stockholder acknowledges that:

(i) such stockholder s consent to the adoption of the merger agreement and approval of the merger is irrevocable;

(ii) such stockholder is aware of its rights to demand appraisal for its shares pursuant to Section 262 of the DGCL, and that such stockholder has received and read a copy of Section 262 of the DGCL; and

(iii) such stockholder is not entitled to appraisal rights with respect to its shares in connection with the merger and that the stockholder hereby waives any rights to receive payment of the fair value of ARCA capital stock under the DGCL.

Recommendation of ARCA s Board of Directors

ARCA S BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT ARCA STOCKHOLDERS VOTE TO ADOPT THE AGREEMENT AND PLAN OF MERGER AND REORGANIZATION, DATED SEPTEMBER 24, 2008, BY AND AMONG NUVELO, INC., DAWN ACQUISITION SUB, INC., AND ARCA BIOPHARMA, INC. AS AMENDED BY THAT AMENDMENT NO. 1 TO AGREEMENT AND PLAN OF MERGER AND REORGANIZATION, DATED OCTOBER 28, 2008, BY AND AMONG NUVELO, INC., DAWN ACQUISITION SUB, INC., AND ARCA BIOPHARMA, INC., AND APPROVE THE MERGER AND THE TRANSACTIONS CONTEMPLATED THEREBY.

Record Date and Voting Power

Only holders of record of ARCA s common stock and preferred stock as of the close of business on the record date, , are entitled to vote by written consent. At of the close of business on the record date, there were 5,713,818 shares of ARCA common stock and 15,677,836 shares of ARCA preferred stock issued and outstanding, consisting of 9,222,257 shares of Series A preferred stock, 3,688,902 shares of Series B-1 preferred stock and 2,766,677 shares of Series B-2 preferred stock, outstanding and entitled to vote via written consent. Each share of ARCA common stock entitles its holder to one vote by written consent on ARCA s proposals. Each share of ARCA preferred stock entitles its holder to one vote for each share of common stock into which such share converts, which, assuming the lowest conversion rate under the outstanding convertible promissory notes, is on a one-for-one basis for Series A preferred stock, 1.219875 to 1 basis for Series B preferred stock and

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1.6265 to 1 basis for Series B-2 preferred stock. See ARCA Security Ownership by Certain Beneficial Owners and Management for information regarding ownership by ARCA management persons and other persons known to the management of ARCA to be the beneficial owners of more than 5% of the outstanding shares of ARCA s capital stock.

Irrevocability of Written Consents

The written consents that are being solicited by this prospectus/proxy statement/consent solicitation are irrevocable.

Execution and Delivery of Written Consents

Complete, date and sign the enclosed written consent and mail it in the enclosed postage-paid envelope to no later than . All properly executed written consents will be treated as votes to approve the merger, the merger agreement and the transactions contemplated by the merger agreement. Any holders of ARCA common stock and ARCA preferred stock who do not execute and return written consents as instructed will be deemed to have voted their shares against these proposals.

Required Consent

This proposal requires the affirmative vote of holders of (a) a majority of the shares of ARCA common stock and ARCA preferred stock, voting together as a single class, with holders of ARCA preferred stock voting on an as-converted basis and (b) a majority of the following ARCA stockholders, who we refer to as the Principal Series Preferred Stockholders : Atlas Venture Fund VII, L.P. and its affiliates, Boulder Ventures IV, L.P. and Boulder Ventures IV (Annex), L.P. and their respective affiliates, Skyline Venture Partners Qualified Purchaser Fund IV, L.P. and its affiliates, and InterWest Partners IX, L.P. and its affiliates.

Pursuant to certain voting agreements with ARCA, the holders of approximately 84.97% of ARCA s outstanding capital stock, including approximately 92.11% of ARCA s outstanding preferred stock, on an as converted basis, and all of the Principal Series Preferred Stockholders, have agreed to consent to the proposal.

Appraisal Rights

Under the DGCL, holders of ARCA s capital stock who do not execute a written consent to the adoption and approval of the merger, the merger agreement and the transactions contemplated by the merger agreement will have the right to seek appraisal of the fair value of their shares as determined by the Delaware Court of Chancery if the merger is completed, but only if they submit a written demand for an appraisal within 20 days after the mailing of notice by ARCA that the merger was approved by written consent of the ARCA stockholders and they comply with the other procedures under the DGCL explained in the accompanying proxy statement/prospectus/consent solicitation. See The Merger Appraisal Rights.

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INFORMATION ABOUT NUVELO S BUSINESS

Overview

Nuvelo, Inc. is a biopharmaceutical company dedicated to improving the lives of patients through the discovery, development and commercialization of novel drugs for acute cardiovascular disease, cancer and other debilitating medical conditions. Nuvelo s development pipeline includes NU172, a direct thrombin inhibitor that has completed Phase 1 development for use as a short-acting anticoagulant during medical or surgical procedures, and Phase 1 clinical candidate NU206, a recombinant, secreted protein for the potential treatment of gastrointestinal, or GI, diseases, including cancer therapy induced mucositis and inflammatory bowel disease, in addition to bone disease and wound healing. In addition, Nuvelo has research programs in leukemia therapeutic antibodies and Wnt signaling pathway therapeutics.

NU172

NU172 is a short-acting aptamer, a single-stranded nucleic acid that forms a well-defined three-dimensional shape conceptually similar to an antibody. NU172 was designed to directly inhibit thrombin s ability to stimulate blood clot formation in the setting of medical or surgical procedures where human blood is exposed to foreign materials. Specifically, NU172 is being studied as a potential short-acting anticoagulant for use during procedures such as coronary artery bypass graft, or CABG, surgery, kidney dialysis and a variety of vascular surgical and coronary interventions. Approximately 450,000 CABG procedures and 50 million dialysis procedures are performed annually in the U.S. In these procedures, heparin is often paired with its antidote protamine as the anticoagulation effect of heparin needs to be reversed once the procedure has been completed. Data from the Phase 1 trial and preclinical studies suggest that NU172 has the potential to produce rapid and predictable onset and offset of anticoagulation, work in stagnant blood, avoid thrombocytopenia, and has the potential for non-renal clearance. Due to its short half-life, the effect of NU172 can be rapidly reversed without the need for an antidote.

In August 2008, Nuvelo completed the Phase 1b proof-of-concept trial, demonstrating that NU172 rapidly produced and maintained anticoagulation with a rapid return toward baseline after the infusion ended. The single-center, Phase 1b trial examined the safety, tolerability and pharmacokinetics of intravenous bolus plus infusion dosing of NU172 in 24 healthy male volunteers. Volunteers were given a 2 mg/kg bolus dose followed by escalating infusion doses of NU172 for four hours. In all four cohorts, NU172 produced dose-dependent increases in anticoagulation, measured by activated clotting time, or ACT, prothrombin time, or PT, and activated partial thromboplastin time, or aPTT. The highest infusion dose rate tested, 6.0 mg/kg/hr, resulted in an average ACT per subject ranging from 373 to 414 seconds and an increase of approximately three times baseline. Average PT values per subject ranged from 56 to 92 seconds and had an increase of approximately five times baseline. Average aPTT values per subject ranged from 130 to 178 seconds and had an increase of approximately five times baseline. All measurements were maintained stably throughout the four-hour infusion. Once the infusion ended, the ACT and other coagulation parameters showed a rapid return toward baseline, consistent with the short plasma half-life of NU172 observed in the Phase 1a trial. In addition, NU172 was well-tolerated with no serious adverse events.

Nuvelo anticipates initiating a Phase 2 study evaluating NU172 in CABG patients in the fourth quarter of 2008 or first quarter of 2009.

Nuvelo is developing NU172 through a collaboration with Archemix Corporation, under which Nuvelo is responsible for development and worldwide commercialization of NU172 and other potential product candidates that may be developed under this collaboration. In February 2008, Nuvelo paid Archemix a $1.0 million milestone fee in connection with the dosing of the first patient in the Phase 1 trial for NU172. If Nuvelo enrolls the first patient in a Phase 2 trial of NU172, which Nuvelo expects may occur before the second quarter of 2009, Nuvelo will be obligated to pay Archemix a $3.0 million milestone fee.

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NU206

NU206 (R-spondin1) is a recombinant, secreted protein that acts as a key regulator of the Wnt pathway, a critical pathway that stimulates cell growth and differentiation during homeostasis and pathogenesis in specific tissues including the GI epithelium and bone. NU206 works by antagonizing an inhibitor of the Wnt pathway, DKK1, thereby turning on the pathway. Preclinical studies suggest it can promote growth and repair in animal models of radiation or cancer chemotherapy induced GI injury, inflammatory bowel disease, bone disease and wound healing. In animal models of GI disease, the effect of NU206 was transient and reversible in normal tissue. Once administration of NU206 is stopped, the epithelium of the intestine reverts to its normal state and does not continue to proliferate.

Nuvelo initiated a Phase 1 single ascending dose trial in healthy volunteers in July 2008 and expect data from the trial in the fourth quarter of 2008. Nuvelo also plans to initiate a Phase 1b multiple ascending dose trial in healthy volunteers in the fourth quarter of 2008 or first quarter of 2009. Nuvelo is currently evaluating partnership and out-licensing opportunities for NU206.

In March 2005, Nuvelo entered into a collaboration agreement with the Kirin Pharma Company, Limited for the development and commercialization of NU206. Under this agreement, all operating expenses and any profits related to the development and commercialization of NU206 are being shared 60 percent by Nuvelo and 40 percent by Kirin.

Research Programs

In addition to Nuvelo s clinical and development-stage drug candidates, Nuvelo has research programs in leukemia therapeutic antibodies and Wnt signaling pathway therapeutics. Nuvelo is currently evaluating partnership and out-licensing opportunities for its research programs.

Leukemia Therapeutic Antibody Program

Nuvelo is developing monoclonal antibody, or mAbs, candidates discovered by Nuvelo s leukemia therapeutic antibody program. Nuvelo is completing preclinical studies with a series of chimeric mAbs to select drug candidates for the potential treatment of chronic lymphocytic leukemia, or CLL, and acute mylogenous leukemia, or AML.

Through its genomic discovery effort, Nuvelo had identified three new mAb targets for leukemia. Nuvelo has generated a series of high affinity and selective mAbs against cell surface receptors restricted to lymphoid and myeloid cells. These mAbs are potent in cytotoxic assays and murine (mouse) cancer models. Nuvelo s lead mAb was developed against the extra cellular domain of the CD2-related cell surface receptor, NTB-A. NTB-A is a novel cell surface receptor that is primarily expressed on lymphoid cells, including B lymphocytes from CLL and lymphoma patients. Nuvelo has generated a NTB-A mouse-human chimeric antibody, or IgG1, and conducted extensive ex vivo and preclinical studies. NTB-A mAb is a potent cytotoxic agent against B lymphocytes from CLL patients. NTB-A mAb also acts as a potent anti-cancer agent in mouse xenograft models. In addition to NTB-A mAb, Nuvelo identified two mAb targets that Nuvelo is currently studying for the treatment of AML. Nuvelo has developed mAbs (NU2444 and NU10458) against both targets, conducted ex vivo cytotoxic assays on blast cells from AML patients and generated a chimeric mAb, which are currently being assessed in murine tumor models.

Wnt Therapeutics Program

Nuvelo has identified several drug candidates as part of Nuvelo s Wnt therapeutic program. Nuvelo s lead candidate in this program is NU206, a Wnt regulator also known as R-Spondin1, or RSpo1. NU206 is the focus of Nuvelo s collaboration with Kirin. Nuvelo s Wnt therapeutics program targets a broad range of indications

where cell regeneration and differentiation are important to disease processes, such as gastrointestinal disease, bone disorders, wound healing and cancer.

The Wnt signaling pathway is critical for regulating cell growth and differentiation during homeostasis and pathogenesis. Nuvelo has developed a comprehensive approach to target key receptors and secreted proteins that modulate the Wnt pathway. In addition, Nuvelo has produced mAbs and secreted recombinant proteins with biological activity in cellular assays and animal disease models. Potential indications include: Inflammatory Bowel Disease, or IBD, peptic ulcers, mucositis, wound healing, and cancer, as well as bone disorders and osteolytic lesions caused by osteoarthritis and multiple myeloma.

The R-Spondin, or RSpo, family of secreted proteins can be used to enhance endogenous Wnt signaling in vivo and, therefore, can provide therapeutic potential in diseases that are dependent on the Wnt pathway for restoration of homeostasis or tissue repair. RSpo proteins are highly potent therapeutic agents in murine colitis and mucositis models and are currently being assessed in additional indications including wound healing, osteolytic lesions and cancer.

RSpo proteins are novel regulators of the Wnt pathway and were first identified by Nuvelo as potent gastrointestinal mitogens in transgenic mice. Nuvelo has recently demonstrated that RSpo proteins regulate the Wnt pathway by antagonizing the Wnt inhibitor DKK1 and subsequently control the cell surface levels of LRP5/6. Numerous studies have implicated DKK1 as a key negative regulator in bone remodeling in diseases such as osteoarthritis and multiple myeloma. Therefore, RSpo proteins have the potential to be exciting therapeutic options to improve bone restoration.

In addition to RSpo proteins, Nuvelo is currently developing mAbs against DKK1 and key receptors in Wnt signaling including LRP6, LRP5 and Frizzled receptors. Nuvelo has identified a series of mAbs against LRP6 that block DKK1 inhibition in cellular assays.

Nuvelo s Strategy

Nuvelo is focused on building a sustainable, fully-integrated business based on the discovery, development and commercialization of therapies that can be sold by a specialty sales force.

Leverage Nuvelo s expertise in cardiovascular disease and other debilitating medical conditions to advance Nuvelo s clinical development programs

Nuvelo is primarily focused on the development of acute, hospital-based, cardiovascular drug candidates. We believe this portfolio leverages Nuvelo s expertise in cardiovascular drug development, enabling us to pursue a more rapid path toward drug commercialization.

Build a diversified pipeline of product candidates

Nuvelo is pursuing several drug development candidates in various stages of clinical and preclinical development. In addition, Nuvelo seeks to identify drug development candidates that have the potential to receive regulatory approval to treat a number of different indications, thereby further diversifying Nuvelo s risk by providing each drug candidate with a number of potential commercialization paths. Nuvelo believes this strategy reduces its exposure to the impact of any single product failure, maximizes its potential returns from successful compounds, and increases its flexibility to eliminate programs Nuvelo deems less promising. By broadening its portfolio across indications and products, Nuvelo intends to increase the probability of clinical and commercial success. In addition, Nuvelo focuses on molecules that it believes have a greater chance of success due to the predictability of preclinical models used in their development.

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Opportunistically seek to license or acquire complementary products

Nuvelo intends to supplement its internal drug discovery efforts through the acquisition of products that complement its development strategy. Nuvelo continues to identify, evaluate and pursue the acquisition or licensing of strategically valuable product opportunities.

Commercialize Nuvelo s products in the United States

Rather than license other companies to commercialize its products in the United States, Nuvelo intends to sell them itself through its own specialty sales force. Nuvelo believes that the resources required to develop a sales and marketing organization to sell products to hospitals or targeted physician groups is manageable for a company of Nuvelo s size and will allow it to capture more value from its clinical development successes.

Corporate Information

Nuvelo was incorporated as Hyseq, Inc. in Illinois in 1992 and reincorporated in Nevada in 1993. On January 31, 2003, Nuvelo merged with Variagenics, Inc., a publicly traded Delaware corporation based in Massachusetts, and, in connection with the merger, changed its name to Nuvelo, Inc. On March 25, 2004, Nuvelo reincorporated from Nevada to Delaware. Nuvelo s principal executive offices are located at 201 Industrial Road, Suite 310, San Carlos, California 94070.

Nuvelo files its annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 electronically with the Securities and Exchange Commission. The public may read or copy any materials Nuvelo files with the SEC at the SEC s Public Reference Rooms at 100 F Street, N.E., Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC. The address of that site is http://www.sec.gov.

You may obtain a free copy of Nuvelo s annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports on the day of filing with the SEC on Nuvelo s website, on the Internet at http://www.nuvelo.com or by contacting the Investor Relations Department at Nuvelo s corporate office by calling (650) 517-8000 or sending an e-mail message to ir@nuvelo.com. Information found on Nuvelo s website is not incorporated by reference into this report.

Research and Development Collaborations

Expenditures for research and development were $42.7 million, $89.4 million and $57.8 million in 2007, 2006 and 2005, respectively. Nuvelo s significant research and development collaborations are as follows:

Archemix

In July 2006, Nuvelo expanded its collaboration with Archemix Corporation, a privately held biotechnology company located in Cambridge, Massachusetts, by entering into a new agreement with them, which replaces the former 50/50 collaboration signed in January 2004. Under the new agreement, Archemix is responsible for the discovery of short-acting aptamers targeting the coagulation cascade for use in acute cardiovascular procedures, and Nuvelo is responsible for development and worldwide commercialization of these product candidates. In August 2006, Nuvelo made an upfront license fee payment to Archemix of $4.0 million. Nuvelo is also funding at least $5.25 million of Archemix s research in the area of short-acting aptamer discovery over the first three years of the agreement. Archemix may receive payments totaling up to $35.0 million per development compound on the achievement of specified development and regulatory milestones, along with potential royalty payments based on sales of licensed compounds. In February 2008, Nuvelo paid Archemix a $1.0 million milestone fee that

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was accrued upon dosing of the first patient in the Phase 1 trial for NU172. If Nuvelo enrolls the first patient in a Phase 2 trial of NU172, which Nuvelo anticipates may occur before the second quarter of 2009, Nuvelo is obligated to pay Archemix a $3 million milestone fee. In addition, Nuvelo is obligated to purchase Archemix common stock having a value equal to the lesser of $10.0 million or 15 percent of the shares issued by Archemix in a qualified public offering of Archemix stock occurring within five years of the effective date of the 2006 collaboration agreement. At the initiation of the first Phase 3 study for any licensed compound, Archemix has the option to elect to participate in profits from sales of the compound by funding its pro rata share of prior and future product development and commercialization expenses, in lieu of receiving milestone payments and royalties with respect to that compound.

Kirin Pharma Company, Limited

In March 2005, Nuvelo entered into a collaboration agreement with Kirin for the development and commercialization of NU206. In accordance with the terms of this agreement, Nuvelo received a $2.0 million upfront cash payment from Kirin in April 2005, and Nuvelo agreed to lead worldwide development, manufacturing and commercialization of the compound. All operating expenses and any profits related to the development and commercialization of NU206 are being shared 60 percent by Nuvelo and 40 percent by Kirin. If this agreement is terminated, or Kirin or Nuvelo elect under certain circumstances to no longer actively participate in the collaboration, the relationship with respect to NU206 will convert from an expense and profit-sharing structure to a royalty-based structure.

Dendreon

Nuvelo obtained exclusive worldwide rights to all indications of rNAPc2 and all other rNAPc molecules owned by Dendreon Corporation as a result of a licensing agreement entered into with them in February 2004. Under the terms of the agreement, Nuvelo paid Dendreon an upfront fee of $4.0 million ($0.5 million in cash and $3.5 million in Nuvelo common stock), in 2004. Future milestone payments to Dendreon could reach as much as $23.5 million if all development and commercialization milestones are achieved, although Nuvelo currently cannot predict if or when any of these milestones will be achieved. If rNAPc2 is commercialized, Nuvelo will also be responsible for paying royalties to Dendreon depending on sales of rNAPc2.

In 2007, Nuvelo suspended Nuvelo s clinical development of rNAPc2, which could impact Nuvelo s current relationship and license with Dendreon.

Amgen

In October 2004, Nuvelo obtained worldwide rights to develop and commercialize alfimeprase from Amgen Inc., in exchange for the future payment to Amgen of future development milestones and royalties. Future milestone payments under the license agreement could total as much as $35.0 million. Nuvelo has discontinued development of alfimeprase and cannot predict if or when any of these additional milestones will be achieved.

Bayer

In June 2007, Nuvelo agreed to terminate its January 2006 collaboration with Bayer Healthcare AG (Bayer) for the development and commercialization of alfimeprase. As part of the termination agreement with Bayer, Nuvelo agreed to waive Bayer s obligation to provide Nuvelo 12 months notice of termination in consideration of Bayer s agreement to pay Nuvelo a lump sum of $15.0 million. Nuvelo also granted Bayer the option to reacquire rights to alfimeprase upon the initiation of a pivotal stroke trial or upon Nuvelo s public announcement that Nuvelo is discontinuing further development of alfimeprase in the stroke indications. The notice period during which Bayer could exercise the option would begin upon Nuvelo making certain information available to Bayer and last for 30 days after delivery of the information.

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As a result of the termination of the collaboration agreement with Bayer, Nuvelo recognized in June 2007 the remaining unamortized balance of the $50.0 million up-front license fee received from Bayer in January 2006, which totaled approximately $44.9 million. The up-front license fee had been recorded as deferred revenue upon receipt and was being recognized on a straight-line basis over the performance period under the agreement, originally estimated to be through September 2020.

On March 17, 2008, Nuvelo announced its decision to discontinue further clinical development of alfimeprase, including the programs in catheter occlusion and acute ischemic stroke. In April 2008, Nuvelo provided the information to Bayer as required by the termination agreement. The $15.0 million termination payment, which had been recorded as deferred revenue, was recognized as revenue in May 2008 upon the expiration of the notice period.

Manufacturing

Nuvelo does not currently have any long-term supply agreements in place for the manufacture of NU172 or NU206.

Patents and Trade Secrets

Nuvelo owns or has rights in a number of patents and patent applications relating to each of Nuvelo s clinical candidate molecules, and we also own or have acquired rights in many of Nuvelo s preclinical molecules and technologies. The table below shows the estimated year that the primary patent for each of Nuvelo s clinical candidate molecules expires:

Clinical Molecule	Territory	Anticipated Expiration
NU172	U.S.	2026
NU172	Europe	2026
NU206 (Composition of Matter)	U.S.	2022
NU206 (Composition of Matter)	Europe	2022
NU206 (Method of Use)	U.S.	2025
NU206 (Method of Use)	Europe	2025

In some cases, certain of the U.S. patents may be entitled to an extension of their term and certain European patents may be entitled to supplemental protection in one or more countries in Europe. The length of any such extension, if an extension is granted, will vary by country. Nuvelo cannot predict whether any such extensions will be granted.

Nuvelo cannot ensure that any of the patents that Nuvelo owns or has rights in will provide sufficient legal protection for the molecules or processes that such patents cover, or will provide any competitive advantage. Any of Nuvelo s granted patents could be challenged, held unenforceable or invalid in legal proceedings, or could be infringed or circumvented by others. Further, it is possible that others could obtain patent protection for molecules, processes and the like that are competitive with Nuvelo s potential products. In addition, other patent holders could assert their patents against Nuvelo, claiming that such patents prevent Nuvelo from marketing Nuvelo s products. Upon expiration of each of the relevant patents, other entities could enter the market with competitive products and/or processes in each country where a patent has expired.

Nuvelo places a high value on its trade secrets. To protect these trade secrets, Nuvelo typically requires employees to enter into a confidentiality agreement upon commencing employment. In addition, Nuvelo generally requires its consultants, licensing and collaboration partners, and scientific advisors to enter into confidentiality agreements. There can be no assurance, however, that these confidentiality agreements will be honored or that Nuvelo can effectively protect its rights to such unpatented trade secrets. Moreover, there can be

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no assurance that others will not independently develop substantially equivalent proprietary information and techniques or otherwise gain access to Nuvelo s trade secrets.

Competition

The biopharmaceutical industry is intensely competitive, which is accentuated by the rapid pace of technological development. Nuvelo s products, if successfully developed, will compete with a number of traditional drugs and therapies and with new products currently under development. Nuvelo also expects to face increased competition in the future as new companies enter Nuvelo s markets. Research and discoveries by others may result in breakthroughs that render Nuvelo s potential products obsolete even before they begin to generate any revenue. The competitors for Nuvelo s drugs currently in development will vary depending on the particular indication pursued, and may include major pharmaceutical, medical device and biotechnology firms, many of which have substantially greater research and product development capabilities and financial, scientific, marketing and human resources than we have. Nuvelo s product candidate, NU172, if approved, could face competition from the paired dosing of heparin and its antidote, protamine, as well as Angiomax® bivalirudin, from The Medicines Company. Nuvelo s second product candidate, NU206, if approved for the treatment of mucositis, could face competition from drugs such as palifermin, an approved Amgen product.

Nuvelo s competitors may obtain patents and regulatory approvals for their competing products more rapidly than Nuvelo, or Nuvelo s collaboration partners, or develop products that are more effective than those developed by Nuvelo, or Nuvelo s collaboration partners. All of Nuvelo s products will face competition from companies developing similar products as well as from companies developing other forms of treatment for the same conditions.

Many of the companies developing competing products have greater expertise than Nuvelo or Nuvelo s collaboration partners have, in discovery, research and development, manufacturing, preclinical and clinical testing, obtaining regulatory approvals and marketing. Other smaller companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These companies as well as other organizations compete with Nuvelo in recruiting and retaining qualified scientific and management personnel as well as in acquiring technologies complementary to Nuvelo s programs.

Nuvelo may face competition with respect to product efficacy and safety, the timing and scope of regulatory approvals, availability of resources, reimbursement coverage, and price and patent position, including the potentially dominant patent positions of others. There can be no assurance that research and development by others will not render the products that Nuvelo may develop obsolete or uneconomical, or result in treatments or cures superior to any therapy developed by Nuvelo, or that any therapy Nuvelo develops will be preferred to any existing or newly-developed alternative products.

Government Regulation

Regulation by governmental authorities in the United States and most foreign countries will be a significant factor in manufacturing and marketing Nuvelo s potential products and in Nuvelo s ongoing research and product development activities. Virtually all of Nuvelo s products and those of Nuvelo s partners will require regulatory approval by governmental agencies prior to commercialization. In particular, human therapeutic products are subject to rigorous preclinical and clinical testing and other approval requirements by regulatory agencies, such as the U.S. Food and Drug Administration, or FDA, and comparable agencies in foreign countries.

Preclinical studies are generally conducted in the laboratory to evaluate the potential efficacy and safety of a therapeutic product. In the United States, the results of these studies are submitted to the FDA as part of an Investigational New Drug application (IND) which must be reviewed by FDA personnel before clinical testing can begin. A similar process occurs in foreign countries. Typically, clinical evaluation involves three sequential phases, which may overlap. During Phase 1, clinical trials are conducted with a relatively small number of subjects or patients to determine the early safety profile of a drug, as well as the pattern of drug distribution and

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drug metabolism. In Phase 2, trials are conducted with groups of patients afflicted by a specific target disease to determine preliminary efficacy, optimal dosages, and dosage tolerance and to gather additional safety data. In Phase 3, larger-scale, multi-center trials are conducted with patients afflicted with a specific target disease to provide data for the statistical proof of efficacy and safety as required by regulatory agencies. Regulatory agencies, the clinical trial sponsor or the investigator may suspend clinical trials at any time if they believe that clinical subjects are being exposed to an unacceptable health risk.

In the United States, the results of preclinical and clinical testing are submitted to the FDA in the form of a Biologic License Application (BLA) or a New Drug Application (NDA). In responding to a BLA or NDA, the FDA may grant marketing approval, request additional information, or deny the application if the FDA determines that the application does not satisfy its regulatory approval criteria. Product approvals may subsequently be withdrawn if compliance with regulatory standards is not maintained or if problems are identified after the product reaches the market. The FDA may require testing and surveillance programs to monitor the effect of a new product and may prevent or limit future marketing of the product based on the results of these post-marketing programs.

Whether or not FDA approval has been obtained, approval of a product by comparable foreign regulatory authorities is necessary prior to the commencement of marketing of a product in those countries. The approval procedures vary among countries and can involve additional testing. The time required to obtain approval may differ from that required for FDA approval. Although there are some centralized procedures for filings in the European Union countries, in general each country has its own procedures and requirements.

Even if regulatory approval for a product is obtained, the product and the facilities manufacturing the product are subject to continued review and periodic inspection. Each drug-manufacturing establishment in the United States must be registered with the FDA. Domestic and foreign manufacturing establishments are subject to inspections by the FDA and must comply with the FDA s current Good Manufacturing Practices (cGMP) regulations, as well as regulatory agencies in other countries if products are sold outside the United States. The FDA stringently applies regulatory standards for manufacturing drugs, biologics, and medical devices. The FDA s cGMP regulations require that drugs and medical devices be manufactured and records be maintained in a prescribed manner with respect to manufacturing, testing and control activities.

Nuvelo s policy is to conduct research activities in compliance with the National Institutes of Health Guidelines for Research Involving Recombinant DNA Molecules. Nuvelo also is subject to various federal, state and local laws, regulations and recommendations relating to safe working conditions, laboratory and manufacturing practices, the experimental use of animals, and the use and disposal of hazardous or potentially hazardous substances, including radioactive compounds and infectious disease agents, used in connection with Nuvelo s work. The extent and character of governmental regulation that might result from future legislation or administrative action cannot be accurately predicted.

Human Resources

As of September 30, 2008, Nuvelo had 51 full-time equivalent employees, 18 of whom hold Ph.D., M.D., J.D., or other advanced degrees. Approximately 31 of these employees are engaged in research and development activities, and approximately 20 are engaged in finance, legal, human resources and administration. None of Nuvelo s employees are represented by a collective bargaining agreement, nor has Nuvelo experienced work stoppages. Nuvelo believes that relations with its employees are good.

Properties

In January 2005, Nuvelo entered into a seven-year facility lease agreement for 61,826 square feet of industrial space at 201 Industrial Road in San Carlos, California, which became Nuvelo s primary headquarters in September 2005. The lease commenced on September 1, 2005 and contains an option to cancel the lease after five years upon payment of certain amounts specified in the lease, two options to extend the lease for five

additional years, each at 95% of the then-current fair market rental rate (but not less than the existing rental rate), rights of first refusal over all vacant space in the building during the first two years of the lease, and an expansion option for a specified amount of space. In March 2006, the lease was amended to provide for the exercise of Nuvelo s expansion option over 7,624 square feet of rentable space, for which the related lease rental payments commenced in August 2006. In January 2008, Nuvelo entered into a sublease agreement, pursuant to which a subtenant leases from Nuvelo approximately 6,754 square feet of space available in the San Carlos facility from February 2008 to January 2011. The term of the sublease can be extended by the subtenant for three additional periods of one year each, subject to certain conditions contained in the sublease agreement. Nuvelo believes that its current facilities are adequate for its needs for the foreseeable future.

Nuvelo also leases approximately 139,000 square foot of space at 985 Almanor Avenue in Sunnyvale, California, which expires in May 2011. In December 2006, Nuvelo exited this facility and has no intention of reoccupying it.

Legal Proceedings

On February 9, 2007, Nuvelo, Inc. and certain of Nuvelo s former and current officers and directors were named as defendants in a purported securities class action lawsuit filed in the United States District Court for the Southern District of New York. The suit alleges violations of the Securities Exchange Act of 1934 related to the clinical trial results of alfimeprase, which we announced on December 11, 2006, and seeks damages on behalf of purchasers of Nuvelo s common stock during the period between January 5, 2006 and December 8, 2006. Specifically, the suit alleges that we misled investors regarding the efficacy of alfimeprase and the drug s likelihood of success. The plaintiff seeks unspecified damages and injunctive relief. Three additional lawsuits were filed in the Southern District of New York on February 16, 2007, March 1, 2007 and March 6, 2007, respectively. On April 10, 2007, three separate motions to consolidate the cases, appoint lead plaintiff, and appoint lead plaintiff s counsel were filed. On April 18, 2007, Nuvelo filed a motion to transfer the four cases to the Northern District of California. The Court granted Nuvelo s motion to transfer the cases to the Northern District of California in July 2007. Plaintiffs have filed motions for consolidation, lead plaintiff and lead plaintiff s counsel in the Northern District of California. Plaintiffs filed their consolidated complaint in the Northern District of California on November 9, 2007. Nuvelo filed a motion to dismiss plaintiffs consolidated complaint on December 21, 2007. Plaintiffs filed an opposition to Nuvelo s motion to dismiss on February 4, 2008. On June 12, 2008, the Court held a hearing on the motion to dismiss. The motion to dismiss the consolidated complaint is still pending. Nuvelo currently cannot determine the impact that this litigation will have on Nuvelo s business, results of operations or financial condition.

On March 19, 2007, Nuvelo received a summons related to a derivative suit that had been filed in the Superior Court for California, San Mateo County, by an alleged individual stockholder of Nuvelo, purportedly on behalf of Nuvelo against certain of Nuvelo s current and former officers and directors. The complaint alleges among other claims, that the defendants breached their fiduciary duties to Nuvelo by issuing or failing to prevent the issuance of purportedly false and misleading statements between January 5, 2006 and December 11, 2006 relating to the clinical trial results of alfimeprase, which Nuvelo announced on December 11, 2006, and that certain defendants benefited from these actions. On April 18, 2007, Nuvelo filed a demurrer to the complaint on the ground that plaintiff was not excused from issuing a demand to the board prior to filing the lawsuit. Plaintiffs filed oppositions to Nuvelo s demurrer, and Nuvelo has subsequently filed replies to Plaintiffs oppositions. The Court heard this motion on July 30, 2007, and granted Nuvelo s demurrer, but also granted plaintiffs the opportunity to file an amended complaint. Plaintiffs filed an amended complaint on October 15, 2007. Nuvelo filed its reply to their amended complaint on December 6, 2007. The Court heard the motion on December 17, 2007. On January 2, 2008, the Superior Court for California, San Mateo County, entered final judgment dismissing in its entirety, with prejudice, the second amended consolidated derivative complaint.

On or about December 6, 2001, Variagenics, Inc. was sued in a complaint filed in the United States District Court for the Southern District of New York naming it and certain of its officers and underwriters as defendants.

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The complaint purportedly is filed on behalf of persons purchasing Variagenics stock between July 21, 2000 and December 6, 2000, and alleges violations of Sections 11, 12(a)(2) and 15 of the Securities Act of 1933, as amended and Section 10(b) of the Securities Exchange Act of 1934, as amended, and Rule 10b-5 promulgated thereunder. The complaint alleges that, in connection with Variagenics July 21, 2000 initial public offering, or IPO, the defendants failed to disclose additional and excessive commissions purportedly solicited by and paid to the underwriter defendants in exchange for allocating shares of Variagenics stock to preferred customers and alleged agreements among the underwriter defendants and preferred customers tying the allocation of IPO shares to agreements to make additional aftermarket purchases at predetermined prices. Plaintiffs claim that the failure to disclose these alleged arrangements made Variagenics registration statement on Form S-1 filed with the SEC in July 2000 and the prospectus, a part of the registration statement, materially false and misleading. Plaintiffs seek unspecified damages. On or about April 19, 2002, an amended complaint was filed which makes essentially the same allegations. On or about July 15, 2002, Variagenics and the individuals filed a motion to dismiss. Nuvelo is involved in this litigation as a result of Nuvelo s merger with Variagenics in January 2003. On July 16, 2003, Nuvelo s board of directors approved a settlement proposal initiated by the plaintiffs. However, because of a recent court ruling, the settlement class, as defined in the settlement papers, is no longer feasible. While a new complaint has not been filed against Nuvelo, there are several focus cases against other issuers in which new complaints have been filed. Defendant issuers in the focus cases filed motions to dismiss the new complaints. On March 26, 2008, the District Court issued an order granting in part and denying in part the focus issuers motions to dismiss. The focus issuers had been advised that plaintiffs intended to file new complaints against Nuvelo, but none have been filed yet. Nuvelo believes that any attorneys fees, loss or settlement payment with respect to this suit will be paid by Nuvelo s insurance provider. However, it is possible that Nuvelo could be forced to incur material expenses in the litigation if the parties cannot achieve a settlement, and, in the event of an adverse outcome, Nuvelo s business could be harmed.

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INFORMATION ABOUT ARCA S BUSINESS

Overview

ARCA is a biopharmaceutical company developing genetically-targeted therapies for heart failure and other cardiovascular diseases. ARCA s first product candidate is Gencaro (bucindolol hydrochloride), a pharmacologically unique beta-blocker and mild vasodilator, being developed for chronic heart failure, or CHF, and other indications. Gencaro is an oral tablet formulation, dosed twice daily. ARCA has identified common genetic variations that predict patient response to Gencaro. Subject to FDA approval, ARCA, through its partnership with Laboratory Corporation of America, or LabCorp, anticipates introducing a test for these genetic markers concurrent with the market launch of Gencaro, potentially making Gencaro the first genetically-personalized cardiovascular drug. When prescribed using these markers, ARCA believes that Gencaro can become an important new therapy for many chronic heart failure patients, with the potential for good clinical outcomes and good tolerability in those patients with a favorable genetic profile. In September 2008, the FDA formally accepted for filing ARCA s New Drug Application, or NDA, for Gencaro as a potential treatment for CHF. In accordance with the Prescription Drug User Free Act, or PDUFA , the FDA s goal is to complete and review all materials regarding Gencaro by May 31, 2009.

Chronic heart failure is one of the largest health care problems in the United States and the rest of the world. It is estimated that there are currently about 6 million people in the United States with CHF, and about 550,000 new cases are diagnosed annually. Beta-blockers are part of the current standard of care for CHF, and are considered to be among the most effective drug classes for the disease. However, a significant percentage of eligible patients in the United States is not being treated, or does not tolerate or respond well to those beta-blockers currently approved for the treatment of CHF. Under current treatment practice, determining whether a patient is responding well or tolerating beta-blockade can be a lengthy process, and an adverse clinical event is often the first significant evidence that the therapy is not working. ARCA believes there is an opportunity for new heart failure therapies with improved efficacy, response rates and tolerability, and for which individual patient response can be better predicted prior to therapy.

Gencaro was the subject of a major, U.S. based heart failure Phase 3 trial, which will provide the primary basis for approval of Gencaro in the U.S. ARCA anticipates that the FDA will reach a decision on the approvability of Gencaro in the second or third quarter of 2009. Subject to FDA approval on this schedule, ARCA plans to commence commercial sales of Gencaro in the fourth quarter of 2009, or the first quarter of 2010.

ARCA has collaborated with LabCorp, to develop the Gencaro Test, a companion test for the genetic markers that predict clinical response to Gencaro. The proposed use of the Gencaro Test, if cleared and approved by FDA, will be to enable a physician to determine, prior to therapy, whether a patient is likely to have a good response to Gencaro. The Gencaro Test is expected to be submitted through the Premarket Approval, or PMA, process.

ARCA holds worldwide rights to Gencaro and plans to commercialize the drug in the U.S. through its own specialized sales force. ARCA s commercial effort in the United States will focus on cardiologists specializing in heart failure, and selected other physicians. ARCA may seek partners to assist it in commercializing Gencaro in international markets. ARCA believes that Gencaro will be covered by statutory exclusivity following commercial launch, and will also potentially have protection under patent applications, which ARCA believes will extend market exclusivity substantially. ARCA also plans to pursue several significant follow-on indications for Gencaro, including various forms of cardiac arrhythmias.

ARCA believes that its expertise in cardiovascular pathophysiology and genetics, and its clinical and commercial experience, will enable it to identify and develop other genetically-personalized cardiovascular therapies. ARCA is currently exploring several such opportunities.

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ARCA was incorporated in Delaware in 2004 and commenced operations in 2005. Its principal executive offices are located in Broomfield, Colorado.

Market Opportunity

CHF is one of the world s most significant health care challenges. Industry sources estimate that about 6 million Americans are living with CHF and nearly 550,000 new patients are diagnosed annually. In addition, CHF is the underlying reason for approximately 12 to 15 million annual visits to physicians, 6.5 million annual hospital days and over $34 billion in direct and indirect healthcare costs. Some sources estimate that the number of chronic heart failure patients in countries within the European Union is significantly higher than in the U.S.

Medical therapy has made progress in treating CHF, but morbidity and mortality remain high. The current standard of care for CHF involves the use of various therapies that operate to inhibit the activity of the renin-angiotensin-aldosterone system, which include angiotensin converting enzyme, or ACE, inhibitors, , angiotensin II receptor blockers, or ARB s, and aldosterone receptor antagonists and diuretics, as well as drugs in the class known as beta-blockers.

Beta-blockers are named for their characteristic mechanism of binding to certain receptors in the nervous system of the heart, and in doing so blocking those receptors from being activated by another molecule. This drug class is part of the current standard of care in patients with CHF and left ventricular dysfunction. The American Heart Association and the American College of Cardiology physician guidelines for the treatment of CHF state the following:

Beta-blockers should be prescribed to all patients with stable heart failure due to reduced left ventricular ejection fraction, unless they have a contraindication to their use or have been shown to be unable to tolerate treatment with the drugs. Because of favorable effects of beta-blockers on survival and disease progression, treatment with a beta-blocker should be initiated as soon as left ventricular dysfunction is diagnosed.

The benefits of beta-blockade are well established and applicable to the majority of the CHF population. Beta-blockers are effective in mortality reduction and are considered to be the most effective drugs for CHF. However, approximately 40% of eligible CHF patients are not being treated with beta-blockers in the U.S. In the European Union, it is estimated that 50% of eligible chronic heart failure patients are not being treated with beta-blockers. ARCA believes this lack of adoption may be due in part to the fact or perception that a significant percentage of chronic heart failure patients do not tolerate the beta-blockers currently approved for CHF, or do not respond well to them.

Moreover, it is difficult to predict how an individual patient will respond to a beta-blocker, and this creates particular issues in the treatment of CHF. The current standard of practice in prescribing a beta-blocker to a CHF patient involves a multi-week- or multi-month-long process in which the dosage is gradually increased to allow the patient to adjust to the therapy, and to determine if the patient is responding positively. This is necessary because the therapeutic mechanism of this drug class involves the inhibition of mechanisms in the failing heart that initially help the heart to compensate for diminished cardiac function, and because it can take a substantial period of time for the therapy to show benefit. The dosage is generally increased gradually over time to avoid withdrawing these compensatory mechanisms too abruptly. As a result, patients newly introduced to beta-blocker therapy often do not feel better, or even feel worse, and it can be weeks or months before there is objective evidence of therapeutic benefit. Because of these factors, it can be difficult for the physician to determine whether a patient is tolerating or responding positively to the therapy, and a serious adverse event, such as a hospitalization for an acute episode, or death, may be the first significant indication that the patient is not responding well. Accordingly, ARCA believes there is a substantial need for new heart failure therapies that have improved efficacy, response rates and better tolerability, and for which response and tolerability can be better predicted prior to the onset of therapy. ARCA believes Gencaro can help to address these unmet needs.

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ARCA Strategy

ARCA s mission is to become a leading biopharmaceutical company developing and commercializing cardiovascular therapies, with an emphasis on genetically-targeted therapies. To achieve this goal, ARCA is pursuing the following strategies:

Obtain FDA approval for Gencaro for the treatment of chronic heart failure and maximize its potential. ARCA believes that Gencaro has a clinical record that supports its approvability. Gencaro s New Drug Application, or NDA, was accepted for filing by the FDA in September 2008. ARCA expects a decision by the FDA on the approvability of Gencaro in the second or third quarter of 2009. If Gencaro is approved, ARCA intends to market it as the first pharmacogenetic cardiovascular therapy through its own sales force. ARCA plans to differentiate Gencaro based on its pharmacogenetic profile, unique mode of action, the Gencaro Test s ability to predict response, favorable tolerability and improved clinical endpoints. ARCA plans to support its commercialization effort with a publication strategy, appropriate contacts with key opinion leaders, a hospital-based heart failure patient registry and a focused reimbursement strategy, in compliance with applicable federal requirements.

Build a specialty sales and marketing capability. In anticipation of the potential commercial launch of Gencaro in the U.S., ARCA is building specialty sales and marketing organization, focusing on cardiologists that specialize in heart failure, and other physicians that treat heart failure or are influential. ARCA s management and employees, including its chief executive officer and its executive in charge of commercialization, have extensive experience in the commercialization of cardiovascular therapies, including specialty sales and marketing organizations. ARCA also intends to use this sales and marketing organization to commercialize future product candidates in the U.S.

Expand Gencaro indications. ARCA plans to pursue clinical development of several potential additional indications for Gencaro, including the prevention of several forms of arrhythmia. ARCA believes these indications have pharmacogenetic potential, reasonable clinical development paths, will help differentiate Gencaro, and could potentially be successfully marketed by ARCA s specialty sales and marketing organization.

Build a cardiovascular pipeline. ARCA s management and employees, including its chief executive officer and its founder and chief science and medical officer, have extensive experience in cardiovascular research, molecular genetics, cardiovascular clinical development, and the commercialization of cardiovascular therapies. ARCA will leverage this expertise to seek to identify, acquire, develop and commercialize other cardiovascular products or candidates, with an emphasis on pharmacogenetic applications.

Gencaro

Gencaro is a pharmacologically unique beta-blocker and mild vasodilator being developed by ARCA for the treatment of chronic heart failure and other potential cardiovascular indications. Gencaro is considered part of the beta-blocker class because of its property of blocking both beta-1, or $ß_1$ and beta-2, or $ß_2$ receptors in the cardiac nervous system from binding with other molecules that activate these receptors. Because of its mild vasodilator effects, Gencaro is well-tolerated in patients with advanced CHF. Originally developed by Bristol-Myers Squibb, the active pharmaceutical ingredient, or API, in Gencaro, bucindolol has been tested clinically in approximately 4,500 patients. Gencaro was the subject of a Phase 3 heart failure mortality trial of over 2,700, mostly U.S. patients, known as the BEST trial. The BEST trial included a DNA bank of over 1,000 patients, which was used to conduct studies of the effect of genetic variation on bucindolol response.

At the time of the BEST trial, ARCA s founding scientists, Dr. Michael Bristow and Dr. Stephen Liggett, hypothesized that the unique pharmacologic properties of Gencaro would interact with common genetic variations or polymorphisms of the $ß_1$, and alpha2C, or α_{2C}, receptors, which are important receptors that regulate cardiac function. They tested this hypothesis prospectively in a sub-study conducted using data from the BEST DNA bank. On the basis of this study, Drs. Bristow and Liggett determined that patients with certain variations,

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or polymorphisms, in these receptors had substantially improved outcomes on primary and certain secondary clinical endpoints in the trial, such as mortality, heart failure progression and hospitalization, relative to the general patient population of the BEST trial. ARCA believes that these polymorphisms, which are detectable using standard genetic testing technology, can serve as diagnostic markers for predicting enhanced therapeutic response to Gencaro, and avoiding adverse events, in individual patients.

Pharmacology and Pharmacogenetics

Gencaro s pharmacology appears to be different from other compounds in the beta-blocker class in two fundamental respects. First, studies conducted by ARCA researchers indicate that in human myocardial preparations, in addition to inhibiting the binding activity of the ß$_1$ receptor like a typical beta-blocker, Gencaro also significantly inactivates high functioning ß$_1$ receptors through a separate mechanism. Second, these same ARCA studies indicate that Gencaro lowers the systemic levels of the neurotransmitter norepinephrine, or NE, which is released by cardiac and other sympathetic nerves. These two properties interact with common genetic variations in two cardiac receptors, the ß$_1$ or α_{2C} receptors, to produce the unique pharmacogenetic profile of Gencaro. ARCA believes that these two properties, and their pharmacogenetic implications, are unique to Gencaro. These receptors, their genetic variants, and the biological system in which they function, are illustrated below:

Gencaro has an important interaction with the ß$_1$ receptor found on muscle cell, or cardiac myocyte, of the heart. The general role of the ß$_1$ receptor and its downstream signaling cascades is to regulate the strength and rate of the heart s contractions. NE serves as an activator of the ß$_1$ receptor, causing the receptor to initiate signaling to the cardiac myocyte. Although this signaling may be beneficial to the failing heart in the short term, in chronic heart failure patients the ß$_1$ receptor also initiates harmful, or cardiomyopathic signaling. Eventually this process exacerbates the heart s functional and structural decline. Beta-blockers counteract this destructive process by reducing ß$_1$ receptor signaling. They do this by binding to the receptor and blocking NE molecules from binding and activating the signaling activity, and in Gencaro s case by also inactivating the constitutively active (active in the absence of NE stimulation) state of certain ß$_1$ receptors.

There are two common genetic variations of the ß$_1$ receptor, each of which is present in approximately 50% of the U.S. population. One of these variations is known as the ß$_1$Arg/Arg variant. Laboratory studies indicate that this variation results in a higher functioning ß$_1$ receptor, one which is has greater ability to mediate the stimulatory effects of NE and is also more likely to be constitutively active and signal the cardiac myocyte to contract in the absence of NE. Heart failure patients with this genotype may have the potential for greater cardiomyopathic ß$_1$ signaling. The other variation, the ß$_1$Gly carrier , also present in about 50% of the U.S.

population, results in a ß$_1$ receptor that is much lower functioning and, according to laboratory studies, has less probability of being in an active state compared to the ß$_1$-Arg/Arg receptor.

Gencaro has a powerful interaction with the higher-functioning ß$_1$-Arg/Arg variation of the ß$_1$ receptor. Laboratory studies show that constitutively active receptors will continue to signal in the presence of standard beta-blockade. Laboratory studies in isolated human heart preparations also show that Gencaro has the unusual ability of being able to stop the signaling of constitutively active receptors. ARCA believes that individuals with the ß$_1$-Arg/Arg genotype potentially will recognize an enhanced therapeutic response to Gencaro because of the greater potential for active state, cardiomyopathic signaling among individuals with this genotype, and the larger reduction in signaling that these individuals experience when taking Gencaro, relative to individuals with the ß$_1$-Gly carrier genotype.

The other receptor that appears to give Gencaro its pharmacogenetic properties is the α_{2C} receptor. This receptor is located on the terminus of the sympathetic cardiac nerve, at its junction with the cardiac myocyte. The role of this receptor is to modulate the amount of NE that is present at this junction, which in turn affects the activation of ß$_1$ receptors and the heart s activity. There are two important genetic variations of this receptor that appear to affect the performance of Gencaro. Approximately 15% of the general population in the U.S. has a modified α_{2C} receptor that functions poorly. Patients with this variant, also known as the deletion variant , or α_{2C} 322 325 DEL are believed to have a diminished ability to regulate the amount of NE released by the cardiac nerve. The remaining 85% of the population has a normal functioning version of this receptor, referred to as the α_{2C}-wild type.

Individuals with the deletion variant of the α_{2C} receptor tend to have abnormally high levels of NE in their cardiac nervous system. Gencaro, unlike other ß-blocking agents, exhibits the pharmacologic property of sympatholysis , or the ability to lower systemic NE levels, through effects that are mediated at least in part by blockade of ß$_2$-receptors residing on sympathetic nerve terminals. When chronic heart failure patients are treated with Gencaro, some of them may be more likely to experience an adverse clinical effect leading to loss of efficacy related to an exaggerated lowering of NE resulting from Gencaro interacting with α_{2C} 322 325 DEL receptors. This risk may be more pronounced with late stage chronic heart failure patients, who are more dependent on symapathetic (NE) support of cardiac function. In contrast to those with the α_{2C} deletion variant, the majority of patients with the α_{2C}-wild type variant appear to experience only a mild reduction in NE levels from Gencaro. In these patients, mild NE lowering by Gencaro appears to have a favorable therapeutic effect.

The DNA substudy of patients from the BEST trial conducted by Drs. Bristow and Liggett indicated that the combinations of these polymorphisms in individual patients appear to influence the response to Gencaro with respect to significant clinical endpoints. As a result, ARCA anticipates three broad treatment groups for Gencaro:

- The very favorable group, constituting an estimated 47-50% of the U.S. population and comprised of patients with the ß$_1$-Arg/Arg genotype. ARCA believes these individuals may have an enhanced therapeutic response to Gencaro because of its powerful effect on this higher-functioning/constitutively active ß$_1$ receptor variant, regardless of their α_{2C} receptor genotype.

- A second favorable group, comprising an estimated 40% of the U.S. population, and comprised of individuals with the ß$_1$-Gly carrier ß$_1$ receptor and wild-type α_{2c} receptor. ARCA believes these individuals will benefit therapeutically from Gencaro (although not as much as the very favorable group), because of Gencaro s enhanced efficacy in the wild-type α_{2C} receptor population combined with some (although reduced) efficacy in ß$_1$-Gly carriers.

- A third and much smaller, unfavorable group, constituting about 10-13% of the U.S. population, comprised of individuals with both ß$_1$-Gly carrier ß$_1$ receptors and the deletion variant α_{2C} receptors. In these patients, compensatory support to the failing heart may be compromised when Gencaro is administered, likely due to the inability of the lower functioning ß$_1$-Gly carrier ß$_1$ receptor to compensate for the increased NE reduction from the deletion variant α_{2C} receptor. Clinical data suggest Gencaro should not be administered to these patients.

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The BEST Trial

Bucindolol was originally developed by Bristol-Myers Squibb for hypertension, and was licensed in the early 1990 s to Intercardia, a biopharmaceutical company. Around the time of completion of the Phase 2 clinical trials with bucindolol, a group of leading heart failure researchers proposed to The U.S. Department of Veteran Affairs Cooperative Clinical Studies Program a large mortality study of beta-blockers in chronic heart failure. This grant application was approved, and shortly thereafter the U.S. National Heart, Lung and Blood Institute (NHLBI) agreed to join in the sponsorship of the trial, known as the Beta-Blocker Evaluation of Survival Trial, or BEST. The Steering Committee of the BEST trial selected bucindolol as the agent to be tested against placebo, and Intercardia joined the trial as a sponsor.

The BEST trial was a double-blind, placebo-controlled, multi-center study of bucindolol on mortality and morbidity in an advanced chronic heart failure population. Most of the patients were from the United States. The basis for the selection of bucindolol as the tested ß-blocker included its Phase 2 clinical results and its high tolerability in more advanced CHF patients. The trial was planned to run four and one-half years, and enroll 2,800 patients. Under the umbrella of the BEST trial substudies program, a DNA bank and substudy was created, and 1,040 of the BEST patients participated by providing blood for DNA analysis. The DNA bank provided data for the DNA substudy of BEST patients conducted by Drs. Bristow and Liggett.

The BEST trial began in 1995 and enrolled a total of 2,708 chronic heart failure patients. The patients were the most advanced ever studied in a large mortality heart failure trial based on baseline systolic blood pressure and other criteria, and disease clinical stability was not an entry criterion for the trial. The primary endpoint of the BEST trial was total mortality and the prespecified main secondary endpoint was progression of heart failure, defined as heart failure death, cardiac transplant, heart failure hospitalization, or emergency room visit for the treatment of worsening heart failure not requiring hospitalization. Other prespecified secondary endpoints included death from cardiovascular causes, a composite of death or heart transplantation, heart failure hospitalization, improvement in left ventricular ejection fraction, incidence of myocardial infarction, quality of life, and any change in the need for concomitant heart failure therapy, including administration of intravenous inotropic agents, intravenous diuretics, or increase in doses of orally-administered diuretics.

In 1999, the BEST trial was terminated prior to the completion of follow-up, in response to a recommendation of the BEST trial Data and Safety Monitoring Board that the trial be discontinued. The primary reason for termination was loss of investigator equipoise; in other words, the fact that the BEST investigators were no longer uncertain regarding the comparative therapeutic merits of giving a placebo versus giving a beta-blocker to a CHF patient. Positive mortality results from two other heart failure trials involving other beta-blockers had been reported, and a substantial number of BEST trial investigators concluded that it was unethical to continue to give placebo to BEST trial participants. As a result, some investigators began to prescribe these other beta-blockers to patients in the trial, which threatened to destroy the trial's integrity. At the time the BEST study was terminated, approximately 70% of the trial information was available, with 2,708 of a projected 2,800 patients enrolled and 797 out of 916 deaths reported. A companion trial to the BEST trial, known as the BEAT trial, studying European patients with left ventricular dysfunction and a history of heart attack, was terminated when BEST was terminated, with approximately 10% of trial information available (including 343 of 2,000 patients enrolled and 43 out of 630 deaths reported).

Following termination, the preliminary results of both studies were analyzed and published. The preliminary determination, and general perception were that the BEST trial had failed, on the basis of not meeting its primary endpoint of total mortality; the published values were a 10% risk reduction in mortality with a p-value of 0.10.

Clinical Results and the DNA Substudy

In 2003 and 2004, the results of the DNA substudy conducted by Drs. Bristow and Liggett began to be released and analyzed. The DNA substudy results indicated a significant enhancement of response on the major clinical endpoints from the BEST trial in patients with the very favorable genotype. The risk reduction on

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clinical efficacy endpoints such as mortality and hospitalization ranged from approximately 35% to approximately 48% in this genotype. In addition, in arrhythmia endpoints of atrial fibrillation or ventricular fibrillation tracked by safety analyses, the risk reduction by bucindolol in the very favorable genotype appeared to be even greater, by 62-70%. Also, beginning in 2005, ARCA began to more fully analyze the overall BEST results in accordance with FDA-approved, prespecified statistical plans, which had not been done by the sponsors when the BEST trial was terminated. For example, as re-analyzed by ARCA in accordance with the statistical plan, there appeared to be a 13% risk reduction on the primary endpoint in the BEST trial of mortality for the entire patient population taking bucindolol, with a p-value of 0.053. In addition, the prespecified main secondary endpoint, reduction in the progression of heart failure, had not been analyzed when the BEST trial ended. As analyzed by ARCA, the results of the BEST trial indicated a 21%, risk reduction on this secondary endpoint for the entire patient population taking bucindolol, that was highly statistically significant (p = 0.00003). The endpoint of heart failure progression, in similar forms, was the original basis of approval for the two beta-blockers currently approved in the U.S. for CHF.

Shown below are certain of the primary and secondary endpoint data from the BEST DNA substudy results, by genotype:

BEST Clinical Responses[1] by Genotype Groups

Endpoint (% of study population)	**Very Favorable patients (47%)**	Favorable patients (40%)	Unfavorable patients (13%)
All Cause Mortality (ACM), TTE	**↓38%***	↓25%	h4%
Cardiovascular Mortality (CVM), TTE	**↓48%***	↓40%*	h11%
ACM + transplantation	**↓43%***	↓24%	h4%
Heart failure (HF) Morbidity & Mortality, CRF, TTE	**↓34%****	↓20%	↓1%
HF M&M, TTE (Adj.)	**↓42%****	↓27%	↓16%
HF Hosp days/patient	**↓48%****	↓17%	h19%
AF prevention (from AE db)	**↓62%***	↓11%	↓4%
VT/VF prevention (from AE db)	**↓70%****	↓44%	↓9%

[1] Covariate adjusted, transplant censored analysis

* p<0.05; **p≤0.007; TTE: Time To Event; CRF: Case Report Form; Adj.: Adjudicated

While the results of the DNA substudy of the BEST trial indicate that Gencaro s efficacy varies by genotype with the most robust clinical effects found in patients with the very favorable genotype, they also indicate that patients with the favorable genotype may also benefit from the drug. The results of the DNA substudy indicate that patients in the unfavorable genotype group are not recommended for Gencaro. ARCA estimates that approximately 10-13% of the U.S. CHF patient population falls into the unfavorable genotype group. In addition to these results, there was a 45-47% reduction in myocardial infarction in all patients in the BEST trial taking bucindolol. This result, which is unique to Gencaro, was supported by the limited results of the companion BEAT trial in Europe, in which Gencaro, with only approximately 10% of the trial information available, demonstrated a statistically significant improvement in combined myocardial infarction endpoints versus placebo, in patients with left ventricular dysfunction and a history of myocardial infarction.

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Regulatory Strategy

In 2005, ARCA approached the FDA to discuss the results of the DNA substudy and ARCA s revised analysis of data from the BEST trial, as well as the prospect of an NDA for Gencaro for the treatment of CHF. Through a number of meetings over the next several years, ARCA received guidance from the FDA on the potential NDA and the coordination of the NDA with a potential application for approval of the Gencaro Test.

The regulatory strategy for Gencaro and the Gencaro Test has been guided by this interaction with the FDA. In the NDA submitted for Gencaro, ARCA argues that Gencaro is approvable based on the full clinical program associated with its development, including data from the total patient cohort population in the BEST trial. The Gencaro clinical development program encompassed numerous clinical studies, including four randomized and placebo controlled studies in patients with CHF or myocardial infarction, of which two, the BEST and BEAT trials, evaluated rigorous clinical endpoints, including mortality, hospitalization and myocardial infarction. The remaining clinical studies include the Phase 2 study conducted by Bristol-Myers Squibb for the treatment of hypertension, several safety studies in other patient populations and a Phase 1 program in healthy subjects. The NDA presents the pharmacogenetic data from the DNA substudy conducted by Drs. Bristow and Liggett as important to the prescribing information in the proposed label for Gencaro, but not as the basis for its approval.

ARCA believes that the clinical trial results for Gencaro, including the results of the BEST trial and DNA substudy, demonstrate the efficacy and safety of Gencaro for treatment of patients with CHF, both for decreasing the risk of mortality and cardiovascular or heart failure hospitalization, and also for reducing the risk of ischemic events and myocardial infarction. The primary endpoint of mortality (when analyzed in accordance with the prespecified plan) was reduced in all BEST trial patients on bucindolol by 13%, with a p-value of 0.053, while the FDA typically views significance as a p-value of less than 0.05, this is within the range found sufficient for approval based on same FDA precedent. This primary endpoint result is enhanced by the response of the BEST trial patient population with respect to eight secondary endpoints, all of which were positive and statistically significant. As prespecified with FDA, heart failure progression was the most important secondary endpoint, and was positive and statistically significant; a heart failure progression endpoint was FDA s basis of approval for the two beta-blockers approved for CHF. ARCA also believes that other statistical analyses and the attributes of the BEST trial itself add to its credibility.

ARCA believes Gencaro s status as a beta-blocker adds further support to its clinical record, as this class has a well-established record of safety and efficacy. The results of the BEST trial are supported by qualitatively consistent results from almost every trial in the beta-blocker class for the treatment of CHF. ARCA believes the use of class effects to support marketing approval of Gencaro by the FDA is consistent with prior precedent, especially within the precedent of approvals in cardiovascular and heart-specific therapies.

ARCA believes that the pharmacogenetic data generated from the DNA substudy conducted by Drs. Bristow and Liggett create a separate public health rationale for approval of Gencaro. These DNA substudy results are not the primary basis for approval as set forth in the Gencaro NDA, but ARCA believes they will represent an important part of the prescribing information in the label being sought for Gencaro. ARCA believes the genetic results will provide physicians with a tool to help predict individual patient response prior to therapy. This unique attribute of Gencaro represents a new approach in treating CHF; one that ARCA believes has the potential to improve the standard of care.

Licensing and Partnership Obligations

ARCA has licensed worldwide rights to Gencaro, including all preclinical and clinical data, from CPEC, a licensing entity which hold the rights of the biotechnology companies that are the successors to Intercardia. Under this license agreement, ARCA has the obligation to make milestone payments of up to $13 million in the aggregate upon regulatory approval in the U.S., Europe and Japan, and to pay royalties based on a percentage of annual sales of Gencaro in any jurisdiction worldwide.

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ARCA has also licensed worldwide rights to intellectual property covering the pharmacogenetic response of bucindolol hydrochloride based on the cardiac receptor polymorphisms, which is owned by the University of Colorado. ARCA has no material future financial obligations under this license. ARCA has also licensed the nonexclusive rights to develop and commercialize diagnostics for these receptor polymorphisms, for the purpose of prescribing Gencaro, from the licensee of these rights, CardioDx, Inc. ARCA has certain milestone and royalty obligations under this license agreement, which have been assumed by one of ARCA s suppliers.

The Gencaro Test

If cleared or approved, ARCA believes that the Gencaro will be the first cardiovascular drug to be integrated with a companion diagnostic to predict enhanced efficacy. The drug label being sought for Gencaro would identify the patient receptor genotypes that can expect enhanced efficacy, as well as those with a likelihood of a standard beta-blocker response and the small unfavorable subgroup with a low probability of benefit. The label being sought would recommend receptor genotype testing prior to initiation of therapy. Accordingly, ARCA believes it is critical to the successful commercialization of Gencaro to develop a companion genetic test that is simple to administer, useful and widely available.

ARCA has partnered with a third party supplier, to develop and commercialize the Gencaro Test and commercially launch the Gencaro Test in parallel with the commercial launch of Gencaro.

ARCA believes that the Gencaro Test involves a fairly simple genetic test that uses technology that has already been well-validated. Based on FDA guidance, it is anticipated that the Gencaro Test will be the subject of a request for PMA regulatory approval. ARCA believes that no further clinical trials will be required for the Gencaro Test submission, though there is no guarantee that FDA will not require additional clinical data. The clinical basis for the Gencaro Test will be the clinical studies discussed in ARCA s NDA for Gencaro, which the PMA submission will cross-reference.

Marketing and Sales

ARCA s strategy is to market Gencaro as the first pharmacogenetically targeted cardiovascular therapy for CHF patients. For the U.S. market, ARCA plans to build its own specialized sales force, which it expects to be experienced in heart failure and cardiovascular drug sales. Cardiologists specializing in heart failure and selected other physicians will be the focus of ARCA s specialty sales force. ARCA believes a relatively small number of cardiologists and other heart failure specialists treat a significant percentage of CHF patients, and, ARCA believes, also have a disproportionate influence on the prescribing practices of other health care providers that treat CHF. Accordingly, ARCA believes that the CHF market may be successfully targeted by a specialized sales strategy.

Key elements of ARCA s U.S. marketing and sales strategy include:

Publication plan. ARCA has developed a plan that it believes is consistent with applicable federal laws and regulations and which includes the publication of the revisited analysis of the Gencaro clinical results.

National and regional key opinion leader development. ARCA plans to develop appropriate contacts with key decision makers in the heart failure market.

Registry. ARCA intends to develop an observational database integrating genetic and CHF data.

Reimbursement. ARCA plans to implement a comprehensive reimbursement plan for Gencaro and the Gencaro Test in connection with the commercial launch of both products and in compliance with applicable federal requirements.

ARCA holds world-wide rights to Gencaro and has filed its patent applications covering Gencaro in the major international pharmaceutical markets. ARCA plans to accelerate its international commercialization

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strategy for Gencaro in 2009, by obtaining guidance from foreign regulatory agencies and engaging in discussions with potential international partners.

Competition

Currently, there are two beta-blockers (three branded formulations) approved for the treatment of CHF in the U.S.:

- TOPROL-XL®;
- Coreg® and Coreg CR® (a sustained release formulation)

TOPROL-XL and immediate release Coreg have generic equivalents commercially available in the U.S. (Metoprolol Succinate and Carvedilol respectively). It is anticipated that both of these generic equivalents will be priced at less than the price of Gencaro. Total sales of beta-blockers were nearly $4 billion in the U.S. in 2007, with generic formulation accounting for 30% of the market. While reports vary on the heart failure indication s contribution of the beta-blocker market, ARCA believes CHF contributes to a significant portion of the U.S. market.

Gencaro may not be successful in competing against the existing beta-blockers approved for CHF or their generic equivalents. The companies that sell the existing therapies are much larger than ARCA and have much greater resources. In addition, ARCA s proposed prescribing information for Gencaro includes a recommendation for genetic testing, which will add additional cost and procedures to the process of prescribing Gencaro, and may make it more difficult for ARCA to compete against existing therapies.

Other Potential Indications for Gencaro

ARCA is exploring the potential of Gencaro for the prevention of atrial fibrillation, and/or ventricular tachycardia/ventricular fibrillation. ARCA believes these would be follow-on indications to CHF, and would require one or more additional clinical trials. ARCA believes that data from the BEST trial suggests that Gencaro has potential for these indications, and that the clinical response is also pharmacogenetic, based on the same genetic markers that stratify response on CHF endpoints.

Manufacturing and Product Supply

Gencaro is a small molecule drug with an established manufacturing history. Multiple manufacturers of both the API and drug product have successfully produced Gencaro for use in clinical trials over the course of its clinical development. ARCA outsources all manufacturing and analytical testing of the API of Gencaro and the drug product. Third party contract manufacturing organizations have been selected by ARCA on the basis of their technical and regulatory expertise. ARCA s approach with its contract manufacturing partners has been to replicate the manufacturing processes that were used to support the pivotal clinical trials with Gencaro, and to minimize any changes from these baseline processes, thereby reducing technical and regulatory risk.

ARCA has contracted with Groupe Novasep to manufacture commercial quantities of the API for Gencaro. Registration batches have been completed to support the NDA submission for Gencaro, with all batches meeting specifications.

For drug product production, ARCA has contracted with Patheon, Inc. to manufacture the Gencaro tablets. Gencaro is produced in a tablet form, utilizing standard solid oral dosage processing techniques. Six separate dosage strengths are manufactured, with the maximum recommended dose of 50mg twice daily for patient weighing 75kg or less and 100mg twice daily for patients weighing more than 75kg. This is consistent with dosages studied in pivotal clinical trials of Gencaro, and ARCA believes they support the appropriate titration and chronic dosages required for CHF patients. Registration batches have been completed to support the NDA submission for Gencaro with all batches meeting specifications.

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ARCA s focus for the remainder of 2008 and 2009 will be to complete the process validation programs and to build product inventory in anticipation of potential commercial launch. ARCA believes both facilities have adequate production capacity to support the projected market demand for Gencaro. ARCA s current and future arrangements with third party manufacturers may not be successful. If these efforts fail, ARCA would be required to devote additional internal resources to the activities currently performed, or to be performed, by third parties, to seek alternative third-party arrangements, or to delay ARCA s commercialization of Gencaro.

Government Regulation

Governmental authorities in the U.S. at the federal, state, and local levels and foreign countries extensively regulate, among other things, the research, development, testing, manufacture, labeling, promotion, advertising, marketing, distribution, sampling, and import and export of pharmaceutical and medical device products.

Premarket Approval of Drugs.

FDA approval is required before any new drug, dosage form, indication, or strength can be marketed in the U.S. ARCA anticipates that virtually all of its products will require regulatory approval by governmental agencies prior to commercialization. The process of obtaining approval and the subsequent process of maintaining substantial compliance with appropriate federal, state, local and foreign statutes and regulations require the expenditure of substantial time and financial resources. In addition, these statutes, rules, regulations and policies may change and ARCA s products may be subject to new legislation or regulations. There are numerous FDA sanctions for non-compliance.

The steps required before new human therapeutic products are marketed in the U.S. include rigorous preclinical and clinical testing and other approval requirements by regulatory agencies, such as the FDA and comparable agencies in foreign countries.

Preclinical Phase. Preclinical studies are generally conducted in the laboratory to evaluate the potential efficacy and safety of a product candidate. These studies include laboratory evaluation of product chemistry, formulation and stability, as well as studies to evaluate toxicity in animals. Preclinical studies are governed by numerous regulations.

Clinical Phase. Before human clinical trials can commence, an Investigational New Drug, or IND, application, submitted to FDA must become effective. The clinical phase of development involves the performance of human studies, including adequate and well-controlled human clinical trials to establish the safety and effectiveness of the product for each proposed indication. Typically, clinical evaluation involves three sequential phases, which may overlap. During Phase 1, clinical trials are conducted with a relatively small number of subjects or patients to determine the early safety profile of a product candidate, as well as dose tolerance, absorption, and the pattern of drug distribution and drug metabolism. In Phase 2, trials are conducted with groups of patients afflicted by a specific target disease to determine preliminary efficacy, optimal dosages and dosage tolerance and to identify possible adverse effects and safety risks. In Phase 3, larger-scale, multi-center trials are conducted with patients afflicted with a specific target disease to provide data for the statistical proof of efficacy and safety as required by regulatory agencies. The conduct of the clinical trials is subject to extensive regulation.

NDA Submission. In the U.S., the results of preclinical and clinical testing along with chemistry, manufacturing and controls information, are submitted to the FDA in the form of an NDA. In September 2008, the FDA formally accepted for filing ARCA s NDA, for Gencaro as a potential treatment for chronic heart failure.

Under PDUFA, after submission of an NDA and payment, or waiver, of the required fee, the FDA assigns a goal to review most standard NDAs within 10 months from acceptance of the application to the time the FDA

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decides to issue a complete response, or approve the NDA. The PDUFA date for Gencaro is May 31, 2009. The review process is often significantly extended by FDA requests for additional information or clarification. In addition, the FDA has recently begun to miss PDUFA dates for various products. The FDA may ultimately decide that the NDA does not satisfy the criteria for approval.

In responding to an NDA, the FDA may grant marketing approval or deny the application if the FDA determines that the application does not satisfy its regulatory approval criteria. A denial may include a request for additional information, including additional clinical data and/or an additional Phase 3 clinical trial. Data from clinical trials are not always conclusive and FDA may interpret data differently than ARCA interprets data. For instance, ARCA believes that results from a single Phase 3 study, the BEST study, are sufficient to support approval of Gencaro s NDA. Under the Food and Drug Modernization Act of 1997, the FDA is authorized to approve a drug based on a single adequate and well-controlled study if such study and other confirmatory data are sufficient to establish the drug s effectiveness. However, it has long been the FDA s general position that the standard of proof of a drug s effectiveness generally requires at least two well-controlled and adequate Phase 3 clinical studies with p-values of less than 0.05 on the primary endpoint.

In addition, in accordance with current FDA law and regulations, if the FDA determines that no active ingredient of a drug has been approved in any other application, the FDA must refer that drug to an advisory committee for review prior to approval or provide reasons in its action letter as to why it did not refer it to an advisory committee. In some cases, FDA may require completion, within a specified time period, of additional clinical studies after approval, referred to as Phase IV clinical studies, to monitor the effect of a new product and may prevent or limit future marketing of the product based on the results of these post-marketing programs. Furthermore, prior to granting approval, the FDA generally conducts an inspection of the facilities, including outsourced facilities that will be involved in the manufacture, production, packaging, testing and control of the drug substance and finished drug product for compliance with current Good Manufacturing Practice, or cGMP, requirements.

If the FDA approves the NDA, the product becomes available for physicians to prescribe. Even if the FDA approves the NDA, the agency may decide later to withdraw product approval if compliance with regulatory standards is not maintained or if safety problems are recognized after the product reaches the market. In addition, the FDA requires surveillance programs to monitor approved products that have been commercialized, and the agency has the power to require changes in labeling or to prevent further marketing of a product based on the results of these post-marketing programs.

Whether or not FDA approval has been obtained, approval of a product candidate by comparable foreign regulatory authorities is necessary prior to the commencement of marketing of a product candidate in those countries. The approval procedures vary among countries and can involve additional testing. The time required to obtain approval may differ from that required for FDA approval. Although there are some centralized procedures for filings in the European Union countries, in general each country has its own procedures and requirements.

Postapproval Compliance. If regulatory approval for a drug or medical device is obtained, the product and the facilities manufacturing the product are subject to periodic inspection and continued regulation by regulatory authorities, including labeling, advertising, promotion, recordkeeping, and reporting requirements, including the reporting of adverse experiences. In addition, the FDA closely regulates the post-approval marketing and promotion of drugs, including standards and regulations for direct-to-consumer advertising, off-label promotion, industry-sponsored scientific and educational activities and promotional activities involving the Internet. Drugs may be marketed only for the approved indications and in accordance with the provisions of the approved label. Failure to comply with these requirements can result in adverse publicity, warning letters, corrective advertising and potential civil and criminal penalties.

Drug Price Competition and Patent Term Restoration Act of 1984. Under the Drug Price Competition and Patent Term Restoration Act of 1984, also known as the Hatch-Waxman Act, Congress created an abbreviated

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FDA review process for generic versions of pioneer (brand name) drug products. The Hatch-Waxman Act also provides for patent term restoration and the award, in certain circumstances, of non-patent marketing exclusivities.

Generic Drug Approval. The Hatch-Waxman Act established an abbreviated FDA review process for drugs that are shown to be equivalent to approved pioneer drugs. Approval for a generic drug is obtained by filing an abbreviated NDA, or ANDA. Generic drug applications are abbreviated because they generally do not include clinical data to demonstrate safety and effectiveness. Instead, an ANDA applicant must establish that its product is bioequivalent to an approved drug and that it is the same as the approved drug with respect to active ingredient(s), route of administration, dosage form, strength and recommended conditions of use (labeling). The FDA will approve the generic as suitable for an ANDA if it finds that the generic does not raise questions of safety and effectiveness as compared to the pioneer drug. A drug is not eligible for ANDA approval if the FDA determines that it is not equivalent to the pioneer drug or if it is intended for a different use. Any applicant who files an ANDA seeking approval of a generic version of an approved drug listed in FDA s Approved Drug Products with Therapeutic Equivalence Evaluations, or the Orange Book, before expiration of the patent(s) listed in the Orange Book for that approved drug, must certify to the FDA for each patent that (i) no patent information on the drug has been submitted to the FDA; (ii) that such patent has expired; (iii) the date on which such patent expires; or (iv) that such patent is invalid, unenforceable or will not be infringed by the manufacture, use or sale of the generic drug. If the ANDA applicant makes a Paragraph IV certification, the NDA owner is entitled to an automatic 30-month stay of FDA s ability to approve the ANDA. This 30-month stay will end early upon any decision by a court that the patent is invalid, unenforceable or not infringed by the generic drug.

Patent Term Restoration. The Hatch-Waxman Act provides for the restoration of a portion of the patent term lost during product development and FDA review of an application. However, the maximum period of restoration cannot exceed five years, or restore the total remaining term of the patent to greater than 14 years from the date of FDA approval of the product. In the future, ARCA may consider applying for patent term restoration for some of its currently owned or licensed patents, depending on the expected length of clinical trials and other factors.

Non-Patent Marketing Exclusivities. Separate and apart from patent protection, the Hatch-Waxman Act entitles approved drugs to various periods of non-patent statutory protection, known as marketing exclusivity. The Hatch-Waxman Act provides five years of new chemical entity marketing exclusivity to the first applicant to gain approval of an NDA for a product that contains an active moiety not found in any other approved product. This exclusivity means that another manufacturer cannot submit an ANDA or 505(b)(2) NDA until the marketing exclusivity period ends. This exclusivity protects the entire new chemical entity franchise, including all products containing the active ingredient for any use and in any strength or dosage form, but will not prevent the submission or approval of stand-alone NDAs where the applicants have conducted their own clinical studies to demonstrate safety and effectiveness. There is an exception, however, for a competitor that seeks to challenge a patent with a Paragraph IV certification. Four years into the five-year exclusivity period, a manufacturer who alleges that one or more of the patents listed with the NDA is invalid, unenforceable or not infringed may submit an ANDA or 505(b)(2) NDA for a generic or modified version of the product.

The Hatch-Waxman Act also provides three years of new use marketing exclusivity for the approval of NDAs, and supplements, where those applications contain the results of new clinical investigations (other than bioavailability studies) essential to the FDA s approval of the applications. Such applications may be submitted for new indications, dosage forms, strengths, or new conditions of use of approved products. So long as the studies are essential to the FDA s approval or were conducted by or for the applicant, this three-year exclusivity prohibits the final approval of ANDAs or 505(b)(2) NDAs for products with the specific changes associated with those studies. It does not prohibit the FDA from approving ANDAs or 505(b)(2) NDAs for other products containing the same active ingredient, without those changes.

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FDA Approval of Medical Devices.

Unless an exemption applies, each medical device that a company wishes to market in the U.S. will require either 510(k) clearance or approval of a PMA from the FDA. The FDA classifies medical devices into one of three classes:

- Class I devices, which are subject to only general controls (e.g., labeling, medical devices reporting, and prohibitions against adulteration and misbranding) and, in some cases, to the 510(k) premarket clearance requirements;
- Class II devices, generally requiring 510(k) premarket clearance before they may be commercially marketed in the United States; and
- Class III devices, consisting of devices deemed by the FDA to pose the greatest risk, such as life-sustaining, life-supporting or implantable devices, or devices deemed not substantially equivalent to a predicate device, generally requiring submission of a PMA supported by clinical trial data.

Devices deemed to pose lower risks are placed in either class I or II, which may require the manufacturer to submit to the FDA a 510(k) requesting permission to commercially distribute the device. This process is generally known as 510(k) clearance. Some low risk devices are exempted from this requirement. Devices deemed by the FDA to pose the greatest risks, or for which there is no predicate, are placed in class III, requiring approval of a PMA.

Based on FDA guidance, it is anticipated that the Gencaro Test will be the subject of a PMA regulatory submission, although the FDA may later decide that the Gencaro Test should be evaluated for clearance under the FDA s 510(k) notification process.

510(k) Clearance Pathway. When a 510(k) clearance is required, a company must submit a premarket notification demonstrating that its proposed device is substantially equivalent to a previously cleared 510(k) device or a device that was in commercial distribution before May 28, 1976 for which the FDA has not yet called for the submission of PMAs. By regulation, the FDA is required to clear or deny a 510(k) premarket notification within 90 days of submission of the application. As a practical matter, clearance may take longer. The FDA may require further information, including clinical data, to make a determination regarding substantial equivalence.

If the FDA issues an order declaring the device to be Not Substantially Equivalent, or NSE, and places it into a class III or PMA category, a company can then request a de novo classification of the product. De novo is generally requested where there is no predicate device and the company believes the device is sufficiently safe so that no PMA should be required. If the FDA classifies the device into class II, company will then receive an approval order to market the device. This device type can then be used as a predicate device for future 510(k) submissions. However, if the FDA subsequently determines that the device will remain in the class III category, the device cannot be marketed until the company has obtained an approved PMA. If ARCA is required to follow a de novo process and is successful in having the Gencaro Test classified as Class II, an additional 60 to 90 days or more will be added on to the original 90 days required for the initial 510(k) review.

Premarket Approval (PMA) Pathway. A PMA must be submitted if the device cannot be cleared through the 510(k) process. The premarket approval application process is generally more costly and time consuming than the 510(k) process. Generally, a PMA must be supported by extensive data including, but not limited to, technical, preclinical, clinical trials, manufacturing and labeling to demonstrate to the FDA s satisfaction the safety and effectiveness of the device for its intended use. After a PMA is sufficiently complete, the FDA will accept the application and begin an in-depth review of the submitted information and will generally conduct a pre-approval inspection of the manufacturing facility or facilities to ensure compliance. By statute, the FDA has 180 days to review the accepted application , although, generally, review of the application can take between one and three years, but it may take significantly longer.

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Clinical Trials. Clinical trials are generally required to support a PMA application and are sometimes required for 510(k) clearance. Based on discussions with FDA, ARCA believes that the clinical trials in the Gencaro NDA are sufficient to support the NDA, and that no further clinical trials will be required for the Gencaro Test submission. Following the FDA s guidance from these discussions, the Gencaro Test regulatory filing will cross-reference the Gencaro NDA. However, there is no guarantee that FDA will not require additional clinical data to support the Gencaro Test submission.

Continuing Regulation. After a device is placed on the market, numerous regulatory requirements apply to the manufacturer, or holder of a 510(k) clearance or PMA approval. With respect to the Gencaro Test, ARCA will be relying on a third party supplier who will be responsible for compliance with such requirements. The FDA has broad post-market and regulatory enforcement powers. Accordingly, this third party supplier s facilities and the manufacturing facilities of certain of its suppliers will be subject to inspections by the FDA to determine those facilities level of compliance with various regulations. Failure by these entities to comply with applicable regulatory requirements can result in enforcement action by the FDA or other regulatory authorities, which may result in a wide variety of sanctions. The occurrence of enforcement actions against this third party supplier and/or the Gencaro Test could impact ARCA s ability to market the Gencaro drug product.

International Marketing Approvals. International sales of medical devices are subject to foreign government regulations, which vary substantially from country to country and are subject to change. The time required to obtain approval by a foreign country may be longer or shorter than that required for FDA clearance or approval, and the requirements may differ.

Other Regulatory Requirements. ARCA is also subject to various federal, state and local laws, regulations and recommendations relating to safe working conditions, laboratory and manufacturing practices, the experimental use of animals and the use and disposal of hazardous or potentially hazardous substances, including radioactive compounds and infectious disease agents, used in connection with ARCA s work. The extent and character of governmental regulation that might result from future legislation or administrative action cannot be accurately predicted.

Intellectual Property

The future success of ARCA s business will partly depend on its ability to maintain market exclusivity in the United States and important international markets for Gencaro, and for other products or product candidates that it may acquire or develop. ARCA will rely on statutory protection, patent protection, trade secrets, know-how, and in-licensing of technology rights to maintain protection for its products.

Gencaro has an intellectual property portfolio that ARCA believes forms the basis for potential U.S. and international market exclusivity. The composition of matter patents that originally covered bucindolol have expired, as a result of bucindolol s long development history. However, bucindolol has never received regulatory approval in any jurisdiction, and therefore ARCA believes it will qualify as a New Chemical Entity, or NCE, in all markets. As an NCE, bucindolol will, upon approval, enjoy statutory protection in the United States and most international markets under data exclusivity statutes. These statutes provide for an exclusivity period beginning from regulatory approval during which any generic competitor is barred from submitting an application that relies on the data of the NCE. In the U.S., the Hatch-Waxman Act provides for an initial period of four or five years from approval of the NCE, during which a generic application attempting to rely on the data of the NCE cannot be filed with FDA. This period can be extended under certain circumstances, and ARCA believes it has the potential to extend this period to seven and one-half years from FDA approval, as discussed below.

Many international markets have data exclusivity statutes that are analogous to Hatch-Waxman and often more protective. The analogous statute in the EMEA will, in general, provide Gencaro with a minimum of eight years of protection before a generic application may be filed, and ten years of protection before such an application may be approved. Protection under Hatch-Waxman and other data exclusivity statutes is sometimes

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considered superior to patent protection, as the generic application cannot be filed, thus eliminating the need to initiate patent infringement litigation with its accompanying risks and costs.

In addition to protection under data exclusivity statutes, Gencaro will potentially benefit from ARCA s ongoing patent strategy. ARCA has worldwide rights to the intellectual property arising from the discovery of the interaction of Gencaro with the polymorphisms of the ß $_1$ and α_{2c} receptors. ARCA has filed patent applications that claim the use of Gencaro with these genetic markers, in the United States and in other jurisdictions ARCA believes that this patent strategy may help to exclude generic competition, because the labeling of the drug is expected to include a recommendation to genotype patients, a use covered by the patent applications. Consequently, if the patents are granted and ARCA s patent strategy is successful, ARCA believes that the possibility of generic competition to Gencaro could be significantly reduced until the expiration of these patents, which would be in 2025. ARCA also believes that if these patents are granted, ARCA may be able to extend its initial period of exclusivity under Hatch-Waxman to seven and one-half years from approval, by filing a litigation stay against a company attempting to enter the market with a generic.

The patent positions of biopharmaceutical companies such as ARCA are uncertain and involve complex legal, scientific and factual questions. In addition, the coverage claimed in a patent application can be significantly reduced before the patent is issued. Consequently, ARCA cannot be certain that any of its patent applications will result in the issuance of patents or, if any patents are issued, that they will provide significant market protection or will not be circumvented or challenged and found to be unenforceable or invalid. In some cases, patent applications in the U.S. and certain other jurisdictions are maintained in secrecy until patents issue, and since publication of discoveries in the scientific or patent literature often lags behind actual discoveries, ARCA cannot be certain of the priority of inventions covered by pending patent applications. Moreover, ARCA may have to participate in interference proceedings declared by the U.S. Patent and Trademark Office to determine priority of invention or in opposition proceedings in a foreign patent office, any of which could result in substantial cost to ARCA, even if the eventual outcome is favorable. There can be no assurance that a court of competent jurisdiction would hold any patents issued valid. An adverse outcome could subject ARCA to significant liabilities to third parties, require disputed rights to be licensed from third parties or require ARCA to cease using such technology.

ARCA also relies on trade secret protection for its confidential and proprietary information. ARCA cannot be sure that others will not independently develop substantially equivalent proprietary information and techniques or otherwise gain access to ARCA trade secrets or disclose such technology or that ARCA can meaningfully protect its trade secrets.

ARCA requires its employees, consultants, business partners and members of its scientific advisory board to execute confidentiality agreements upon the commencement of employment, consulting or business relationships with ARCA. These agreements provide that all confidential information developed or made known during the course of the relationship with ARCA be kept confidential and not disclosed to third parties except in specific circumstances. In the case of employees, the agreements provide that all inventions resulting from work performed for ARCA, utilizing the property or relating to the business of ARCA and conceived or completed by the individual during employment shall be the exclusive property of ARCA to the extent permitted by applicable law. There can be no assurance, however, that these agreements will provide meaningful protection or adequate remedies for ARCA trade secrets in the event of unauthorized use or disclosure of such information.

Employees

As of September 30, 2008, ARCA had 44 full-time employees. Most of these employees operate out of ARCA s Broomfield, Colorado location while others operate from home-based offices in other states. None of its employees are represented by any collective bargaining unit. ARCA believes that it maintains good relations with its employees.

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Facilities

ARCA s facilities currently consist of approximately 15,000 square feet of newly constructed office space serving as ARCA s headquarters in Broomfield, Colorado, which is leased until June 2013. ARCA also leases approximately 1,500 square feet of laboratory facilities located in Aurora, Colorado. ARCA believes that these facilities are adequate to meet its current needs.

Legal Proceedings

ARCA is not currently subject to any material legal proceedings.

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MANAGEMENT S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS FOR NUVELO

This Management s Discussion and Analysis of Financial Condition and Results of Operations contains forward-looking statements as defined in the Private Securities Litigation Reform Act of 1995. Words such as anticipate, believes, budget, continue, could, estimate, expect, forecast, intend, may, plan, potential, predicts, project, should, will and similar expressions are intended to identify such forward-looking statements. Actual results and performance could differ materially from those projected in the forward-looking statements as a result of many factors discussed herein and elsewhere including, in particular, those factors described under the Risk Factors set forth above, and in Nuvelo s other periodic reports filed from time to time with the SEC. Actual results and performance could also differ materially from time to time from those projected in Nuvelo s filings with the SEC.

Overview

Nuvelo, Inc. is a biopharmaceutical company dedicated to improving the lives of patients through the discovery, development and commercialization of novel drugs for acute cardiovascular disease, cancer and other debilitating medical conditions. Nuvelo s development pipeline includes NU172, a direct thrombin inhibitor that has completed Phase 1 development for use as a short-acting anticoagulant during medical or surgical procedures, and Phase 1 clinical candidate NU206, a recombinant, secreted protein for the potential treatment of gastrointestinal, or GI, diseases, including cancer therapy induced mucositis and inflammatory bowel disease, in addition to bone disease and wound healing. In addition, Nuvelo has research programs in leukemia therapeutic antibodies and Wnt signaling pathway therapeutics.

NU172

NU172 is a short-acting aptamer, a single-stranded nucleic acid that forms a well-defined three-dimensional shape conceptually similar to an antibody. NU172 was designed to directly inhibit thrombin s ability to stimulate blood clot formation in the setting of medical or surgical procedures where human blood is exposed to foreign materials. Specifically, NU172 is being studied as a potential short-acting anticoagulant for use during procedures such as coronary artery bypass graft, or CABG, surgery, kidney dialysis and a variety of vascular surgical and coronary interventions. Approximately 450,000 CABG procedures and 50 million dialysis procedures are performed annually in the U.S. In these procedures, heparin is often paired with its antidote protamine as the anticoagulation effect of heparin needs to be reversed once the procedure has been completed. Data from the Phase 1 trial and preclinical studies suggest that NU172 has the potential to produce rapid and predictable onset and offset of anticoagulation, work in stagnant blood, avoid thrombocytopenia, and has the potential for non-renal clearance. Due to its short half-life, the effect of NU172 can be rapidly reversed without the need for an antidote.

In August 2008, Nuvelo completed the Phase 1b proof-of-concept trial, demonstrating that NU172 rapidly produced and maintained anticoagulation with a rapid return toward baseline after the infusion ended. The single-center, Phase 1b trial examined the safety, tolerability and pharmacokinetics of intravenous bolus plus infusion dosing of NU172 in 24 healthy male volunteers. Volunteers were given a 2 mg/kg bolus dose followed by escalating infusion doses of NU172 for four hours. In all four cohorts, NU172 produced dose-dependent increases in anticoagulation, measured by activated clotting time, or ACT, prothrombin time, or PT, and activated partial thromboplastin time, or aPTT. The highest infusion dose rate tested, 6.0 mg/kg/hr, resulted in an average ACT per subject ranging from 373 to 414 seconds and an increase of approximately three times baseline. Average PT values per subject ranged from 56 to 92 seconds and had an increase of approximately five times baseline. Average aPTT values per subject ranged from 130 to 178 seconds and had an increase of approximately five times baseline. All measurements were maintained stably throughout the four-hour infusion. Once the infusion ended, the ACT and other coagulation parameters showed a rapid return toward baseline, consistent with the short plasma half-life of NU172 observed in the Phase 1a trial. In addition, NU172 was well-tolerated with no serious adverse events.

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Nuvelo anticipates initiating a Phase 2 study evaluating NU172 in CABG patients in the fourth quarter of 2008 or first quarter of 2009.

Nuvelo is developing NU172 through a collaboration with Archemix Corporation, under which Nuvelo is responsible for development and worldwide commercialization of NU172 and other potential product candidates that may be developed under this collaboration. In February 2008, Nuvelo paid Archemix a $1.0 million milestone fee in connection with the dosing of the first patient in the Phase 1 trial for NU172. If Nuvelo enrolls the first patient in a Phase 2 trial of NU172, which Nuvelo expects may occur before the second quarter of 2009, Nuvelo will be obligated to pay Archemix a $3.0 million milestone fee.

NU206

NU206 (R-spondin1) is a recombinant, secreted protein that acts as a key regulator of the Wnt pathway, a critical pathway that stimulates cell growth and differentiation during homeostasis and pathogenesis in specific tissues including the GI epithelium and bone. NU206 s function is to antagonize an inhibitor of the Wnt pathway, DKK1, thereby turning on the pathway. Preclinical studies suggest it can promote growth and repair in animal models of radiation or cancer chemotherapy induced GI injury, inflammatory bowel disease, bone disease and wound healing. In animal models of GI disease, the effect of NU206 was transient and reversible in normal tissue. Once administration of NU206 is stopped, the epithelium of the intestine reverts to its normal state and does not continue to proliferate.

Nuvelo initiated a Phase 1 single ascending dose trial in healthy volunteers in July 2008 and expect data from the trial in the fourth quarter of 2008. Nuvelo also plans to initiate a Phase 1b multiple ascending dose trial in healthy volunteers in the fourth quarter of 2008 or first quarter of 2009. Nuvelo is currently evaluating partnership and out-licensing opportunities for NU206.

In March 2005, Nuvelo entered into a collaboration agreement with the Kirin Pharma Company, Limited for the development and commercialization of NU206. Under this agreement, all operating expenses and any profits related to the development and commercialization of NU206 are being shared 60 percent by Nuvelo and 40 percent by Kirin.

Research Programs

In addition to Nuvelo s clinical and development-stage drug candidates, Nuvelo has research programs in leukemia therapeutic antibodies and Wnt signaling pathway therapeutics. Nuvelo is currently evaluating partnership and out-licensing opportunities for both of its research programs.

Leukemia Therapeutic Antibody Program

Nuvelo is developing monoclonal antibody, or mAbs, candidates discovered by its leukemia therapeutic antibody program. Nuvelo is completing preclinical studies with a series of chimeric mAbs to select drug candidates for the potential treatment of chronic lymphocytic leukemia and acute mylogenous leukemia.

Wnt Therapeutics Program

The Wnt signaling pathway is critical for regulating cell growth and differentiation during homeostasis and pathogenesis. Nuvelo has developed a comprehensive approach to target key receptors and secreted proteins that modulate the Wnt pathway. In addition, Nuvelo has produced mAbs and secreted recombinant proteins with biological activity in cellular assays and animal disease models. Potential indications include: inflammatory bowel disease, peptic ulcers, mucositis, wound healing, and cancer, as well as bone disorders and osteolytic lesions caused by osteoarthritis and multiple myeloma. Nuvelo s lead candidate in this program is NU206, a Wnt regulator also known as R-Spondin1, which Nuvelo is developing in collaboration with Kirin.

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Results of Operations

Six-Month Period Ended June 30, 2008 Compared to Six-Month Period Ended June 30, 2007

Contract Revenues

Contract revenues were $15.1 million for six months ended June 30, 2008, compared with $46.7 million in the corresponding period of 2007.

In the six months ended June 30, 2008, Nuvelo recorded as revenue $15.0 million that was received from Bayer HealthCare AG, or Bayer, in connection with the termination of its collaboration agreement in June 2007. Following Nuvelo s decision to discontinue further clinical development of alfimeprase, the $15.0 million, which had been recorded as deferred revenue, was recognized as revenue upon the expiration of the notice period, as defined in the termination agreement with Bayer.

In the six months ended June 30, 2007, Nuvelo recorded as revenue $45.8 million of the $50.0 million up-front license fee received from Bayer in January 2006 as a result of the termination of Nuvelo s collaboration agreement in June 2007. The up-front license fee had been recorded as deferred revenue upon receipt and was being recognized on a straight-line basis over the performance period under the agreement, originally estimated to be through September 2020.

Nuvelo expects the quarterly amortization of existing deferred revenue for the remainder of 2008 to be $63,000 due to the ongoing revenue recognition from an up-front license fee received from Kirin under Nuvelo s NU206 collaboration agreement. Nuvelo currently does not have any other sources of revenue. In the future, Nuvelo may not be able to obtain additional collaboration partners or obtain revenue from other sources, which could have a material adverse effect on its revenues, operating results and cash flows.

Research and Development Expenses

Research and development, or R&D, expenses primarily consist of clinical trial and drug manufacturing costs, personnel costs, including related stock-based compensation expense, license, collaboration and royalty fees and allocated facilities expenses.

R&D expenses for Nuvelo s significant programs were as follows for the periods indicated (including up-front fees and collaboration cost-sharing credits, and excluding occupancy costs and stock-based compensation expense):

Program	Since Inception through June 30, 2008	Six Months Ended June 30	
		2008	2007
		(In Millions)	
Alfimeprase	$ 124.0	$ 4.6	$ 4.2
NU172	16.6	3.5	4.5
NU206	12.7	3.1	2.1

R&D expenses were $19.1 million for the six months ended June 30, 2008, compared with $24.0 million for the corresponding period in 2007, net of cost sharing credits billable to collaboration partners of $1.9 million and $4.7 million, respectively. The decrease of $4.9 million in 2008 was primarily attributed to the following: a $2.9 million decrease in expenses related to rNAPc2 due to the suspension of development in 2007, a $1.0 million decrease in NU172-related expenses, and a $1.8 million decrease in employees stock-based compensation expense, partially offset by an increase in expenses related to NU206 of $1.0 million.

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The decrease in NU172-related expenses in 2008 was primarily due to a decrease in manufacturing costs, partially offset by increases in clinical trial and collaboration expenses as a result of the initiation of the Phase 1 and Phase 1b trials. The increase in NU206-related expenses in 2008 was primarily due to increased expenditures in manufacturing, toxicology studies and clinical trials, in preparation for the initiation of the Phase 1 trials.

In addition to the development programs discussed above, Nuvelo has research programs, including leukemia therapeutic antibodies and Wnt therapeutics. For the six months ended June 30, 2008, research expenses totaled $3.6 million, compared with $3.2 million for the corresponding period in 2007.

Nuvelo expects total R&D expenses in the second half of 2008 to be lower than that in the six months ended June 30, 2008, as a result of the reduction in workforce and the discontinuance of alfimeprase programs announced in March 2008.

The timing, cost of completing the clinical development of any product candidate, and any potential future product revenues will depend on a number of factors, including the maintenance of existing collaboration agreements with cost-sharing arrangements, disease or medical condition to be treated, clinical trial design and endpoints, availability of patients to participate in trials and the relative efficacy of the product versus treatments already approved. Due to these uncertainties, Nuvelo is unable to estimate the length of time or the costs that will be required to complete the development of its current product candidates.

General and Administrative Expenses

General and administrative, or G&A, expenses primarily consist of personnel costs, including related stock-based compensation expense, consulting and professional fees, insurance, facilities and depreciation expenses, and various other administrative costs.

G&A expenses were $7.7 million for the six months ended June 30, 2008, compared with $12.6 million in the corresponding period of 2007. The decrease of $4.9 million in 2008 was primarily related to a $3.2 million decrease in personnel-related expenses as a result of a reduction in headcount and a $1.1 million charge related to the impairment of software implementation costs recorded in the 2007 period.

Nuvelo expects G&A expenses in the second half of 2008 to be consistent with or slightly lower than the G&A expenses in the six months ended June 30, 2008.

Restructuring

On March 17, 2008, Nuvelo announced that data from its alfimeprase Phase 2 program in catheter occlusion or CO, known as SONOMA-3, did not show sufficient improvement in catheter opening at the higher dose and concentration evaluated in the study to meet the desired target product profile. As a result, Nuvelo ended further clinical development of alfimeprase, including the programs in CO and acute ischemic stroke, and restructured the company to make additional resources available for Nuvelo s other research and development programs. In connection with the restructuring, Nuvelo reduced its workforce by approximately 19 percent and recorded a restructuring expense of $2.5 million, including $1.3 million of termination benefits and $1.2 million of non-cash stock-based compensation expense for the six months ended June 30, 2008.

Facility Exit Charge

In December 2006, Nuvelo exited the facility located in Sunnyvale, California, and recorded a liability for the remaining lease obligations, less estimated sublease income, for the remainder of the lease term. For the six months ended June 30, 2008, Nuvelo recorded a $1.5 million charge reflecting the change in its sublease assumption, as Nuvelo determined that the likelihood of subleasing the Sunnyvale facility has become remote. Nuvelo will continue to pursue sublease opportunities and make necessary adjustments to the liability if and when Nuvelo enters into a sublease agreement in the future.

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Impairment of Goodwill

In the first quarter of 2008, Nuvelo performed a goodwill impairment test due to the significant decline of its stock price subsequent to the March 17, 2008 alfimeprase announcement discussed above. As a result of the impairment test, Nuvelo determined that goodwill was not impaired as management concluded that the market capitalization following the initial market reaction to the announcement did not provide a good indication of Nuvelo s fair value based on the upward trend in the price of the Nuvelo s common stock following the initial decrease after the announcement and through the filing of the Form 10-Q for the first quarter of 2008.

In the second quarter of 2008, Nuvelo performed an additional goodwill impairment test as the upward trend in the market price of Nuvelo s common stock did not continue and Nuvelo s market capitalization remained lower than its carrying value. As a result of this impairment test, Nuvelo determined that goodwill was impaired as of June 30, 2008. Accordingly, Nuvelo recorded an impairment charge of the full balance of goodwill totaling $4.7 million in the second quarter of 2008 (also see Note 7 to the Nuvelo Condensed Consolidated Financial Statements for the six months ended June 30, 2008).

Interest Income, Net

Interest income, net, was $1.7 million for the six months ended June 30, 2008, compared with $3.6 million in the corresponding period of 2007. The decrease was primarily due to declining balances in cash, cash equivalents and marketable securities and a substantial reduction in the yield on cash equivalents and marketable securities.

Year Ended December 31, 2007 Compared to Year Ended December 31, 2006, and Year Ended December 31, 2006 Compared to Year Ended December 31, 2005.

Contract Revenues

Contract revenues were $46.9 million in 2007, compared to $3.9 million in 2006 and $0.5 million in 2005. The $43.0 million increase in 2007 from 2006 was primarily due to the recognition of the remaining unamortized balance of the $50.0 million up-front license fee received from Bayer in January 2006, as a result of the termination of the collaboration agreement in June 2007, which totaled $44.9 million. The up-front license fee had been recorded as deferred revenue upon receipt and was being recognized on a straight-line basis over the performance period under the agreement, originally estimated to be through September 2020. The $3.4 million increase in 2006 from 2005 was primarily due to the recognition of revenue from the $50.0 million up-front license fee received from Bayer in January 2006.

Research and Development Expenses

	Years Ended December 31,			% Change	% Change
	2007	2006	2005	in 2007	in 2006
	(In thousands)				
Research and development	$ 42,654	$ 89,370	$ 57,778	(52)%	55%

R&D expenses primarily consist of clinical trial and drug manufacturing costs, R&D personnel costs, including related stock-based compensation expense, license, collaboration and royalty fees and allocated facilities expenses.

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R&D expenses for Nuvelo s significant programs were as follows for the periods indicated (including up-front fees and collaboration cost-sharing credits, and excluding occupancy costs and stock-based compensation expense):

Program	Since Inception through December 31, 2007	Years Ended December 31, 2007	2006	2005
			(In millions)	
Alfimeprase	$ 119.4	$ 8.3	$ 49.5	$ 34.8
NU172	13.1	8.0	5.1	
NU206	9.6	3.6	3.3	2.7

The $46.7 million decrease in R&D expense in 2007 as compared to 2006 was primarily due to a significant decrease in alfimeprase development expenses of $41.2 million and reductions of $3.5 million in facilities expenses as a result of the exit charges accrued in December 2006 for the facility in Sunnyvale, California, and $0.9 million in employees stock-based compensation expense, partially offset by an increase in NU172 development expenses of $2.9 million.

The decrease in alfimeprase-related expenses in 2007 was largely due to a $19.0 million charge in 2006 to expense previously capitalized clinical trial supplies related to alfimeprase. The charge was based on a change in estimate related to alternative future uses triggered by the failure of the first trial in each of the two Phase 3 programs for alfimeprase to meet their primary endpoints in 2006. The decrease in 2007 was also due to a significant reduction in clinical trial related expenditures in 2007 as Nuvelo s two alfimeprase Phase 3 trials were suspended during the first half of 2007. Additionally, Nuvelo entered into a Settlement Agreement with its contract manufacturer of alfimeprase in June 2007, pursuant to which certain obligations to this contract manufacturer we had previously accrued in 2006 were reversed. Accordingly, Nuvelo recorded a credit to R&D expenses of approximately $2.9 million, net of cost sharing with Nuvelo s collaboration partner.

The $31.6 million increase in R&D expense in 2006 as compared to 2005 was primarily due to increases in expenses related to alfimeprase, NU172 and NU206 totaling $20.4 million, an increase of $6.5 million in expenses related to rNAPc2, of which the development was suspended in 2007, and an increase in employee stock-based compensation expense of $4.6 million as a result of the implementation of Statement of Financial Accounting Standards No. 123 (revised 2004), *Share-Based Payment* (SFAS 123(R)). The increase in alfimeprase-related expenses in 2006 was primarily due to the $19.0 charge in December 2006 as discussed above.

The timing, cost of completing the clinical development of any product candidate, and any potential future product revenues will depend on a number of factors, including the disease or medical condition to be treated, clinical trial design and endpoints, availability of patients to participate in trials and the relative efficacy of the product versus treatments already approved. Due to these uncertainties, Nuvelo is unable to estimate the length of time or the costs that will be required to complete the development of these product candidates.

General and Administrative Expenses

	Years Ended December 31, 2007	2006	2005	% Change in 2007	% Change in 2006
		(In thousands)			
General and administrative	$ 20,762	$ 30,632	$ 15,805	(32)%	94%

G&A expenses primarily consist of G&A personnel, including related stock-based compensation expense, consulting and professional fees, insurance, facilities and depreciation expenses, and various other administrative costs.

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The $9.9 million decrease in G&A expense in 2007 as compared to 2006 was primarily due to a decrease in personnel costs of $3.7 million, of which $1.5 million was related to employee stock-based compensation expense, as well as reductions of $2.5 million in commercialization-related expenses for alfimeprase and $2.4 million in facilities expenses as a result of the exit charges in 2006 for the facility in Sunnyvale, California.

The $14.8 million increase in G&A expense in 2006 as compared to 2005 was primarily due to a $8.4 million increase in G&A personnel costs, including a $6.6 million increase in employee stock-based compensation expense as a result of the implementation of SFAS 123(R), a $1.9 million increase in outside service and consulting expenses, primarily related to pre-commercialization activities for alfimeprase, and a $1.7 million increase in facilities expenses allocated to G&A.

Facility Exit Charges

In December 2006, Nuvelo ceased use of its facility at 985 Almanor Avenue in Sunnyvale, California, as it was no longer required for its business. In accordance with Statement of Financial Accounting Standards No. 146, *Accounting for Costs Associated with Exit or Disposal Activities* (SFAS 146), on December 31, 2006 Nuvelo recorded a liability of $26.6 million, representing the estimated present value of future lease-related payments through May 30, 2011, less estimated sublease income. A charge of $21.1 million was recorded concurrently to the statement of operations, after deducting the remaining deferred rent of $5.5 million as of December 31, 2006. Additionally, on December 31, 2006, Nuvelo recorded an impairment charge under Statement of Financial Accounting Standards No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets* (SFAS 144), of $3.4 million, being the carrying value of leasehold improvements previously made to this facility plus capitalized restoration costs.

Restructuring Expense

In August 2007, Nuvelo announced a reduction of approximately 30% of its workforce, across its research, clinical development and administrative functions, to realign Nuvelo s organization to focus on core development programs. As a result, Nuvelo recorded a restructuring expense of $2.3 million in 2007, including $1.4 million of termination benefits and $0.9 million of non-cash stock-based compensation expense.

Interest Income, Net

Net interest income was $6.6 million in 2007, as compared to $7.8 million in 2006 and $1.4 million in 2005. The decrease in net interest income in 2007 was primarily due to declining cash and investment balances and lower interest rates. The increase in net interest income in 2006 was primarily due to higher cash and investment balances and higher interest rates.

Cumulative Effect of Change in Accounting Principle

On October 1, 2006, Nuvelo adopted the provisions of FASB Staff Position No. EITF 00-19-2, *Accounting for Registration Payment Arrangements* (EITF 00-19-2), which requires that contingent obligations to make future payments under a registration payment arrangement be recognized and measured separately in accordance with SFAS No. 5, *Accounting for Contingencies.* Under previous guidance, the fair value of the warrant issued to Kingsbridge in August 2005 under Nuvelo s Committed Equity Financing Facility, or CEFF, was recorded as a current liability in Nuvelo s balance sheet, due to a potential cash payment feature in the warrant. The current liability was marked-to-market at each quarter end, using the Black-Scholes option-pricing model, with the change being recorded to general and administrative expenses. Under the new guidance in EITF 00-19-2, as Nuvelo believed the likelihood of such a cash payment to be not probable, Nuvelo did not need to recognize a liability for such obligations. Accordingly, a cumulative-effect adjustment of $2.2 million was made as of October 1, 2006, representing the difference between the initial fair value of this warrant and its fair value as of this date.

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Net Loss

Since Nuvelo s inception, Nuvelo has incurred significant net losses, and as of December 31, 2007, Nuvelo s accumulated deficit was $470.5 million. Nuvelo incurred a net loss of $12.3 million in 2007, as compared to a net loss of $130.6 million in 2006. The decrease in net loss was primarily due to the recognition of the remaining unamortized balance of the Bayer up-front license payment in the second quarter of 2007 and a reduction in R&D and G&A expenses noted above. Nuvelo incurred a net loss $130.6 million in 2006, as compared to $71.6 million in 2005. The increase in net loss resulted primarily from the increases in expenses noted above, including an $11.2 million increase in total employee stock-based compensation expense in 2006 as a result of the implementation of SFAS 123(R), partially offset by higher revenues and interest income.

Liquidity and Capital Resources

	June 30, 2008	December 31, 2007	December 31, 2006
		(In thousands)	
Cash and cash equivalents	$ 42,714	$ 32,061	$ 60,335
Marketable securities	27,333	65,506	92,791
Restricted cash	6,000	6,000	
	$ 76,047	$ 103,567	$ 153,126

As of June 30, 2008, Nuvelo had total cash and cash equivalents, marketable securities and restricted cash of $76.0 million, as compared with $103.6 million as of December 31, 2007. The decrease of $27.6 million resulted primarily from operating expenditures during the period. As of December 31, 2007, Nuvelo had total cash and cash equivalents, marketable securities and restricted cash of $103.6 million, as compared to $153.1 million as of December 31, 2006. The decrease of $49.5 million resulted primarily from operating expenditures during the period.

As of June 30, 2008, all of Nuvelo s investments in marketable securities have been classified as available-for-sale securities, as defined by Statement of Financial Accounting Standards No. 115, *Accounting for Certain Investments in Debt and Equity Securities*. These securities are recorded at their fair value and consist of corporate debt, U.S. government agency and asset-backed securities. Nuvelo makes its investments in accordance with its investment policy. The primary objectives of Nuvelo s investment policy are liquidity and safety of principal.

Cash Flows from Operating, Investing and Financing Activities

	Six Months Ended June 30,		Years Ended December 31,		
	2008	2007	2007	2006	2005
			(In thousands)		
Net cash provided by (used in):					
Operating activities	$ (27,403)	$ (30,794)	$ (45,958)	$ (37,060)	$ (59,035)
Investing activities	37,929	12,640	21,085	(62,064)	(1,175)
Financing activities	127	(1,860)	(3,401)	121,695	81,163
Net increase (decrease) in cash and cash equivalents	$ 10,653	$ (20,014)	$ (28,274)	$ 22,571	$ 20,953

Net cash used in operating activities was $27.4 million in the six months ended June 30, 2008, compared with $30.8 million in the corresponding period of 2007. The decrease of $3.4 million in net cash used in operating activities was primarily due to an overall reduction in R&D and G&A expenses in the 2008 period.

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Net cash used in operating activities was $46.0 million in 2007, as compared to $37.1 million in 2006 and $59.0 million in 2005. The increase of $8.9 million in 2007 was primarily due to the $50.0 million up-front license fee received from Bayer in 2006, partially offset by the $15 million received from Bayer related to the termination of the collaboration agreement and an overall reduction in operating expenses in 2007. The decrease of $22.0 million in 2006 was primarily due to the $50.0 million up-front license fee received from Bayer in 2006, partially offset by an increase in spending primarily related to clinical trials and drug manufacturing for alfimeprase.

Net cash provided by investing activities was $37.9 million in the six months ended June 30, 2008, compared with $12.6 million in the corresponding period of 2007. The increase of $25.3 million was primarily due to a decrease in purchases of marketable securities.

Net cash provided by investing activities was $21.1 million in 2007, as compared to net cash used in investing activities of $62.1 million and $1.2 million in 2006 and 2005, respectively. The change of $83.2 million in 2007 was primarily due to an increase in maturities, net of purchases, of marketable securities, partially offset by a transfer of $6 million to a certificate of deposit to collateralize a letter of credit for the unoccupied facility at 985 Almanor Avenue in Sunnyvale, California. The change of $60.9 million in 2006 was primarily due to an increase in purchases, net of maturities, of marketable securities.

Net cash provided by financing activities was $0.1 million in the six months ended June 30, 2008, compared with net cash used in financing activities of $1.9 million in the corresponding period of 2007. The change was primarily related to the payment in full of bank loans and related party line of credit in 2007.

Net cash used in financing activities was $3.4 million in 2007, as compared to net cash provided by financing activities of $121.7 million and $81.2 million in 2006 and 2005, respectively. In 2007, Nuvelo paid in full the remaining principal balances related to the related party line of credit and the loans from Silicon Valley Bank totaling $3.8 million. In 2006 and 2005, net cash provided by financing activities primarily consisted of net proceeds from public offerings of $112.0 million and $68.4 million, respectively, plus additional net cash proceeds of $10.0 million from a draw-down under the Kingsbridge CEFF in 2006 and $14.2 million from two draw-downs under this facility in 2005.

Sources and Uses of Capital

Nuvelo s primary sources of liquidity to date have been financing activities and collaboration receipts. In order to complete development of Nuvelo s current product pipeline, Nuvelo will need to raise funds through additional public and/or private offerings and collaboration activities in the future. Nuvelo s primary uses of capital resources to date have been to fund operating activities, including research, clinical development and drug manufacturing expenses, license payments, and spending on capital items.

In August 2005, Nuvelo entered into a Committed Equity Financing Facility with Kingsbridge Capital Ltd. under which Kingsbridge committed to purchase up to a total of $75.0 million of Nuvelo s common stock, not to exceed 8,075,000 shares, within a three-year period, subject to certain conditions and limitations. Under the CEFF, Nuvelo sold 1,839,400 shares for gross proceeds of $14.4 million in the fourth quarter of 2005, and a further 568,247 shares for gross proceeds of $10.0 million in October 2006. There has been no further sale of shares to Kingsbridge since October 2006. The CEFF expired on October 13, 2008.

In July 2006, Nuvelo entered into a collaboration agreement with Archemix. Under the agreement, Archemix is responsible for the discovery of short-acting aptamers targeting the coagulation cascade for use in acute cardiovascular procedures, and Nuvelo is responsible for development and worldwide commercialization of these product candidates. If Nuvelo enrolls the first patient in a Phase 2 trial of NU172, which Nuvelo anticipates may occur before the second quarter of 2009, a $3.0 million milestone fee is payable to Archemix. In addition,

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Nuvelo is obligated to purchase Archemix common stock having a value equal to the lesser of $10.0 million or 15 percent of the total gross proceeds raised by Archemix in a qualified public offering of Archemix stock occurring within five years of the effective date of the collaboration agreement.

Nuvelo has a $6.0 million letter of credit issued to the landlord of Nuvelo s Sunnyvale facility as required by the lease agreement of this facility, and the letter of credit is being collateralized by a certificate of deposit of the same amount, which is recorded as restricted cash.

Nuvelo s future capital requirements and the adequacy of available funds will depend on many factors, including those set forth under the Nuvelo Risk Factors section of this proxy/prospectus/consent solicitation. Nuvelo may not be able to secure additional financing to meet its funding requirements on acceptable terms, if at all. If Nuvelo raises additional funds by issuing equity securities, substantial dilution to Nuvelo s existing stockholders may result. If Nuvelo is unable to obtain additional funds, Nuvelo will have to reduce its operating costs and delay its research and development programs. Nuvelo believes that it has adequate balance in cash, cash equivalents and marketable securities to fund its operations for at least the next twelve months.

Contractual Obligations

The following table summarizes Nuvelo s significant contractual obligations as of December 31, 2007, and the effect such obligations are expected to have on Nuvelo s liquidity and cash flow in future periods (in thousands):

	2008	2009	2010	2011	2012	Thereafter	Total
Operating lease obligations(a)	$ 9,741	$ 8,328	$ 8,628	$ 4,979	$ 1,539	$	$ 33,215
Facility restoration obligation	757						757
	$ 10,498	$ 8,328	$ 8,628	$ 4,979	$ 1,539	$	$ 33,972

(a) Amounts represent future minimum rental payments under non-cancelable operating leases for Nuvelo s facilities. It includes approximately $22.9 million in total of future minimum rental payments related to the Sunnyvale facility, of which the fair value of these payments, net of estimated sublease rental income, was classified as Accrued Facility Exit Costs in the consolidated balance sheet as of December 31, 2007.

The foregoing table does not include milestone payments potentially payable by Nuvelo under its collaboration agreements and licenses. Such milestone payments are dependent upon the occurrence of specific and contingent events, and not the passage of time. In February 2008, Nuvelo paid Archemix a $1.0 million milestone fee that was accrued upon dosing of the first patient in the Phase 1 trial for NU172. An additional $3 million milestone is payable to Archemix if Nuvelo enrolls the first patient in a Phase 2 trial of NU172, which may occur before the second quarter of 2009. In addition, Nuvelo s obligation to purchase Archemix common stock having a value equal to the lesser of $10.0 million or 15 percent of the total gross proceeds raised by Archemix in the event of a qualified public offering of their stock, subject to conditions detailed in Nuvelo s collaboration agreement, is also excluded, as it is dependent upon the occurrence of a specific and contingent event.

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Selected Quarterly Financial Data (Unaudited)

Summarized selected quarterly unaudited financial data is as follows (in thousands, except per share amounts):

	Quarter Ended	
	June 30, 2008	March 31, 2008
Contract revenues	$ 15,062	$ 63
Restructuring		2,470
Facility exit charge		1,472
Impairment of goodwill	4,671	
Operating loss	(892)	(19,406)
Net loss	(231)	(18,408)
Basic and diluted net loss per share	(0.00)	(0.34)

	Quarter Ended			
	December 31, 2007	September 30, 2007	June 30, 2007	March 31, 2007
Contract revenues	$ 63	$ 63	$ 45,825	$ 910
Restructuring		2,336		
Operating income (loss)	(13,058)	(15,971)	27,319	(17,181)
Net income (loss)	(11,636)	(14,358)	29,042	(15,349)
Basic and diluted net income (loss) per share*	(0.22)	(0.27)	0.54	(0.29)

	Quarter Ended			
	December 31, 2006	September 30, 2006	June 30, 2006	March 31, 2006
Contract revenues	$ 910	$ 908	$ 1,005	$ 1,065
Facility exit charges	24,460			
Operating loss	(69,589)	(28,794)	(20,955)	(21,235)
Loss before cumulative effect of change in accounting principle	(67,560)	(26,668)	(18,898)	(19,651)
Cumulative effect of change in accounting principle	2,224			
Net loss	(65,336)	(26,668)	(18,898)	(19,651)
Basic and diluted net loss per share*:				
Loss before cumulative effect of change in accounting principle	(1.27)	(0.51)	(0.36)	(0.40)
Basic and diluted net loss per share	(1.23)	(0.51)	(0.36)	(0.40)

* The sum of earnings per share for the four quarters may be different from the full year amount as a result of computing the quarterly and full year amounts based on the weighted average number of common shares outstanding in the respective periods.

Critical Accounting Policies and Estimates

Nuvelo s discussion and analysis of its operating results and financial condition is based upon Nuvelo s consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of the financial statements requires Nuvelo to make estimates, judgments, and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent amounts. While Nuvelo believes Nuvelo s estimates, judgments and assumptions are reasonable, the inherent nature of estimates is that actual results will likely differ from the estimates made. Nuvelo s senior management has reviewed these critical accounting policies and related

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disclosures with Nuvelo s Audit Committee. Nuvelo s significant accounting policies are described in Note 1 to the Consolidated Financial Statements for the year ended December 31, 2007 included elsewhere in this proxy

statement/prospectus/consent solicitation. Nuvelo believes the following critical accounting policies affect Nuvelo s most significant judgments, assumptions, and estimates used in the preparation of Nuvelo s consolidated financial statements and, therefore, are important in understanding Nuvelo s financial condition and results of operations.

Clinical Trial and Drug Manufacturing Expenses

Costs related to clinical trial and drug manufacturing activities are based upon estimates of the services received and related expenses incurred by the contract research organizations, or CROs, clinical study sites, drug manufacturers, collaboration partners, laboratories, consultants, or otherwise. Related contracts vary significantly in length, and may be for a fixed amount, a variable amount based on actual costs incurred, capped at a certain limit, or for a combination of these elements. Nuvelo monitors the activity levels through close communication with the CROs and other vendors, including detailed invoice and task completion review, analysis of expenses against budgeted amounts, and pre-approval of any changes in scope of the services to be performed. Nuvelo may also request certain significant vendors to provide an estimate of costs incurred but not invoiced on a periodic basis. For accrual of expenses related to CROs and clinical study sites, Nuvelo s estimate is based on patient enrollment or progress made against specified milestones or targets in each period. All estimates may differ from the actual amounts subsequently invoiced. No adjustments for material changes in estimates have been recognized in any period presented.

In accordance with Statement of Financial Accounting Standards No. 2, *Accounting for Research and Development Costs* (SFAS 2), Nuvelo capitalizes clinical trial drug manufacturing costs as clinical trial supplies, a current asset on Nuvelo s balance sheet, as long as there are alternative future uses for the related clinical trial drug material in other indications not currently being studied.

In December 2006, as a result of the failure of the first trial in each of two Phase 3 programs for alfimeprase to meet their primary endpoints, Nuvelo suspended enrollment in the second trial in each of these programs. Due to the increased uncertainty over the future of this drug program, Nuvelo s management reassessed the probability of alternative future use of capitalized alfimeprase clinical trial supplies and determined that previously capitalized amounts no longer met the criteria for capitalization under SFAS 2, which represents a change in estimate for accounting purposes. Accordingly, in December 2006, Nuvelo recognized $21.2 million in expense, including $19.0 million related to alfimeprase, and $2.2 million related to other drug programs, as a result of a similar review. During 2007 and the first six months of 2008, Nuvelo determined that there were no alternative future uses of clinical trial supplies for all current drug programs and that all expenditures related to clinical trial supplies were charged to expense as incurred. In the future, Nuvelo will continue to assess whether alternative future use exists for Nuvelo s drugs under development.

Revenue Recognition

Nuvelo recognizes revenue in accordance with Staff Accounting Bulletin No. 104, *Revenue Recognition* (SAB 104), when (i) persuasive evidence of an arrangement exists, (ii) delivery has occurred or services have been rendered, (iii) the price is fixed and determinable, and (iv) collectibility is reasonably assured. In situations where Nuvelo has no continuing performance obligations, or Nuvelo s continuing obligations are perfunctory or inconsequential, Nuvelo recognizes up-front non-refundable fees as revenues on the effective date of the related agreement. Up-front non-refundable licensing fees that require continuing involvement in the form of development, manufacturing or other commercialization efforts by Nuvelo are recognized as revenue ratably over the performance period. Judgment is required in determining this performance period, and the effects of any changes to the estimated period are recognized prospectively.

Nuvelo evaluates revenue from agreements that have multiple elements to determine whether the components of the arrangement represent separate units of accounting as defined in EITF Issue No. 00-21,

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Revenue Arrangements with Multiple Deliverables (EITF 00-21). To recognize revenue for a delivered item in a multiple element arrangement, EITF 00-21 requires that the delivered items have value to the customer on a stand-alone basis, there is objective and reliable evidence of fair value of the undelivered items, and delivery of any undelivered items is probable and within Nuvelo s control if delivered items have a general right of return. The determination that multiple elements in an arrangement meet the criteria for separate units of accounting requires Nuvelo to exercise its judgment.

Stock-based Compensation

Effective January 1, 2006, Nuvelo adopted the provisions of Statement of Financial Accounting Standards No. 123 (revised 2004), *Share-Based Payment* (SFAS 123(R)). SFAS 123(R) establishes accounting for stock-based awards exchanged for employee and non-employee services. Under SFAS 123(R), employee stock-based compensation cost is generally measured at the grant date, based on the fair value of the award, and is recognized as an expense over the employee s requisite service period, net of estimated forfeitures. Nuvelo previously applied Accounting Principles Board Opinion No. 25, *Accounting for Stock Issued to Employees* (APB 25), and related Interpretations to account for employee stock-based compensation, and provided the required pro forma disclosures of SFAS No. 123, *Accounting for Stock-Based Compensation* (SFAS 123). Nuvelo adopted the modified prospective application method as provided by SFAS 123(R). Under the modified prospective method, the fair values of new and previously granted but unvested stock options are recognized as compensation expense in the statement of operations over the related vesting periods from the date of adopting SFAS 123(R), and prior period results are not restated.

Nuvelo uses the Black-Scholes option pricing model as management believes that it is the most appropriate fair-value method for Nuvelo s stock-based awards. The Black-Scholes option pricing model requires assumptions to be made for the expected term of the awards, expected volatility of Nuvelo s stock price, risk-free interest rates and expected dividend yields. These assumptions are highly subjective and involve inherent uncertainties and are based on management s best estimates and judgment. If alternative assumptions are used instead of those presented in the notes to the financial statements, stock-based compensation expense could be materially different from amounts recorded in the financial statements under SFAS 123(R) and disclosed on a pro forma basis under SFAS 123. In addition, under SFAS 123(R) Nuvelo is required to estimate the expected forfeiture rate of awards and only recognize expense for those awards expected to vest. If the actual forfeiture rate is materially different from the estimate, the stock-based compensation expense could be materially different from amounts recorded in the financial statements. For options granted prior to January 1, 2006, Nuvelo continues to use the graded-vested (multiple-option) method for expense attribution. Prior to January 1, 2006, option forfeitures were recognized on a pro forma basis as they occurred. For options granted since January 1, 2006, Nuvelo has been using the straight-line (single-option) method for expense attribution, estimates forfeitures based on historical data and only recognizes expense for those shares expected to vest. Adjustments to the forfeiture rate are made if actual forfeitures differ from previous estimates.

To determine the expected term of the options granted, Nuvelo s uses historical data, including post-vesting termination behavior and the contractual term to estimate future exercises and cancellations. For options granted prior to January 1, 2006, the expected volatility was based solely on the historical volatility of Nuvelo s common stock. For options granted since January 1, 2006, Nuvelo has been using a combination of historic and implied volatility of Nuvelo s common stock in deriving expected volatility. The risk-free interest rate assumptions are based on the yield of U.S. Treasury instruments with similar durations as the expected term of the related awards. The expected dividend yield assumption is based on Nuvelo s historic and expected dividend payouts.

Nuvelo accounts for stock-based compensation expense for consultants based on the fair values estimated using the Black-Scholes model on the date of grant and re-measured at each reporting date until vested, in compliance with Emerging Issues Task Force No. 96-18, Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services. Nuvelo is using the straight-line method in order to expense the value associated with any non-employee awards.

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Goodwill and Other Long-Lived Assets Impairment Assessments

Nuvelo tests goodwill for impairment using a fair value approach at the reporting unit level on an annual basis or when events indicate that the carrying value of the asset may be impaired in accordance with Statement of Financial Accounting Standards No. 142, *Goodwill and other Intangible Assets*, (SFAS 142). Consistent with the determination that Nuvelo has only one reporting segment, it has determined that there is only one reporting unit and, therefore, goodwill is tested at the entity level. Nuvelo has elected October 31st as its measurement date. Nuvelo completed its last annual goodwill tests as of October 31, 2007, and no impairments were recognized.

SFAS 142 requires a two-step test for goodwill impairment. In the first step, Nuvelo compares the fair value of Nuvelo to its carrying value. Nuvelo generally bases its fair value on its market capitalization, which is based on quoted market prices of its common stock, taking into account other factors that may affect the fair value of the Nuvelo as a whole. If the fair value of the Nuvelo exceeds the carrying value of its net assets, goodwill is not impaired and Nuvelo is not required to proceed to the second step of the impairment test.

In the first quarter of 2008, Nuvelo performed a goodwill impairment test due to the significant decline of its stock price subsequent to the announcement on March 17, 2008 to discontinue further clinical development of alfimeprase. Significant judgment is required to evaluate the fair value of a company, as quoted market prices of a company s common stock and consequently market capitalization may experience significant fluctuations in reaction to disclosures of new information about the company. Based on the upward trend in the price of Nuvelo s common stock following the initial decrease after the announcement and through the filing of the Form 10-Q for the first quarter of 2008, Nuvelo concluded that the market capitalization following the initial market reaction to the announcement did not provide a good indication of Nuvelo s fair value. Accordingly, Nuvelo concluded that the carrying value of its net assets at that time did not exceed its fair value and consequently, goodwill was not impaired at March 31, 2008.

In the second quarter of 2008, Nuvelo performed an additional goodwill impairment test as the upward trend in the market price of Nuvelo s common stock did not continue and Nuvelo s market capitalization remained lower than its carrying value. Since the carrying value exceeded the fair value, at June 30, 2008, Nuvelo performed the second step in order to determine the implied fair value of the goodwill and compare it to the carrying value of goodwill. The activities in the second step included valuing the tangible and intangible assets and liabilities of Nuvelo based on their fair value and determining the implied goodwill based upon the difference between the fair value of the reporting unit and the net fair values of identified tangible and intangible assets and liabilities. Based on the results of the second step of calculating the implied goodwill, Nuvelo recorded an impairment charge of the full balance of goodwill totaling $4.7 million.

In accordance with Statement of Financial Accounting Standards No. 144, *Accounting for Impairment or Disposal of Long-Lived Assets*, or SFAS 144, Nuvelo evaluates long-lived assets, other than goodwill, for impairment whenever events or changes in circumstances indicate that the carrying value of an asset may not be recoverable based on expected undiscounted cash flows attributable to that asset. The amount of any impairment is measured as the difference between the carrying value and the fair value of the impaired asset.

Assumptions and estimates about future values and remaining useful lives are complex and often subjective. They can be affected by a variety of factors, including external factors such as industry and economic trends, competition to Nuvelo s products and internal factors such as changes in Nuvelo s business strategy and Nuvelo s internal forecasts. Although Nuvelo believes the assumptions and estimates Nuvelo has made in the past have been reasonable and appropriate, different assumptions and estimates and certain events could materially impact Nuvelo s reported financial results.

Exit and Disposal Activities

Nuvelo records costs and liabilities associated with exit and disposal activities, as defined in SFAS 146, at fair value in the period the liability is incurred. SFAS 146 requires that the estimated future cash flows to be used

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in the fair value calculation be discounted using a credit-adjusted risk-free interest rate and that such interest rate shall have a maturity date that approximates the expected timing of future cash flows. Future cash flows related to lease obligations shall include the effect of sublease rental income and other lease operating expenses. Nuvelo re-evaluates its sublease assumptions on a quarterly basis considering current market data, including vacancy rates and lease activities for similar facilities within the area. In periods subsequent to initial measurement, changes to a liability resulting from changes in sublease assumptions are measured using the same credit-adjusted risk-free rate that was applied in the initial period. In addition, accretion of the liability due to the passage of time is recorded as an expense. Changes to the sublease assumptions may potentially have a significant effect on Nuvelo s financial condition and results of operations.

In December 2006, Nuvelo exited the facility located in Sunnyvale, California, and recorded a liability of $26.6 million related to the remaining lease obligations, less estimated sublease income, for the remainder of the lease term. As of March 31, 2008, Nuvelo determined that the likelihood of subleasing this facility during the remainder of the lease term has become remote and, therefore, recorded an additional $1.5 million charge to reflect such change in the sublease assumption. Nuvelo will continue to pursue sublease opportunities and make necessary adjustments to the liability if and when Nuvelo enters into a sublease agreement in the future.

Income Taxes

Income taxes are accounted for under the liability method pursuant to Statement of Financial Accounting Standards No. 109, *Accounting for Income Taxes* (SFAS 109). Under SFAS 109, deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date.

Nuvelo records a valuation allowance to reduce deferred tax assets to an amount that is more likely than not to be realized. Assessment of the realization of deferred income tax assets requires that estimates and assumptions be made as to the taxable income of future periods. Nuvelo s deferred tax assets have been reduced to zero, as Nuvelo s management believes that it is more likely than not that the deferred tax assets will not be realized. Projection of future period earnings is inherently difficult as it involves consideration of numerous factors such as Nuvelo s overall strategies and estimates of new product development and acceptance, product lifecycles, selling prices and volumes, responses by competitors, manufacturing costs and assumptions as to operating expenses and other industry specific and macro and micro economic factors. In addition, consideration is also given to ongoing and constantly evolving global tax laws and Nuvelo s own tax minimization strategies.

Utilization of Nuvelo s net operating loss and research and development credit carryforwards are subject to an annual limitation under the change in ownership provisions of the Internal Revenue Code of 1986 and similar state law provisions as a result of certain transactions that Nuvelo entered into prior to 2006. If the proposed merger with ARCA is consummated, a change in ownership of Nuvelo will occur and Nuvelo s ability to utilize these carryforwards will be substantially reduced.

On January 1, 2007, Nuvelo adopted the provisions of FASB Interpretation No. 48, *Accounting for Uncertainty in Income Taxes*, *an interpretation of FASB Statement No. 109* (FIN 48). FIN 48 requires that a position taken or expected to be taken in a tax return be recognized in the financial statements when it is more likely than not (i.e. a likelihood of more than fifty percent) that the position would be sustained upon examination by tax authorities. A recognized tax position is then measured at the largest amount of benefit that is greater than fifty percent likely of being realized upon ultimate settlement.

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Recent Accounting Pronouncements

On January 1, 2008, Nuvelo adopted Statement of Financial Accounting Standards (SFAS) No. 157, *Fair Value Measurements* (SFAS 157). SFAS 157 establishes a common definition for fair value to be applied to U.S. GAAP requiring use of fair value, establishes a framework for measuring fair value, and expands disclosure about such fair value measurements. In February 2008, Financial Accounting Standards Board (FASB) issued FASB Staff Position No. FAS 157-2, *Effective Date of FASB Statement No. 157* (FSP 157-2), which delays the effective date of SFAS 157 for all nonfinancial assets and nonfinancial liabilities, except items that are recognized or disclosed at fair value on a recurring basis (at least annually), until fiscal years beginning after November 15, 2008. The implementation of SFAS 157 for financial assets and financial liabilities did not have a material impact on Nuvelo s consolidated financial position and results of operations. Nuvelo is currently assessing the impact of adopting SFAS 157 for nonfinancial assets and nonfinancial liabilities on its financial position and results of operations.

In February 2007, the FASB issued SFAS No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities* (SFAS 159). SFAS 159 allows entities to voluntarily choose, at specified election dates, to measure many financial instruments and certain other items at fair value that are not currently required to be measured at fair value. The effective date for Nuvelo was January 1, 2008. To date, Nuvelo has not elected this fair value option for any assets or liabilities.

In June 2007, the FASB ratified the consensus reached by the Emerging Issues Task Force (EITF) on EITF Issue No. 07-3, *Accounting for Nonrefundable Advance Payments for Goods or Services to Be Used in Future Research and Development Activities* (EITF 07-3). EITF 07-3 addresses the diversity that exists with respect to the accounting for the non-refundable portion of a payment made by a research and development entity for future research and development activities. Under EITF 07-3, an entity would defer and capitalize non-refundable advance payments made for research and development activities until the related goods are delivered or the related services are performed. The effective date for Nuvelo was January 1, 2008. The adoption of EITF 07-3 did not have a material effect on Nuvelo s consolidated financial statements.

In December 2007, the FASB issued Statement 141R, *Business Combinations* (SFAS 141R). SFAS 141R replaces SFAS 141. SFAS 141R requires the acquirer of a business to recognize and measure the identifiable assets acquired, the liabilities assumed, and any non-controlling interest in the acquiree at fair value. SFAS 141R also requires transactions costs related to the business combination to be expensed as incurred. SFAS 141R applies prospectively to business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after December 15, 2008. The effective date for Nuvelo will be January 1, 2009. Nuvelo has not yet determined the impact of SFAS 141R related to future acquisitions, if any, on Nuvelo s consolidated financial statements.

In December 2007, the FASB ratified the consensus reached by the EITF on EITF Issue 07-1, *Accounting for Collaborative Arrangements* (EITF 07-1). EITF 07-1 requires collaborators to present the results of activities for which they act as the principal on a gross basis and report any payments received from (made to) other collaborators based on other applicable GAAP or, in the absence of other applicable GAAP, based on analogy to authoritative accounting literature or a reasonable, rational, and consistently applied accounting policy election. The effective date Nuvelo will be January 1, 2009. Nuvelo has not yet determined the impact of EITF 07-1 on Nuvelo s consolidated financial statements.

Off-Balance Sheet Arrangements

Nuvelo has not participated in any transactions with unconsolidated entities, such as special purpose entities, which would have been established for the purpose of facilitating off-balance sheet arrangements.

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Indemnifications

In the ordinary course of business, Nuvelo enters into contractual arrangements under which Nuvelo may agree to indemnify certain parties from any losses incurred relating to the services they perform on Nuvelo s behalf or for losses arising from certain events as defined within the particular contract. Such indemnification obligations may not be subject to maximum loss clauses. Historically, payments made related to these indemnifications have been insignificant. In addition, Nuvelo has entered into indemnity agreements with each of its directors and officers. Such indemnity agreements contain provisions, which are in some respects broader than the specific indemnification provisions contained in Delaware law. Nuvelo also maintains an insurance policy for its directors and executive officers insuring against certain liabilities arising in their capacities as such.

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NUVELO QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Nuvelo s investments in marketable debt securities are subject to interest rate and credit risks. To minimize the exposure due to an adverse shift in interest rates, Nuvelo invests primarily in short-term securities and maintain an average maturity of 12 months or less. As of June 30, 2008, a hypothetical change in market interest rates by 100 basis points would result in a change in market value of Nuvelo s investment portfolio by approximately $0.1 million and annual interest income by approximately $0.7 million. To minimize its exposure to credit risk, Nuvelo invests in securities with strong credit ratings and has established guidelines relative to diversification and maturity with the objective of maintaining safety of principal and liquidity. Nuvelo does not invest in derivative financial instruments, mortgage-backed securities or auction rate securities, and Nuvelo has not recorded any losses on its securities due to credit or liquidity issues. Nuvelo continues to monitor its credit exposure and may modify its investment guidelines as necessitated by changing market conditions.

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MANAGEMENT S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION

AND RESULTS OF OPERATIONS FOR ARCA

This Management s Discussion and Analysis of Financial Condition and Results of Operations contains forward-looking statements as defined in the Private Securities Litigation Reform Act of 1995. Words such as anticipate, believes, budget, continue, could, estimate, expect, forecast, intend, may, plan, potential, predicts, project, should, will and similar expressions are intended to identify such forward-looking statements. Such statements are based on management s current expectations and involve risks and uncertainties. Actual results and performance could differ materially from those projected in the forward-looking statements as a result of many factors discussed herein and elsewhere including, in particular, those factors described under the Risk Factors. The following discussion and analysis should be read in conjunction with ARCA s financial statements and related notes included elsewhere in this proxy statement/prospectus/consent solicitation.

Overview

ARCA biopharma, Inc. is a biopharmaceutical company developing genetically-targeted therapies for heart failure and other cardiovascular diseases. ARCA s lead product candidate is Gencaro™ (bucindolol hydrochloride), a twice-a-day oral formulation that has been developed for the treatment of chronic heart failure. ARCA believes it has identified common genetic variations that help predict patient response to Gencaro. The FDA accepted ARCA s NDA for Gencaro in September 2008. ARCA believes that Gencaro, if approved, will be the first genetically-targeted cardiovascular drug.

ARCA holds worldwide rights to Gencaro and, if it is approved, plans to commercialize the drug in the U.S., through its own specialized sales force. ARCA may seek commercial partners outside the United States. ARCA has collaborated with Laboratory Corporation of America, or LabCorp, to develop and launch a companion genetic test for Gencaro, in conjunction with any commercialization of Gencaro.

ARCA was incorporated in 2001, reorganized as a Delaware corporation in 2004 and began substantial operations in 2005. ARCA is in the development stage and has incurred net losses since inception. From inception through June 30, 2008, ARCA s activities have been focused primarily on conducting research and development, hiring personnel and raising capital to support these activities. ARCA expects to incur net losses in the future as research and development activities continue and it prepares to commercialize Gencaro.

ARCA s costs associated with Gencaro have represented substantially all of ARCA s research and development expenses to date. For the fiscal years ended December 31, 2007, 2006 and 2005, ARCA s net losses were $14.0 million, $5.2 million and $1.5 million, respectively. For the six months ended June 30, 2008, ARCA s net losses were $7.8 million. As of June 30, 2008, ARCA had $6.9 million in cash and cash equivalents and marketable securities, working capital of $4.8 million and an accumulated deficit since inception of $29.2 million. ARCA expects significant costs for the foreseeable future while it awaits the FDA s decision on the NDA for Gencaro and builds its sales and marketing organization in anticipation of the potential commercial launch of Gencaro.

ARCA has not generated any revenues from sales of commercial products since inception and does not expect to generate any revenues unless and until the NDA for Gencaro is approved. To date, substantially all of ARCA s operations have been funded through the private placement of equity securities and convertible debt. Since inception, ARCA has raised net cash proceeds of $33.0 million from the sales of preferred stock. In August 2008, ARCA drew $4.0 million on its bank line of credit. In October 2008, ARCA sold convertible promissory notes and warrants to purchase common stock for total consideration of $8.75 million.

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Critical Accounting Policies and Estimates

Management s discussion and analysis of ARCA s financial condition and results of operations is based on ARCA s financial statements, which have been prepared in accordance with U.S. generally accepted accounting principles. The preparation of these financial statements requires ARCA to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements as well as the reported expenses during the reporting periods. ARCA bases its estimates on various assumptions that are believed to be reasonable under circumstances, and evaluates its estimates and judgments on an ongoing basis. Actual results may differ materially from these estimates.

ARCA believes that the following accounting policies and estimates are most critical to a full understanding and evaluation of ARCA s reported financial results.

Cash and Cash Equivalents

ARCA considers all highly liquid investments purchased with original maturities of three months or less to be cash equivalents. ARCA s cash and cash equivalents are maintained at two financial institutions in the U.S. Deposits held with these financial institutions may, from time to time, exceed the amount of insurance provided on such deposits.

Long Lived Assets and Impairments

ARCA reviews long lived assets for impairment whenever events or changes in circumstances indicate that the carrying value of such assets may not be recoverable. Management believes that there is no indication that an impairment of its long lived assets has occurred from ARCA s inception on December 17, 2001 through June 30, 2008. As a development stage company, ARCA has not generated positive cash flows from operations, and such cash flows may not materialize for a significant period into the future, if ever. Additionally, ARCA may make changes to its business plan that would result in changes to expected cash flows from long lived assets. As a result, it is reasonably possible that future evaluations of long lived assets may result in an impairment.

Accrued Expenses

As part of the process of preparing its financial statements, ARCA is required to estimate accrued expenses. This process involves identifying services that third parties have performed on ARCA s behalf and estimating the level of service performed and the associated cost incurred for these services as of the balance sheet date. Examples of estimated accrued expenses include contract service fees, such as fees payable to contract manufacturers in connection with the production of materials related to drug product, and professional service fees, such as attorneys and consultants. ARCA develops estimates of liabilities using its judgment based upon the facts and circumstances known and accounts for these estimates in accordance with accounting principles involving accrued expenses generally accepted in the U.S.

Research and Development Costs

ARCA s research and development expenses consist primarily of salaries and related employee benefits, costs associated with regulatory activities, including the costs of contract research organizations, upfront license fees and milestone payments for acquired product rights that have not been developed into saleable products or approved by regulatory agencies, and which have no future alternative use. Research and development costs are expensed as incurred. ARCA has issued shares of common stock in exchange for certain licenses and sublicenses. Total research and development expense recorded for the fair value of these issuances was $20,028, $149,841, $44,132 and $214,001 in 2007, 2006, 2005 and the period from inception through December 31, 2007, respectively. No shares were issued for licenses and sublicenses in 2008.

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To date, ARCA s major research and development project has been the regulatory filing of the Gencaro NDA with the FDA. On July 31, 2008 ARCA submitted the Gencaro NDA to the FDA and the submission was accepted and filed by the FDA in September 2008. ARCA anticipates a determination with respect to the NDA from the FDA in the second quarter of 2009. ARCA has spent approximately $19.7 million on research and development from ARCA s inception through June 30, 2008, a substantial majority of which was related to the Gencaro NDA. Included in these total expenditures are licensing costs for the active pharmaceutical ingredient, or API, of Gencaro, bucindolol, of $1.0 million. In August 2008, ARCA made a milestone payment of $500,000 to the licensor of such rights based on the July 31, 2008 submission of its NDA. If ARCA obtains approval from the FDA it will owe an additional milestone royalty of $8.0 million to this licensor and must make the payment within 180 days after receiving approval.

ARCA could incur additional costs in defense of its NDA. These costs could be significant but are not currently estimable or certain. The FDA could also require ARCA to do additional research and development work, the scope and cost of which are not currently foreseeable or certain. If ARCA is required to perform additional research and development work, the costs and time related to which could be significant, then the commercialization of Gencaro and ARCA s ability to generate revenues will also be delayed.

Share-Based Compensation

Prior to January 1, 2006, ARCA accounted for employee stock options using the intrinsic-value method in accordance with Accounting Principles Board Opinion No. 25, *Accounting for Stock Issued to Employees*, and related interpretations, or APB No. 25. In accordance with APB No. 25, stock-based compensation was calculated using the intrinsic-value method and represented the difference between the estimated fair value of ARCA common stock and the per share exercise price of the stock option at the grant date. Based on this method, ARCA did not incur any compensation expense under APB No. 25. Effective January 1, 2006, ARCA adopted SFAS 123(R), *Share-Based Payment*, using the prospective transition method, which requires the measurement and recognition of compensation expense for all share-based payment awards granted or modified to employees and directors after January 1, 2006, based on the estimated fair value of the award at the grant date. The fair value of stock options is estimated using the Black-Scholes option pricing model. This model requires the input of subjective assumptions, including expected stock price volatility, expected life and estimated forfeitures of each award. Management believes its assumptions regarding these inputs are reasonable. The estimated grant-date fair value of stock-based awards is amortized over the vesting period of the award, and ARCA has elected to use the straight-line method of amortization. Due to the limited amount of historical data available to ARCA, particularly with respect to stock-price volatility, employee exercise patterns and forfeitures, future estimates of grant-date fair value could utilized different assumptions, and actual forfeiture rates could differ from those estimated through June 30, 2008.

Information regarding ARCA s stock option grants for the years ended December 31, 2006 and 2007, and the six months ended June 30, 2008 is summarized as follows:

Stock Option Grant Date	Number of Options Granted	Exercise Price
August 3, 2006	302,400	$ 0.15
November 2, 2006	1,186,199	$ 0.15
February 2, 2007	285,821	$ 0.28
May 3, 2007	126,500	$ 0.30
November 1, 2007	94,000	$ 0.31
February 12, 2008	803,500	$ 0.31
May 2, 2008	75,000	$ 0.31
May 5, 2008	29,800	$ 0.31

In evaluating the fair value of ARCA s common stock, ARCA followed procedures that are consistent with the recommendations of the American Institute of Certified Public Accountants Technical Practice Aid regarding

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Valuation of Privately Held Company Equity Securities Issued as Compensation, or the AICPA Practice Aid, and the SEC staff commentary set forth in the Division of Corporation Finance, *Current Accounting and Disclosure Issues* dated August 31, 2001, Part II *Other Current Accounting and Disclosure Issues*, and Paragraph I *Valuing Equity Instruments*.

ARCA s board of directors, with the assistance of management, performed contemporaneous fair value analyses of the estimated fair value of ARCA s common stock at or near the time of each stock option grant. Determining the fair value of ARCA common stock required complex and subjective judgments, assumptions and estimates. Given the absence of any trading market for ARCA s common stock, uncertainty of the results of regulatory approval, and other risk and factors affecting ARCA, ARCA s board of directors, with input from management, determined the estimated fair value of its common stock on the date of the grant of stock options based on several factors, including:

- ARCA s actual financial condition and results of operations during the relevant period;
- ARCA s future financial outlook;
- uncertainties involved in gaining regulatory approval to market Gencaro;
- the progress of ARCA s business model, including the status of ARCA s efforts to recruit and retain the talent required to support ARCA s business objectives and strategies;
- ARCA s capitalization;
- the price at which ARCA last issued convertible preferred stock and the rights and preferences associated with those and previously issued preferred stock;
- the illiquidity of ARCA s common stock as a private company;
- the likelihood of achieving a liquidity event for shares of ARCA s common stock, such as an acquisition of ARCA or becoming a publicly traded company in the imminent future;
- ARCA s competitive position in the marketplace;
- research concerning the biotechnology industry;
- research and comparative analysis of similar public companies; and
- general economic conditions and the outlook for the US economy.

Grants Made on August 3, 2006

For the stock-based awards granted in August 2006, ARCA s board of directors, based on relevant factors, concluded that the fair value of ARCA s common stock was $0.15 per share at the time of grant. The main factors accounting for the increase in value were:

- ARCA s progress in constructing a knowledgeable and experienced regulatory management team to assist with the NDA for Gencaro, including the hiring an Executive Vice President of Regulatory Affairs in July 2006; and
- an evaluation of the risks related to the filing of ARCA s Gencaro NDA, and the impact that filing delays encountered in the second quarter of 2006 would have on ARCA s business plan and value.

Grants Made on November 2, 2006

For the stock-based awards granted in November 2006, ARCA s board of directors, based on relevant factors, concluded that the fair value of ARCA s common stock was $0.15 per share at the time of grant. The estimated value of common stock was unchanged primarily because of the following factors:

- delays in the submission of the Gencaro NDA as a result of new analyses by the ARCA regulatory team;

increases in the cost estimate to complete the Gencaro NDA of $1.4 million; and

receipt of additional guidance from the FDA regarding ARCA s upcoming submittal of the Gencaro NDA.

Grants Made on February 2, 2007

For the stock-based awards granted in February 2007, ARCA s board of directors, based on relevant factors, concluded that the fair value of ARCA s common stock was $0.28 per share at the time of grant. The main factors for the increase in value were:

the closing of the second tranche of the Series A preferred financing in December 2006, providing $5 million of capital to fund its programs for the coming year;

the hiring in November 2006 of an experienced, pharmaceutical and biotechnology executive to assume the role of President and Chief Executive Officer;

the hiring in October 2006 of an Executive Vice President of Pharmaceutical Operations to manage the Chemistry, Manufacturing and Controls sections of the NDA and ARCA s manufacturing requirements in preparation for the commercialization of Gencaro;

continued guidance from the FDA regarding its upcoming submittal of the Gencaro NDA; and

the anticipated Gencaro NDA timeline, which was unchanged as ARCA expected feedback from the FDA on the clinical component in the second half of 2007 and a response on the complete NDA filing for Gencaro in the second quarter of 2008.

Grants Made on May 3, 2007

For the stock-based awards granted in May 2007, ARCA s board of directors, based on relevant factors, concluded that the fair value of ARCA s common stock was $0.30 per share at the time of grant. The reasons for the increase in value were:

continued incremental progress on the filing of the Gencaro NDA. ARCA was still on target to submit its NDA filing in June or July of 2007 and expected feedback from the FDA on the clinical component in the second half of 2007 with the results of the full NDA filing expected in the second quarter of 2008;

execution of a contract with LabCorp, one of the largest clinical laboratories in the U.S., to develop, gain regulatory approval of and commercialize the companion genetic test for Gencaro;

a pending additional equity funding of approximately $15.0 to $25.0 million in a Series B redeemable convertible preferred stock to continue to support the Gencaro NDA submission and related research and development;

the determination of ARCA s management that ARCA would require a total of approximately $80.0 million in financing through 2009 (including the projected Series B financing) to meet ARCA s financial obligations; and

the availability of a pending bank line of credit of approximately $4.0 to $5.0 million.

Grants Made on November 1, 2007

For the stock-based awards granted in November 2007, ARCA s board of directors, based on relevant factors, concluded that the fair value of ARCA s common stock was $0.31 per share at the time of grant. The reason for the increase in value, despite a six-month delay in the Gencaro NDA submission until December 2007 and an additional associated costs, was the closing of the Series B preferred stock financing in May 2007, of which $9.0 million had been funded in May, and the remaining $9.0 million was contingent upon the satisfactory review and adjudication of certain clinical trial data.

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Grants Made on February 12, 2008 and May 5, 2008

For the stock-based awards granted in February 2008 and May 2008, ARCA s board of directors, based on relevant factors, concluded that the fair value of ARCA s common stock was $0.31 per share at the time of each grant. The main factors for maintaining the value during this period were:

- the closing of the second tranche of the Series B preferred stock financing of $9.0 million upon satisfactorily meeting investor milestones related to the clinical trial data;
- an additional three-month delay in the Gencaro NDA submission with a projected submission date of March 2008; and
- revised financial projections for 2008 through 2011, reflecting a one-year shift in the commencement of commercialization and generation of revenue resulting from the delay in filing the Gencaro NDA.

Board Experience

ARCA s board of directors includes individuals with significant business, finance and/or venture capital experience. During the periods set forth above, ARCA s board of directors was comprised of several individuals with experience in valuing early stage biopharmaceutical companies and pricing stock options. These board members are familiar with the valuations of biopharmaceutical companies entering the public market, as well as with the market for the acquisition of biopharmaceutical companies similar to ARCA s stage of development.

Warrants for Series B-1 Redeemable Preferred Stock and Series B-2 Redeemable Preferred Stock

On January 1, 2006, ARCA adopted SFAS No. 150, *Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity*, and related FASB Staff Position 150-5, *Issuer s Accounting under FASB Statement No. 150 for Freestanding Warrants and Other Similar Investments on Shares That Are Redeemable*, or FSP 150-5. In July 2007, ARCA issued warrants to purchase 31,790 shares of Series B-1 redeemable preferred stock to a financial institution in connection with a credit facility. The warrants have an exercise price of $2.43975 per share, a 10 year life and were fully vested and exercisable at the time of grant. ARCA also issued warrants to purchase 24,592 shares of its Series B-2 redeemable preferred stock in August 2008 in connection with the draw down of the full balance of the credit facility. The warrants have an exercise price of $3.253 per share, a 10 year life and were fully vested and exercisable at the time of grant.

In accordance with FSP 150-5, the warrants are reported as long-term liabilities at their estimated fair value at the time of issuance. At each reporting period, ARCA updates the estimated fair value of the warrants based upon current valuation factors, and the change in the estimated fair value is reported in the statement of operations. Fair value is estimated using assumptions that management believes are reasonable.

Upon the closing of the merger, all warrants to purchase ARCA capital stock will be assumed by Nuvelo and will become warrants to purchase a number of shares of Nuvelo common stock calculated in accordance with the exchange ratio set forth in the merger agreement. At such time, the estimated fair value of such warrants will be re-classified to equity.

Redeemable Convertible Preferred Stock

ARCA s redeemable convertible preferred stock is classified on its balance sheet between liabilities and stockholders deficit as the holders of the redeemable convertible preferred stock have the right to request redemption in the future if certain classes of stockholders vote in favor of such redemption. Immediately prior to the closing of the merger, all of ARCA s outstanding shares of preferred stock and convertible promissory notes will convert into shares of common stock and the redemption right and rights in liquidation will terminate.

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Income Taxes

The current provision for income taxes represents actual or estimated amounts payable or refundable on tax returns filed or to be filed each year. Deferred tax assets and liabilities are recognized for the estimated future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carryforwards. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the period that includes the enactment date. The overall change in deferred tax assets and liabilities for the period measures the deferred tax expense or benefit for the period. The measurement of deferred tax assets may be reduced by a valuation allowance based on judgmental assessment of available evidence if deemed more likely than not that some or all of the deferred tax assets will not be realized. ARCA has recorded a valuation allowance against all of its net deferred tax assets, as management is unable to conclude that it is more likely than not that the net deferred tax asset will be realized through future taxable income, based primarily on ARCA s history of operating losses.

Results of Operations

Six-Month Period Ended June 30, 2008 Compared to Six-Month Period Ended June 30, 2007

Research and Development Expenses

Research and development expenses were $4.6 million for the six months ended June 30, 2008, as compared to $4.7 million for the corresponding period in 2007. Costs associated with ARCA s regulatory operations decreased by $859,000 because work on the Gencaro NDA was nearing completion. The decrease in regulatory costs was largely offset by cost increases of approximately $711,000 during the six months ended June 30, 2008 as ARCA expanded its quality assurance, clinical operations and medical affairs activities in anticipation of the commercialization of Gencaro. ARCA s NDA for Gencaro was submitted to the FDA in July 2008.

Research and development expenses are expected to increase for the remainder of 2008 as ARCA:

- completes selected Phase I clinical trials for Gencaro;
- initiates additional manufacturing and process controls projects for tableting and packaging Gencaro to support Gencaro s anticipated commercial launch timeline, assuming the Gencaro NDA is approved by the FDA; and
- incurs consulting and advisory services costs in support and defense of ARCA s NDA for Gencaro.

Selling General and Administrative Expenses

Selling, general and administrative expenses were $3.4 million for the six months ended June 30, 2008, as compared to $2.0 million for the corresponding period in 2007. The $1.4 million increase was primarily due to increased personnel costs related to the development of ARCA s commercial organization. ARCA also incurred additional costs for consulting and professional services associated with developing ARCA s commercialization strategy such as market research, branding and continuing medical education programs. ARCA expects its marketing and sales related costs to continue to increase during the remainder of 2008 and in future periods as ARCA expands its sales and marketing organization to support the anticipated potential commercialization of Gencaro. General and administrative costs are expected to increase as a result of increased compensation costs, as well as additional legal, accounting, insurance and other professional services costs relating to the compliance obligations associated with the merger and with operating as a public company.

Interest and Other Income

Interest and other income was $173,000 for the six months ended June 30, 2008, as compared to $210,000 for the corresponding period in 2007. The decrease was primarily due to reduced cash balances throughout the six month period ended June 30, 2008 as compared to the corresponding period in 2007.

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Interest and Other Expense

Interest expense was $39,000 for the six months ended June 30, 2008, as compared to $0 for the corresponding period in 2007. The increase was due to $39,000 in interest expense reflecting the increase in estimated fair value of the warrants to purchase shares of Series B-1 preferred stock issued to ARCA s lender in July 2007 in connection with its credit facility.

Year Ended December 31, 2007 Compared to Year Ended December 31, 2006

Research and Development Expenses

Research and development expenses were $10.2 million for the year ended December 31, 2007 compared to $4.0 million for the year ended December 31, 2006. Increased personnel and related costs accounted for approximately $1.7 million of the cost increase. ARCA increased its headcount in the second half of 2006 and in 2007 to expand its regulatory capabilities to prepare the Gencaro NDA for submission. In addition to ARCA s own personnel, ARCA also increased its utilization of outside professional services, such as contract manufacturers, contract research organizations, or CROs, and consultants in connection with the preparation of the Gencaro NDA. These activities accounted for approximately $5.7 million of increased costs. ARCA s licensing costs decreased approximately $1.2 million in 2007 because the fees paid in 2006 for ARCA s initial licensing of the API for Gencaro and related technology were non-recurring costs.

Selling General and Administrative Expenses

Selling, general and administrative expenses were $4.2 million for the year ended December 31, 2007, as compared to $1.5 million for the year ended December 31, 2006. The increase was primarily due to increased personnel costs of approximately $1.6 million related to staffing to support ARCA s growth, approximately $1.1 million of costs for market research, business development activities and professional service fees, which were principally legal expenses related to general corporate and licensing activities and patent filings.

Interest and Other Income

Interest and other income was $468,000 for the year ended December 31, 2007, as compared to $287,000 for the year ended December 31, 2006. The increase was due to higher overall cash balances throughout 2007 as compared to 2006. In May and December 2007, ARCA sold shares of its Series B preferred stock in preferred stock financings yielding aggregate net proceeds of $17.9 million.

Interest and Other Expense

Interest expense was $8,000 for the year ended December 31, 2007, as compared to $5,000 for the year ended December 31, 2006. Interest expense in 2007 related to amortization of financing costs for a credit facility obtained in July 2007. Interest expense in 2006 related to interest on convertible notes payable. These notes were fully converted to Series A preferred stock in February 2006.

Year Ended December 31, 2006 Compared to Year Ended December 31, 2005

Research and Development Expenses

Research and development expenses were $4.0 million for the year ended December 31, 2006 compared to $846,000 for the year ended December 31, 2005. Increased costs for professional services, such as CROs and consultants, accounted for approximately $1.4 million of additional expenses. Research and development activities in 2006 included the acceleration of ARCA s clinical regulatory efforts for Gencaro, the design of ARCA s manufacturing and process development strategy and the selection of ARCA s manufacturing vendors for Gencaro. Licensing expense increased approximately $1.2 million as ARCA incurred initial licensing costs

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for the API for Gencaro and for technology to develop Gencaro. Personnel and related costs comprised approximately $500,000 of the increase due to the hiring of additional senior management and staff needed to develop Gencaro.

Selling, General and Administrative Expenses

Selling, general and administrative expenses were $1.5 million for the year ended December 31, 2006, as compared to $569,000 for the year ended December 31, 2005. Approximately $350,000 of the increase was attributable to increased personnel and related costs for staff necessary to support ARCA s growth, including recruiting and hiring ARCA s current chief executive officer. The remaining cost increase consisted primarily of consulting, legal and other professional service costs for strategic business development and commercialization planning, as well as legal expenses related to general corporate and licensing activities and patent filings.

Interest and Other Income

Interest and other income was $287,000 for the year ended December 31, 2006, as compared to $0 for the year ended December 31, 2005. The increase was due to higher overall cash balances throughout 2006 as compared to 2005. In February and December 2006, ARCA sold shares of its Series A preferred stock in preferred stock financings for aggregate net proceeds of $14.9 million.

Interest and Other Expense

Interest expense was $5,000 for the year ended December 31, 2006, as compared to $44,000 for the year ended December 31, 2005. The decrease was due to interest expense that ceased to incur on convertible notes payable when such notes were converted to Series A preferred stock in 2006.

Liquidity and Capital Resources

Sources and Used of Capital

ARCA has incurred losses since its inception in 2001. As of June 30, 2008, ARCA had an accumulated deficit of $29.2 million. ARCA has funded its operations to date principally from private placements of equity securities and convertible notes totaling $33.0 million through December 31, 2007. As of June 30, 2008, ARCA had $6.9 million in cash and cash equivalents. In addition, ARCA has a $4.0 million revolving credit facility in place which it drew down in full in August 2008 to fund its operations. Current investors have also provided debt financing totaling $8.75 million in principal amount of notes and in consideration for related warrants in a bridge loan financing that was completed in October 2008. These notes, plus accrued interest, will convert into ARCA common stock immediately prior the closing of the merger equal to the amount of unpaid principal and interest due as of the date of conversion divided by the conversion price. The conversion price is equal to the lesser of: (i) $3.253 or (ii) the product of (a) the average closing price of Nuvelo common stock on the Nasdaq Global Market for the five consecutive trading days immediately preceding (but not including) the date the merger is consummated and (b) the Exchange Ratio; provided, however that in no event will the conversion price be less than $1.6265. In connection with the issuance of these notes, ARCA also issued warrants to purchase shares of common stock. The warrants are exercisable for a number of shares of ARCA s common stock determined by dividing (i) 20% of the sum of the principal amount of each note plus the consideration paid for the warrants divided by (ii) the conversion price of the notes. The warrants have an exercise price equal to the conversion price of the notes and have a five-year exercise period.

As of June 30, 2008, ARCA had total cash and cash equivalents of $6.9 million, as compared with $15.9 million as of December 31, 2007. The decrease of approximately $9.0 million resulted primarily from operating expenditures during the period. As of December 31, 2007, ARCA had total cash and cash equivalents of $15.9

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million, as compared to $9.7 million as of December 31, 2006. The increase of $6.2 million is the net effect of ARCA s Series B preferred stock financing of $18.0 million completed during the year offset by operating expenditures during the period.

Cash Flows from Operating, Investing and Financing Activities

Net cash used in operating activities was $7.9 million in the six months ended June 30, 2008, compared with $6.0 million in the corresponding period of 2007. The increase of $1.9 million in net cash used in operating activities was primarily due to an overall increase in the selling general and administrative expenses attributable to increased work on the Gencaro NDA.

Net cash used in operating activities was $11.6 million in 2007, as compared to $4.7 million in 2006 and $1.4 million in 2005. The increase of $6.9 million in 2007 was primarily due to the growth of the organization and increased work on the Gencaro NDA filing resulting in increases in overall operating expenses. The increase of $3.3 million in 2006 was also attributable to overall growth of ARCA as it completed its Series A preferred stock financing in 2006 and initiated work on the Genacaro NDA.

Net cash used in investing activities was $1.0 million in the six months ended June 30, 2008, compared with $67,000 in the corresponding period of 2007. The increase of approximately $900,000 was primarily due to an increase in capital expenditures associated with ARCA s move of its principal corporate offices. Net cash used in investing activities was $120,000 in 2007, as compared to net cash used in investing activities of $122,000 and $24,000 in 2006 and 2005, respectively. The net cash used in investing activities in each of these years was used to purchase property and equipment to support the growth of the organization.

Net cash provided by financing activities was $6,000 in the six months ended June 30, 2008, compared with net cash provided by financing activities of $8.9 million in the corresponding period of 2007. In May 2007, ARCA completed the sale of $9 million of its Series B preferred stock. In the six months ended June 30, 2008, the only financing activity was attributable to the exercise of stock options held by employees.

Net cash provided by financing activities was $17.9 million in 2007, as compared to net cash provided by financing activities of $14.1million and $1.6 million in 2006 and 2005, respectively. The 2007 activity reflects ARCA s sale of Series B preferred stock during the year. In 2006, the activity reflects ARCA s sale of Series A preferred stock. The 2005 activity includes the issuance of convertible notes payable that were converted to common stock during the year.

From ARCA s inception through June 30, 2008, ARCA has obtained $34.1 million through financing activities, and utilized $25.8 million in funding its operating activities and $1.4 million in purchasing property and equipment.

ARCA anticipates that it will continue to incur substantial net losses for the next several years as it develops Gencaro, prepares for a potential commercial launch of Gencaro and expands its corporate infrastructure. ARCA does not anticipate generating any revenues until after it receives regulatory approval from the FDA for Gencaro.

ARCA believes that its current cash and cash equivalents and credit facilities will be sufficient to satisfy its anticipated cash needs for working capital and capital expenditures through February 2009, without regard to the merger. ARCA s future capital requirements depend on a number of factors, including, but not limited to, the following:

- timing and outcomes of regulatory approvals, in particular the approval of ARCA s NDA for Gencaro by the FDA;
- the costs of establishing or contracting for marketing and sales capabilities, including the establishment of ARCA s own sales force;

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the extent to which ARCA is able to acquire or in-license new products, technologies or businesses;

the costs of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights; and

the terms and timing of any additional collaborative, strategic partnership or licensing agreements that ARCA may establish.

If ARCA s available cash and cash equivalents and funding received or made available are insufficient to satisfy its liquidity requirements, or if ARCA develops additional products or pursues additional applications for its products or conduct additional clinical trials beyond those currently contemplated, ARCA may seek to sell additional equity or incur additional indebtedness. The sale of additional equity or convertible debt securities may result in additional dilution to ARCA s stockholders. If ARCA raises additional funds through the incurrence of additional indebtedness, the obligations related to such indebtedness would be senior to rights of holders of ARCA capital stock and could contain covenants that would restrict ARCA s operations. ARCA may require additional capital beyond its currently forecasted amounts. Any such required additional capital may not be available on reasonable terms, if at all. If ARCA is unable to obtain additional financing, it may be required to modify or limit its planned research, development and commercialization strategies, which could adversely affect its business.

Contractual Obligations

ARCA s future contractual obligations, including financing costs, as of December 31, 2007, included the following:

		Payments Due by Period			
	Total	Less than 1 Year	1-3 Years	3-5 Years	More than 5 Years
			(in thousands)		
Operating lease obligations	$ 131	$ 131	$	$	$

The above table reflects only payment obligations that are fixed and determinable. ARCA s commitments for operating leases relate to the lease for its office and laboratory facilities in Colorado.

As of October 1, 2008 ARCA had incurred additional payment obligations which are fixed and determinable. These obligations, as of October 1, 2008, are summarized in the following table:

		Payments Due by Period			
	Total	Less than 1 Year	1-3 Years	3-5 Years	More than 5 Years
			(in thousands)		
Operating lease obligations(1)	$ 1,359	$ 266	$ 727	$ 366	$
Note payable(2)	4,000	1,616	2,384		
	$ 5,359	$ 1,882	$ 3,111	$ 366	$

(1) On February 8, 2008, ARCA entered into a lease agreement for approximately 15,000 square feet of newly constructed office space in Broomfield, Colorado.

(2) On August 19, 2008, ARCA drew the full $4.0 million balance of its credit facility. Repayment of the loan begins January 1, 2009.

In addition to the amounts in the above tables, in August 2008 ARCA paid CPEC $500,000 in recognition of a milestone royalty due based on the July 31, 2008 submission of the ARCA s NDA with the FDA. If the Gencaro NDA is approved by the FDA, ARCA will be obligated to pay CPEC an additional milestone royalty of $8 million payable with 180 days of receiving approval from the FDA.

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Recent Accounting Pronouncements

Effective January 1, 2008, ARCA adopted SFAS No. 157, *Fair Value Measurements.* In February 2008, the FASB issued FASB Staff Position No. FASB 157-2, *Effective Date of FASB Statement No. 157*, which provides a one-year deferral of the effective date of SFAS No. 157 for non-financial assets and non-financial liabilities, except those that are recognized or disclosed in the financial statements at fair value at least annually. SFAS No. 157 defines fair value, establishes a framework for measuring fair value under generally accepted accounting principles and expands disclosures about fair value measurements. SFAS No. 157 applies under other accounting pronouncements that require or permit fair value measurements and does not require any new fair value measurements. The standard describes a fair value hierarchy based on three levels of inputs, the first two of which are considered observable and the last unobservable, that may be used to measure fair value. The adoption of SFAS No. 157 had no impact on ARCA s financial statements.

In December 2007, the FASB issued SFAS No. 141(R), *Business Combinations*, and SFAS No. 160, *Accounting and Reporting of Noncontrolling Interest in Consolidated Financial Statements*, *an amendment of ARB No. 51*. These new standards will significantly change the financial accounting and reporting of business combination transactions and noncontrolling, or minority, interests in consolidated financial statements. As discussed previously in the Selected Unaudited Pro Forma Condensed Combined Financial Data section, if the acquisition were consummated in 2009, SFAS No. 141(R) would apply and would significantly change the accounting for, and reporting of the transaction from what is presented in the Unaudited Condensed Combined Financial Data.

Off-Balance Sheet Arrangements

Since its inception, ARCA has not engaged in material off-balance sheet activities, including the use of structured finance, special purpose entities or variable interest entities.

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ARCA QUALITATIVE AND QUANTITATIVE DISCLOSURES ABOUT MARKET RISK

ARCA s exposure to market risk is confined to its cash, cash equivalents that have original maturities of less than three months. The primary objective of ARCA s investment activities is to preserve its capital for the purpose of funding operations while at the same time maximizing the income it receives from its investments without significantly increasing risk. To achieve these objectives, ARCA s investment policy allows ARCA to maintain a portfolio of cash equivalents and investments in a variety of marketable securities, including U.S. government and mortgage backed securities, money market funds and under certain circumstances, derivative financial instruments. ARCA s cash and cash equivalents as of June 30, 2008 included liquid money market accounts.

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ARCA CONTROLS AND PROCEDURES

Prior to the filing of the registration statement of which this proxy statement/prospectus/consent solicitation forms a part, ARCA was not subject to the Sarbanes-Oxley Act of 2002. Therefore, ARCA s management and independent registered public accounting firm did not perform an evaluation of ARCA s internal control over financial reporting as of December 31, 2007 in accordance with the provisions of the Sarbanes-Oxley Act.

Material weaknesses may exist when the combined company reports on the effectiveness of its internal control over financial reporting for purposes of its reporting requirements under the Exchange Act or Section 404 of the Sarbanes-Oxley Act after the merger. The existence of one or more material weaknesses would preclude a conclusion that the combined company maintains effective internal control over financial reporting. Such a conclusion would be required to be disclosed in the combined company s future Annual Reports on Form 10-K and could impact the accuracy and timing of its financial reporting and the reliability of its internal control over financial reporting.

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MANAGEMENT OF THE COMBINED COMPANY AFTER THE MERGER

Executive Officers and Directors

Resignation of Nuvelo s Current Executive Officers and Directors

Pursuant to the Merger Agreement, it is contemplated that all of Nuvelo s current executive officers except Lee Bendekgey and all of Nuvelo s current directors except Dr. Love, Ms. Pendergast and Dr. Sobel, will resign immediately prior to the completion of the merger.

Executives Officers and Directors of Nuvelo Following the Merger

Nuvelo s board of directors is currently comprised of six directors and is divided into three classes, with each class serving a staggered three-year term. Prior to the effective time of the merger, the board of directors of Nuvelo will increase to ten members and continue to be classified into three classes, with each class serving staggered three-year terms. In connection with this increase, Nuvelo s bylaws will be amended, in accordance with Article VII of the bylaws, to permit up to ten directors.

Pursuant to the merger agreement, prior to closing, Nuvelo will take such actions as are necessary to have seven of the ten directors be individuals that have been designated by ARCA. It is anticipated that the directors following the merger will be appointed to the three classes of directors as follows:

Dr. Love, Dr. Sobel, Dr. Freytag and Dr. Formela would be in the class of directors whose terms expire at the 2009 annual meeting of stockholders.

Dr. Zabriskie, Dr. Lowe and Dr. Grais would be in the class of directors whose terms expire at the 2010 annual meeting of stockholders.

Ms. Pendergast, Dr. Bristow and Mr. Brewer would be in the class of directors whose terms expire at the 2011 annual meeting of stockholders.

The following table lists the names and ages as of October 15, 2008, and positions of the individuals who are expected to serve as directors and executive officers of Nuvelo upon completion of the merger:

Name	Age	Position
Richard B. Brewer	57	Chief Executive Officer and Director
Michael R. Bristow, M.D., Ph.D.	64	Chairman and Chief Science and Medical Officer
Lee Bendekgey	51	Chief Financial Officer
Christopher D. Ozeroff	49	Executive Vice President of Business Development and General Counsel
Randall St. Laurent	47	Executive Vice President of Commercial Operations
John L. Zabriskie, Ph.D.	69	Director
J. William Freytag, Ph.D.	57	Director
Jean-François Formela, M.D.	52	Director
Ted W. Love, M.D.	49	Director
Mary K. Pendergast	58	Director
Burton E. Sobel, M.D.	71	Director
David G. Lowe, Ph.D.	51	Director
Linda Grais, M.D.	52	Director

Richard B. Brewer. Mr. Brewer joined ARCA in November 2006. Prior to joining ARCA, from January 2003 Mr. Brewer was managing partner of Crest Asset Management, where he provided guidance to and invested in biotechnology opportunities. Before that, Mr. Brewer was president and CEO of Scios, Inc. Before Scios, Brewer served as chief operating officer of Heartport, a cardiovascular device company developing minimally invasive approaches to major heart surgery. Prior to that, he spent over a decade at Genentech in various

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management positions, including senior vice president of sales and marketing and senior vice president of Genentech Europe and Canada. Mr. Brewer holds a B.S. from Virginia Polytechnic Institute and an M.B.A. from Northwestern University.

Michael R. Bristow, M.D., Ph.D. Dr. Bristow joined ARCA as one of ARCA s founders in September 2004, and served as Chairman and Chief Executive Officer of ARCA until he was appointed to his current position of Chief Science and Medical Officer in November 2006. Dr. Bristow is a Professor of Medicine and the former Head of Cardiology at the University of Colorado Health Sciences Center, where he has been since October 1991. Dr. Bristow was one of the founders of Myogen, Inc. and served as Myogen s Chief Science and Medical Officer from October 1996 to February 2006 and as a Scientific Advisor to Myogen from February 2006 until the acquisition of Myogen by Gilead Sciences, Inc. in November 2006.

Lee Bendekgey. Mr. Bendekgey joined Nuvelo in July 2004 as Senior Vice President and General Counsel. In August 2007, Mr. Bendekgey assumed the additional role of Chief Financial Officer, which he also held from July 2004 until November 2005. Prior to joining Nuvelo, Mr. Bendekgey was employed by Incyte Corporation from 1998 to January 2004, where he held several executive positions, including executive vice president, general counsel, acting chief financial officer and acting general manager of information business. From 1993 to 1997, Mr. Bendekgey worked for Silicon Graphics, Inc. where he held a variety of positions in their legal group. Prior to his employment with Silicon Graphics, he served as a partner at Graham & James (now Squire Sanders & Dempsey) where he specialized in intellectual property, corporate and commercial law and founded the firm s Palo Alto office. Mr. Bendekgey graduated magna cum laude with a bachelor of arts degree from Kalamazoo College and received his J.D. from Stanford University.

Christopher D. Ozeroff. Mr. Ozeroff was a co-founder of ARCA in September 2004 and has been its Executive Vice President of Business Development and General Counsel since that date. From August 1999, Mr. Ozeroff was previously a partner with the law firm of Hogan & Hartson L.L.P., where he practiced in such areas as finance, acquisitions, public offerings and licensing. Mr. Ozeroff completed his undergraduate degree at Stanford University, and his law degree at the University of Chicago Law School.

Randall St. Laurent. Mr. St. Laurent joined ARCA in January 2008. From March 2001 until he joined ARCA, Mr. St. Laurent was employed by Scios, a Johnson & Johnson company, first as the vice president of sales and marketing and later as the vice president of commercial development. From September 1999 until March 2001, Mr. St. Laurent was an executive sales director at Transkaryotic Therapies in Cambridge, Massachusetts. Mr. St. Laurent received a B.A. with a major in marketing from the Ohio State University.

John L. Zabriskie, Ph.D. Dr. Zabriskie has served as a member of ARCA s board of directors since March 2005. Dr. Zabriskie is Co-Founder and Director of Puretech Ventures, LLC, and the past Chairman of the Board, Chief Executive Officer and President of NEN Life Science Products, Inc., a supplier of kits for labeling and detection of DNA. Prior to joining NEN Life Science Products in July 1997, Dr. Zabriskie was President and Chief Executive Officer of Pharmacia and Upjohn Inc. Prior to joining Upjohn in 1994, Dr. Zabriskie was Executive Vice President for Merck & Co., Inc. He currently serves on the board of directors of Array BioPharma Inc., Kellogg Co. and Protein Forest Inc. Dr. Zabriskie received his undergraduate degree in chemistry from Dartmouth College and his Ph.D. in organic chemistry from the University of Rochester.

J. William Freytag, Ph.D. Dr. Freytag has served as a member of ARCA s board of directors since March 2007. Dr. Freytag served as President and CEO of Aspreva Pharmaceuticals from July 2007 until January 2008. From July 1998 until November 2006, Dr. Freytag was President, Chief Executive Officer and Chairman of the board of directors of Myogen, Inc. From October 1994 to May 1998, Dr. Freytag was a Senior Vice President at Somatogen, Inc., a biopharmaceutical company, where he was responsible for corporate and commercial development. Prior to Somatogen, he was President of Research and Development at Boehringer Mannheim Corporation, an international healthcare company, from May 1990 to September 1994. Previously, Dr. Freytag spent 10 years with DuPont in various research and business positions in the Medical Products Department.

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Dr. Freytag is a member of the board of directors of Immunicon Corporation. Dr. Freytag received a B.S. from Purdue University and a Ph.D. in biochemistry from the University of Kansas Medical Center.

Jean-François Formela. Dr. Formela has served as a member of ARCA s board of directors since February 2006. Dr. Formela is a Partner and joined Atlas Venture in 1993 to help build the US Life Sciences franchise. Previously, he was Senior Director, Medical Marketing and Scientific Affairs at Schering-Plough in the U.S. During his tenure there, he was responsible for the marketing of Intron A, Schering-Plough s alpha-interferon. In his last position at Schering-Plough, Dr. Formela directed the US Phase IV studies in all therapeutic areas, as well as the health economics, medical information, and biotechnology pre-marketing groups. As a medical doctor, Jean-François practiced emergency medicine at Necker University Hospital in Paris. Since joining Atlas Venture, Jean-François has been involved in the formation of companies such as Archemix, ArQule, Aureon Laboratories, Cellzome, deCODE, Exelixis, MorphoSys, NxStage, Resolvyx Pharmaceuticals and SGX Pharmaceuticals. He was also an investor in Ciphergen Biosystems and Nuvelo. Dr. Formela received his M.D. from Paris University School of Medicine, and his M.B.A. from Columbia University.

Ted W. Love, M.D. Dr. Love served as Nuvelo s president since January 2001, as its chief executive officer since March 2001, as a member of its board of directors since February 2001 and as chairman of its board of directors since September 2005. Dr. Love served as Nuvelo s president and chief operating officer from January 2001 until March 2001. Prior to joining Nuvelo, Dr. Love served as senior vice president of development at Theravance Inc. from 1998 to 2001 and as a research physician and vice president of product development at Genentech from 1992 to 1998. Dr. Love also serves as a member of the board of directors of Santarus, Inc., and Affymax, Inc. Dr. Love holds a B.A. in molecular biology from Haverford College and an M.D. from Yale Medical School.

Mary K. Pendergast. Ms. Pendergast has served as a member of Nuvelo s board of directors since May 2002. Since September 2003, Ms. Pendergast has been president of Pendergast Consulting. Ms. Pendergast served as executive vice president, government affairs for Elan Corporation from 1998 to December 2003. Ms. Pendergast was deputy commissioner and senior advisor to the Commissioner, Food and Drug Administration, Department of Health and Human Services from 1990 to 1998. Ms. Pendergast received her LL.M. from Yale Law School in 1977, her J.D. from the University of Iowa College of Law in 1976 and her B.A. from Northwestern University in 1972.

Burton E. Sobel, M.D. Dr. Sobel has served as a member of Nuvelo s board of directors since September 2004. Since June 2005, Dr. Sobel has served as professor of medicine and biochemistry at the University of Vermont and Fletcher Allen Health Care, where he formerly served as chair of the department of medicine from 1994 to June 2005. Dr. Sobel served as senior counsel to the executive dean of the University of Vermont College of Medicine and to the executive vice president of Fletcher Allen Health Care from 1996 to 1998. From 1994 to 1996, Dr. Sobel served as professor of medicine at Washington University in St. Louis, Missouri. Dr. Sobel serves as a member of the board of directors of Ariad Pharmaceuticals, Inc. and Clinical Data, Inc. Dr. Sobel received his M.D. from the Harvard Medical School, magna cum laude, and his A.B. from Cornell University.

David G. Lowe, Ph.D. Dr. Lowe has served as a member of ARCA s board of directors since May 2007. Dr. Lowe is a Managing Director of and joined Skyline Ventures in June 2002. Dr. Lowe is a molecular biologist and was Director of Cardiovascular Research at Genentech, Inc., where he worked for 16 years until November 2001. Dr. Lowe also serves as a director of Applied Genetic Technologies Corp. Dr. Lowe holds a Ph.D. in biochemistry from the University of Toronto, Canada.

Linda Grais, M.D. Dr. Grais has served as a member of ARCA s board of directors since May 2007. She is currently a partner at InterWest, where she has been since May 2005. From July 1998 to July 2003, Dr. Grais was a founder and executive vice president of SGX Pharmaceuticals Inc., a drug discovery company focusing on new treatments for cancer. Prior to that, she was a corporate attorney at Wilson Sonsini Goodrich & Rosati, where she practiced in such areas as venture financings, public offerings and strategic partnerships. Before practicing law,

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Dr. Grais worked as an assistant clinical professor of Internal Medicine and Critical Care at the University of California, San Francisco. Dr. Grais received a B.A. from Yale University, magna cum laude, and Phi Beta Kappa, an M.D. from Yale Medical School and a J.D. from Stanford Law School.

Director Independence

Under applicable Nasdaq rules, a director will only qualify as an independent director if, in the determination of Nuvelo s board of directors, that person does not have a relationship which would interfere with the exercise of independent judgment in carrying out the responsibilities of a director.

Of the six current members of the of Nuvelo board of directors, five have been determined to be independent within the meaning of the applicable Nasdaq rules.

In connection with the consummation of the merger, the incumbent directors of the Nuvelo s board of directors will amend the bylaws of Nuvelo and take necessary action to fix the size of the Nuvelo board at ten directors. James R. Gavin, Mark L. Perry and Kimberly Popovits will tender their resignations effective as of the effective time of the merger and the incumbent board of Nuvelo will appoint Richard B. Brewer, Michael R. Bristow, Jean-François Formela, J. William Freytag, Linda Grais, David G. Lowe and John L. Zabriskie to fill the vacancies created by such resignations and the increase to the size of Nuvelo s board. Prior to appointing these individuals to Nuvelo s board of directors, and before the effectiveness of the resignations of James R. Gavin, Mark L. Perry and Kimberly Popovits, the incumbent directors will determine whether the directors to be appointed to such vacancies are independent as defined under the applicable Nasdaq rules. Additionally, the incumbent directors of Nuvelo will determine whether those individuals meet the additional independence requirements of Rule 10A-3 under the Securities Exchange Act of 1934. Finally, the incumbent directors of Nuvelo will determine whether all of the members of each of the board of directors three standing committees will be independent as defined under the applicable Nasdaq rules.

Committees of the Board of Directors

The board of directors of the combined company will have three standing committees: the compensation committee, the audit committee and the nominating and corporate governance committee.

Compensation Committee

The combined company s compensation committee s responsibilities will include: reviewing and approving the company s goals and objectives relevant to the compensation of executive officers and other senior management; setting compensation and bonus levels for the company s executive officers that correspond to the company s goals and objectives; reviewing and making recommendations to its board of directors regarding the company s compensation policies, programs, practices, and procedures designed to contribute to the company s success, in accordance with its charter; evaluating the company s goals and objectives related to the compensation of its chief executive officer and his performance in light of such goals and objectives and setting the chief executive officer s compensation level and bonus based on this evaluation; reviewing with management the compensation discussion and analysis included in the company s proxy statements for its annual meetings of stockholders and considering whether to recommend its inclusion in such proxy statements and other filings; administering the company s stock and equity incentive plans.

Following completion of the merger, , as the chairperson, and will serve on the compensation committee.

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Audit Committee

The combined company s audit committee s responsibilities will include: selecting, evaluating, and where necessary, replacing the independent registered public accounting firm retained by the company; consulting with the company s independent registered public accounting firm regarding their audit, their opinion, and the company s Forms 10-Q and 10-K; approving the audit and non-audit services of the company s independent registered public accounting firm and the terms of their engagement; meeting with the company s management; reviewing both the independent registered public accounting firm and management reports; recommending changes in financial policies and procedures that may be suggested by the company s independent registered public accounting firm; and preparing the audit committee report included in the company s proxy statements for its annual meetings of stockholders.

Following completion of the merger , as the chairperson, and will serve on the audit committee. It is expected that the board of the combined company will determine that is an audit committee financial expert as defined in Item 401(h) of Regulation S-K.

Nominating and Corporate Governance Committee

The responsibilities of the nominating and corporate governance committee of the combined company will include: considering the qualifications of, proposing, and recommending individuals for board membership and senior management positions; making recommendations to the board of directors regarding the company s corporate governance policies, business conduct, and ethics; evaluating the size and composition of the board of directors and its committees; and reviewing the annual performance of the board of directors.

Following completion of the merger, , as the chairperson, and will serve on the nominating and corporate governance committee.

Compensation of Directors

Nuvelo has not yet determined whether the compensation for the directors of the combined company will remain the same as that for Nuvelo directors currently.

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EXECUTIVE COMPENSATION AND OTHER INFORMATION

The following compensation discussion and analysis sections provide information regarding the compensation, compensation philosophy, and objectives for each of ARCA and Nuvelo as standalone entities in relation to the individuals who served as the principal executive officer, the principal financial officer or one of the three most highly paid executive officers as of December 31, 2007 of Nuvelo or ARCA and who are expected to serve as executive officers following consummation of the merger. These individuals are referred to as the named executive officers in the compensation discussion and analysis sections below and the tables that follow.

Following completion of the merger, it is expected that Richard B. Brewer, Dr. Michael R. Bristow, Lee Bendekgey, Christopher D. Ozeroff and Randall St. Laurent will be the executive officers of the combined company. Each of these executive officers, except Mr. Bendekgey, is currently an executive officer of ARCA. Additional executive officers of the combined company are expected to be identified and appointed following the merger. The discussion and analysis below titled ARCA s Compensation Discussion and Analysis applies to Mr. Brewer, Dr. Bristow and Mr. Ozeroff, and the discussion and analysis below titled Nuvelo s Compensation Discussion and Analysis applies to Mr. Bendekgey, who is expected to serve as the combined company s chief financial officer for a temporary transitional period following completion of the merger. Mr. St. Laurent joined ARCA during 2008, so his compensation is not discussed below.

ARCA s Compensation Discussion and Analysis

Overview of Executive Compensation Program

The compensation committee of the ARCA board of directors has responsibility for establishing, implementing and monitoring ARCA s executive compensation program philosophy and practices. During fiscal year 2007, Dr. Bullock, Dr. Grais and Dr. Formela were the members of ARCA s compensation committee. The compensation committee seeks to ensure that the total compensation paid to ARCA s named executive officers is fair, reasonable and competitive. Generally, the types of compensation and benefits provided to the named executive officers are similar to those provided to ARCA s other officers. The board of directors has also established an award committee comprised of members of the compensation committee and delegated to this committee the authority to approve and authorize grants under ARCA s 2004 Stock Incentive Plan, or the ARCA Plan.

Compensation Philosophy and Objectives

The components of ARCA s executive compensation consist of salary, annual performance-based cash bonuses based on the achievement of company goals established by the compensation committee, discretionary cash bonuses awarded from time to time based on the compensation committee s subjective assessment of each individual executive s job performance during the past year, and grants of restricted stock and/or stock options to provide executives with longer-term incentives.

ARCA s compensation committee believes that an effective executive compensation program should provide base annual compensation that is reasonable in relation to the individual executive s job responsibilities and reward the achievement of both annual and long-term strategic goals of ARCA. The compensation committee uses annual cash bonuses to reward an officer s achievement of specific goals and employee stock options as a retention tool and as a means to align the executive s long-term interests with those of ARCA s stockholders, with the ultimate objective of improving stockholder value. ARCA s compensation committee has also used grants of restricted stock as a means to provide incentives to executive officers to achieve longer-term key strategic objectives of the company. ARCA s compensation committee evaluates both performance and compensation to maintain ARCA s ability to attract and retain excellent employees in key positions and to assure that compensation provided to key employees remains competitive relative to the compensation paid to similarly situated executives of comparable companies. To that end, ARCA s compensation committee believes executive

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compensation packages provided by ARCA to the named executive officers should include both cash compensation and equity.

Because of ARCA s size, the small number of executive officers, and ARCA s financial priorities, the compensation committee has decided not to implement or offer any pension benefits, deferred compensation plans, or similar plans for ARCA s named executive officers.

As a biopharmaceutical company engaged in developing potential products that, to date, have not generated any revenues and are not expected to generate significant revenues or profits for several years, the compensation committee also takes ARCA s financial and working capital condition into account in its compensation decisions.

Role of Executive Officers in Compensation Decisions

ARCA s compensation committee makes all compensation decisions for ARCA s named executive officers and approves recommendations regarding equity awards to all of ARCA s officers. Decisions regarding the non-equity compensation of ARCA s other officers are made by ARCA s president and chief executive officer.

ARCA s compensation committee and the president and chief executive officer annually review the performance of each named executive officer (other than the president and chief executive officer, whose performance is reviewed only by the compensation committee and other non-management directors). The conclusions reached and recommendations based on these reviews, including with respect to salary adjustments and annual award amounts, are presented to the compensation committee. ARCA s compensation committee can exercise its discretion in modifying any recommended adjustments or awards to executives.

Setting Executive Compensation

Based on the foregoing objectives, the compensation and award committees have structured ARCA s annual cash and incentive-based cash and non-cash executive compensation to seek to motivate the named executive officers to achieve the business goals set by ARCA s management and board of directors, to reward the executives for achieving these goals and to retain and attract top executive talent. For fiscal year 2008, ARCA has retained Radford Consulting and Surveys, a division of Aon Corporation, or Radford, independent compensation consultants, to evaluate and provide recommendations on the compensation for ARCA s executive officers.

2007 Executive Compensation Components

For 2007, the principal components of compensation for ARCA s named executive officers were base salary, annual performance bonuses and equity incentive compensation.

Base Salary

ARCA provides its named executive officers and other employees with base salary to compensate them for services rendered during the year. Base salary ranges for ARCA s named executive officers are determined for each named executive officer based on his position and responsibility. During its review of base salaries for ARCA s executives, ARCA s compensation committee primarily considers:

- the negotiated terms of each executive s employment agreement, to the extent that one exists;
- internal review of the executive s compensation, both individually and relative to other named executive officers; and
- individual performance of the executive.

In February 2008, ARCA s board of directors and compensation committee completed a review of ARCA executive compensation in light of general market conditions in the life science industry. The compensation

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committee concluded that the competition for executive talent remained strong as a result of the solid economic performance of the industry, the continued high level of investment by venture capital firms in the new and existing life science companies and the specialized skills and experiences required to manage life science companies. The compensation committee s assessment of general market conditions in the life science industry was based on the experience of the committee members who were and are actively involved in venture capital investing, and Radford and other survey data in making its base salary assessments. In light of its considerations, the compensation committee recommended and the board of directors approved increases to base salary of 3.8% for Mr. Brewer to $311,400, 3.8% for Dr. Bristow to $259,500, and 3.8% for Mr. Ozeroff to $228,360. The increased base salaries became effective in March 2008.

Annual and Special Bonuses

In February 2007, ARCA s compensation committee and the board of directors established a bonus structure for the entire ARCA executive team, including all of ARCA s named executive officers. The philosophy employed was to create incentives for the executive officers to achieve key corporate goals. The compensation committee set a potential bonus target of 50% of base salary for Mr. Brewer and Dr. Bristow and 30% of base salary for Mr. Ozeroff. The compensation committee retained discretion to change the bonus structure and the bonus payment amounts as it considered appropriate. The compensation committee and board of directors agreed to nine equally weighted goals. The compensation committee believed attaining these goals would take a high level of executive performance, particularly as they related to the submission of the Gencaro NDA. These nine goals included:

- execution of an agreement with LabCorp with respect to the development of the Gencaro companion genetic test;
- securing manufacturing arrangements for the API for Gencaro and tablet formulation of the drug;
- submission of the clinical portion of the NDA for Gencaro;
- in-license of a second product candidate;
- execution of a partnership for a sustained release development for Gencaro;
- cost management initiatives;
- organizational development, key hires and growth initiatives;
- execution of a commercial partnership for Gencaro; and
- submission of the chemistry, manufacturing and controls section of the NDA for Gencaro.

In March 2008, performance bonuses for 2007 were paid. At that time, the compensation committee and board of directors concluded that the 2007 corporate goals described above had been met at the 65% level, and each executive officer therefore received a bonus based on corporate goal achievement equal to his respective bonus percentage level multiplied by his base salary and adjusted pursuant to the compensation committee s discretion to account for its assessment of each named executive officer s individual performance. Cash bonuses paid to ARCA s named executive officers were $97,500 for Mr. Brewer, $81,250 for Dr. Bristow, and $35,750 for Mr. Ozeroff.

For incentive bonuses tied to 2008 performance, the compensation committee and board of directors have approved a similar bonus structure as they approved for 2007. All company executives remain at their respective bonus target levels. For 2008, the board of directors, with the participation of the compensation committee and members of management, formulated 12 equally weighted corporate performance goals that

were consistent with the maturation of the Gencaro development program, financing activities, and pre-commercialization activities planned by ARCA. These goals were related to the submission and acceptance of the Gencaro NDA with the

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FDA, obtaining financing and pre-commercialization activities. The ARCA board of directors believes that these goals are attainable with a very high level of executive performance and that such goals will be challenging to achieve. The 12 goals included:

- submission of the NDA for Gencaro s adequate for FDA filing and approval;
- submission by LabCorp of a genetic test application associated with the FDA s review of the NDA for Gencaro to the FDA, sufficient for approval;
- securing financing sufficient to fund ARCA through Gencaro s anticipated launch in 2009;
- development of the Gencaro commercial plan;
- securing the manufacturing, tableting and packaging arrangements adequate for the anticipated commercial launch of Gencaro;
- key opinion leader identification and recruitment;
- investor relations and public relations development and execution;
- relocation of ARCA to new Colorado offices;
- design and implementation of the bucindolol genetic registry;
- implementation of the Gencaro reimbursement plan;
- preparation for a possible cardio-renal advisory committee meeting for Gencaro Test; and
- sales force and field force hiring and deployment.

Equity Incentive Compensation

ARCA s compensation committee considered the equity ownership of the executive officers and, based upon the committee members experience investing in and serving on the boards of similar life sciences companies, and upon the executive officers ownership percentages in ARCA, the compensation committee did not approve any additional grants to ARCA s named executive officers in 2007.

Retirement Plans, Perquisites and Other Personal Benefits

ARCA has adopted a tax-qualified employee savings and retirement plan, the 401(k) Plan, for eligible employees, including ARCA s named executive officers. Eligible employees may elect to defer a percentage of their eligible compensation in the 401(k) Plan, subject to the statutorily prescribed annual limit. ARCA has elected to make safe harbor matching contributions on behalf of all participants in the 401(k) Plan in accordance with statutory requirements. Participants are fully vested in all matching contributions. During fiscal 2007, ARCA s matching

contributions were equal to 100% of each employee s first 3% of pretax deferrals and 50% of each employee s next 2% of pretax deferrals. ARCA intends the 401(k) Plan, and the accompanying trust, to qualify under Sections 401(k) and 501 of the Internal Revenue Code so that contributions by employees to the 401(k) Plan, and income earned (if any) on plan contributions, are not taxable to employees until withdrawn from the 401(k) Plan, and so that ARCA will be able to deduct its contributions, if any, when made. The trustee under the 401(k) Plan, at the direction of each participant, may invest the assets of the 401(k) Plan in any of a number of investment options.

ARCA s executive officers are eligible to participate in all ARCA employee benefit plans, such as medical, dental, vision, group life, disability and accidental death and dismemberment insurance, in each case on the same basis as other employees, subject to applicable law. ARCA also provides vacation and other paid holidays to all employees, including executive officers, which ARCA believes are comparable to those provided at peer companies. ARCA does not provide any of Messrs. Brewer, Bristow and Ozeroff with any other perquisites or personal benefits.

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Equity Compensation; Ownership Guidelines

ARCA s long-term incentive compensation consists solely of periodic grants of stock options to the named executive officers. The stock option program is intended to:

- link the creation of stockholder value with executive compensation;
- provide increased equity ownership by executives;
- function as a retention tool, because participants must remain employed by ARCA as a condition to the vesting of options granted by the compensation and award committees; and
- maintain competitive levels of total compensation.

ARCA s compensation and award committees may grant stock options to new executive officers when they join ARCA based on their position with ARCA and their relevant prior experience. Options generally vest over four years. Prior to the exercise of an option, the holder has no rights as a stockholder with respect to the shares subject to such option, including voting rights and the right to receive dividends or dividend equivalents.

In addition to the stock option grant, certain executives have been issued restricted stock upon payment by the executive of a price equal to the fair market value of the stock on the date of issuance. The restricted stock is subject to repurchase by ARCA for any unvested portion. To date, only Mr. Brewer has been granted an award of restricted stock and his grant will vest in full upon the closing of the merger.

On an annual basis, ARCA s compensation committee assesses the appropriate individual and corporate goals for its executive officers and may provide additional option grants based upon the achievement by the executive officers of both individual and corporate goals. The compensation committee expects that it will continue to provide new employees with initial option grants in the future to provide long-term compensation incentives and will continue to rely on performance-based and retention grants to provide additional incentives for current employees. Additionally, in the future, the compensation committee may again consider awarding additional or alternative forms of equity incentives, such as grants of restricted stock, restricted stock units and other performance-based awards. ARCA s compensation committee has no requirement that any of its executive officers maintain a minimum ownership interest in ARCA.

Tax and Accounting Implications

Deductibility of Executive Compensation

As part of its role, ARCA s compensation committee reviews and considers the deductibility of executive compensation under Section 162(m) of the Internal Revenue Code, which provides that corporations may not deduct compensation, excluding certain performance-based compensation, of more than $1,000,000 that is paid to certain individuals. ARCA s compensation committee believes that compensation paid to ARCA executive officers generally is fully deductible for federal income tax purposes.

Accounting for Share-Based Compensation

ARCA accounts for share-based compensation in accordance with the requirements of FASB Statement 123(R), *Share-Based Payment.* See Note 1(n) to ARCA s financial statements included in this proxy statement/prospectus/consent solicitation. Although this accounting treatment is one of the factors ARCA s compensation committee considers in awarding options, it has not had a significant impact on its granting practices, since ARCA s compensation committee believes stock options remain a highly valued component of the overall compensation package for management of a growth company such as ARCA and are the primary means by which executive officers share in the company s growth.

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Nuvelo s Compensation Discussion and Analysis

Lee Bendekgey, Nuvelo s senior vice president and chief financial officer, is expected to serve as the chief financial officer of the combined company following the merger. The discussion and analysis below relates to Mr. Bendekgey s service as Nuvelo s senior vice president and chief financial officer.

Overview of Nuvelo s Executive Compensation Program

Corporate Governance and the Role of the Compensation Committee.

Nuvelo s compensation committee assists its board of directors in fulfilling its fiduciary responsibilities with respect to the oversight of Nuvelo s affairs in the areas of compensation plans, policies, and its programs, especially those regarding executive compensation and employee benefits. Nuvelo s compensation committee charter is publicly available on Nuvelo s web site at www.nuvelo.com in the section titled, Investors, under the subsection titled, Corporate Governance.

Nuvelo s compensation committee s primary responsibilities are: (i) to administer Nuvelo s 2004 Equity Incentive Plan, as amended; (ii) to approve all compensation decisions for Nuvelo s chief executive officer, or CEO, and all executive officers; (iii) to review and oversee compensation decisions with regard to other Nuvelo executives; (iv) to administer Nuvelo s cash bonus program, including the determination of the bonus pool based on the achievement of goals established by Nuvelo s board of directors; and (v) to review and approve the policies adopted by Nuvelo with regard to employee compensation and employee benefits.

Kimberly Popovits, as the chairperson, Mark L. Perry and James R. Gavin III, MD, PhD presently serve on the compensation committee, and all served as members of the compensation committee throughout 2007. On December 20, 2007, Ms. Popovits was appointed chairperson of the compensation committee, replacing Mr. Perry as chairperson. Nuvelo s board of directors has determined that all of its compensation committee members are independent directors under the Nasdaq definition of independence. Mr. Perry, Ms. Popovits, and Dr. Gavin all have extensive experience in executive management in the biotechnology industry, including experience with compensation practices and policies.

The Nuvelo compensation committee has the authority to retain advisors. In 2007, at the recommendation of management, the compensation committee approved the retention of Radford. At the Nuvelo compensation committee s direction, Nuvelo s compensation consultants provided advice to management and the Nuvelo compensation committee regarding Nuvelo s compensation practices in connection with retention, executive and director compensation and equity awards for all employees.

In 2007 the Nuvelo compensation committee met seven times. The chairperson of the meeting is responsible for approving the agenda for each meeting in consultation with management. Nuvelo s chief executive officer, its vice president of human resources, and its general counsel attend compensation committee meetings, except for those portions of any meeting in which the Nuvelo compensation committee meets in executive session.

Objectives of Nuvelo s Compensation Program.

As a development stage pharmaceutical company, Nuvelo is committed to building a sustainable business focused on the discovery, development, and commercialization of novel therapies for the treatment of acute cardiovascular conditions and cancer. To achieve this vision, Nuvelo has emphasized the recruitment of executives with significant experience working at large biotechnology companies and major pharmaceutical companies.

Pharmaceutical discovery, development, and commercialization require sustained and focused effort over many years. As a consequence, Nuvelo s compensation committee believes Nuvelo s compensation program must balance long-term incentives that create rewards for the realization of this long-term vision with nearer term

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compensation that rewards employees for the achievement of annual goals that further the attainment of Nuvelo s long-term vision. Nuvelo believes that compensation should not be based primarily on the short-term performance of Nuvelo s common stock, which has been and continues to be highly volatile.

To this end, the objectives of Nuvelo s compensation program are to:

- reward executives for Nuvelo s success in meeting its annual and long-term clinical development and other operational goals;
- reward executives for their individual performance and achievement of their personal goals and those of the functional organizations that they manage; and
- enable Nuvelo to attract and retain highly qualified executives with significant experience at larger biotechnology and pharmaceutical companies by providing a competitive compensation package that includes long-term incentives that provide significant retentive value.

Elements of Nuvelo s Executive Compensation Program

The following are the elements of Nuvelo s executive compensation program:

- Base Salary
- Cash Bonus
- Stock Options
- Executive Change in Control and Severance Plan
- 401(k) Plan
- Medical, Dental, and Vision Plans
- Life and Disability Insurance
- Employee Stock Purchase Plan

In 2007, Nuvelo completed the transition of all compensation decisions to a calendar year basis. Previously, Nuvelo made adjustments to individuals base salaries and annual performance option grants effective August 1 of each year, following annual performance reviews for each employee, and made bonus decisions following the completion of each calendar year and the assessment of corporate and individual goal achievement. Nuvelo determined that a calendar year decision on each of these three principal elements of compensation would be preferable. A calendar year decision would more closely tie individual performance assessment to individual and corporate goal achievement, and would facilitate the consideration of an employee s total cash and equity compensation in a more integrated fashion. As a consequence, in 2007 Nuvelo made annual performance option grants effective February 1, rather than August 1. In addition, merit compensation increases, which were made

effective August 1, 2007, are intended to be effective without change until February 1, 2009, at which point Nuvelo will have completed the transition to align all compensation decisions with a calendar year schedule.

Executive Compensation Determination Procedures and Policies

Nuvelo s compensation committee approves Nuvelo s policies regarding executive compensation, approves all compensation actions with regard to Nuvelo s executive officers, and oversees all other aspects of Nuvelo s employee compensation programs. The Nuvelo compensation committee reviews executive compensation annually. In these reviews, the Nuvelo compensation committee refers to performance assessments of individual executives, which for executives other than the CEO are generated by each executive s direct manager and reviewed by both the vice president of human resources and the CEO. In the case of the CEO, the Nuvelo compensation committee evaluates his performance against goals established by the board of directors. In

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addition, for each executive officer, the Nuvelo compensation committee considers Nuvelo s performance against annual and longer term objectives, market data regarding executive compensation at relevant comparable companies, and the recommendations of management. For the 2007 fiscal year, the compensation committee approved the retention of Radford to assist management and the Nuvelo compensation committee in analyzing and determining the compensation of Nuvelo executives.

Nuvelo determines executive compensation by reference to publicly available compensation data from peer companies. As its primary comparison group for 2007, management and the Nuvelo compensation committee approved the following 14 biotechnology companies selected based on their stage of development, their market capitalization, their therapeutic focus, the size and complexity of their organizations, and to some extent their geographic proximity to Nuvelo:

ACADIA Pharmaceuticals Inc.

Affymax, Inc.

Arena Pharmaceuticals, Inc.

Cell Genesys, Inc.

Cytokinetics, Inc.

Intermune, Inc.

Ligand Pharmaceuticals Inc.

Mannkind Corporation

Maxygen, Inc.

Metabasis Therapeutics, Inc.

Peregrine Pharmaceuticals, Inc.

Rigel Pharmaceuticals, Inc.

Telik, Inc.

XOMA, Ltd.

Nuvelo supplements compensation from these peer companies with market data, taken from the Radford compensation survey, providing compensation information with regard to a large number of biotechnology companies with comparable numbers of employees and with expert counsel received from Nuvelo s consultants at Radford. Generally, after management reviews the information generated by Radford and those of the selected peer companies, management and Radford make recommendations to the Nuvelo compensation committee with respect to compensation for Nuvelo s executive officers and other Nuvelo officers. The Nuvelo compensation committee may accept or adjust such recommendations, and makes the sole determination with respect to Nuvelo s chief executive officer and chairman of the Nuvelo board of directors. Members of management for whom compensation decisions are being made are absent from the meeting when the compensation committee is determining and deliberating his or her compensation.

For all executive officers other than the CEO, the vice president of human resources and the CEO make compensation recommendations to the Nuvelo compensation committee based on the factors described above, including market data provided by Radford and the performance of the executive. In the case of the CEO, the vice president of human resources makes recommendations regarding a range of potential compensation decisions to the compensation committee based on market data provided to her and to the compensation committee by Radford, and the compensation committee makes its decisions based on its assessment of the data provided and its evaluation of the chief executive officer s performance.

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Base Salary

Base salary is intended to enable Nuvelo to attract and retain executives with greater than average experience and skills, when compared to comparable biotechnology companies. For each executive position, Nuvelo sets as its target base compensation at the 65th percentile of compensation paid by its peer companies for that position. Actual base salary may be below or above the 65th percentile, based on individual performance, experience, skills, and the importance of the position to Nuvelo.

In July of 2007, as in past years, Nuvelo conducted annual performance reviews of all of its employees, including Nuvelo s executive officers. Based on these reviews and the other factors described above, the compensation committee approved the aggregate total adjustments to base salaries for employees which were effective on August 1, 2007, which are intended to remain in effect until early 2009, when Nuvelo will complete the transition of its annual performance evaluation and compensation decisions to coincide with the commencement of the calendar year.

The Nuvelo compensation committee increased Mr. Bendekgey s annual salary, effective as of August 1, 2007, in light of the additional responsibilities he assumed as chief financial officer. The Nuvelo compensation committee further decided not to grant a merit compensation increase to the base salary of Mr. Bendekgey. The Nuvelo compensation committee agreed the decision not to grant a merit increase was based not on its assessment of Mr. Bendekgey s performance, but rather on its conclusion that merit increases for senior executives would be inappropriate in light of the impact of the reduction in force Nuvelo announced on August 1, 2007.

Cash Bonus

Cash bonuses reward accomplishment of annual Nuvelo corporate goals critical to the achievement of its long term vision and the individual s achievement of functional goals for the functional organization that he or she manages. The Nuvelo compensation committee determines cash bonuses by reference to target bonus amounts, based on market data, established for each executive position.

Nuvelo commenced its cash bonus plan in 2004. For 2004 and 2005, the target bonus for the Nuvelo CEO and other Nuvelo named executive officers was 25 percent of base compensation. This target amount is below the 65th percentile for Nuvelo s peer group, which in some cases has resulted in total cash compensation below the 65th percentile. Nuvelo nevertheless considered these targets appropriate in light of Nuvelo s need to conserve cash and its reliance on the equity capital markets as its primary source of cash.

In 2006, the Nuvelo compensation committee increased the target cash bonus for Nuvelo s executive vice presidents and senior vice presidents to 35 percent of base salary. These targets were determined by reference to the target bonus percentages that Nuvelo s peer companies pay to executives in corresponding positions. While this is still below the 65th percentile for peer companies, this change is intended to help ensure that Nuvelo s total cash compensation is competitive when compared to peer companies. It is also designed to increase the relative portion of each Nuvelo executive s cash compensation that is contingent on goal achievement, thereby increasing the performance-based component of each Nuvelo executive s total compensation.

The Nuvelo compensation committee determines each individual executive bonus by reference to the achievement of corporate goals and the individual executive s achievement of functional goals for the functional organization that he or she manages. Nuvelo s board of directors sets annual corporate goals that fall into the following categories:

- advancement of compounds in Nuvelo s research and clinical development pipeline;
- strengthening Nuvelo s financial position; and
- development of a best in class organization capable of executing Nuvelo s vision.

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These goals included making go/no go decisions on all four alfimeprase indications. Given the decision not to pursue some indications, the corporate goals were revised accordingly in August 2007. Enrollment goals for SONOMA-3, Nuvelo s clinical trial of alfimeprase for catheter occlusion, and CARNEROS-1, Nuvelo s clinical trial of alfimeprase for the treatment of acute ischemic stroke, were included among the revised goals as were IND submissions for NU172 and NU206, and other goals that Nuvelo s board of directors determined were important to Nuvelo s progress and were reasonably difficult to achieve.

The Nuvelo compensation committee determines the relative weight of each goal based on its importance to Nuvelo s success. Given the importance of Nuvelo s research and development programs to its success, the Nuvelo compensation committee determined that achievement of goals associated with the advancement of Nuvelo s research and development pipeline would be worth 70% of the total for bonus achievement in 2007, with financial goals afforded 10% of the total and organizational goals the remaining 20%.

After the end of each year, the Nuvelo compensation committee establishes the overall bonus pool based on its assessment of whether Nuvelo has met corporate goals at the target level, has exceeded expectations, or has failed to meet expectations. The compensation committee assessed Nuvelo s performance in 2007 as having achieved 84% of the target goal performance. The Nuvelo compensation committee s determination was based on Nuvelo s failure to meet goals based on enrollment in Nuvelo s clinical trial of alfimeprase in acute ischemic stroke, as well as delays in the initiation of a Phase 1 trial of NU206. The Nuvelo compensation committee found that Nuvelo had met other research and development goals, as well as its organizational and financial goals. The Nuvelo compensation committee s assessment of the percentage deductions for failure to achieve a particular goal involves significant discretion, within the range of the percentages that the Nuvelo compensation committee has previously attributed as the value of the achievement of that goal. The Nuvelo compensation committee also retains the discretion to grant bonuses to individual executives that are above or below the established target based on the above criteria and its subjective assessment of each executive s performance and the achievement of the corporate goals for which that executive was primarily responsible. For that reason, following the determination that the overall bonus pool would be reduced to 84%, Mr. Bendekgey s bonus was calculated as 110% of 84%, because Nuvelo had met or outperformed all of the finance, compliance and legal goals for which he was responsible.

Stock Options

Nuvelo grants stock options to its executives, and to all of its employees, to provide long term incentives that align the interests of its work force with the achievement of Nuvelo s long term vision to develop and commercialize pharmaceutical products. Given the time periods involved in pharmaceutical development, Nuvelo believes that these long term incentives are critical to Nuvelo s success. The exercise price for options granted by Nuvelo is established as the market price of Nuvelo s stock on the date of the grant. The market price of Nuvelo s stock on the date of grant is determined by the average of the high and the low sale price on the date of grant.

The Nuvelo compensation committee determines stock option grants for the Nuvelo CEO and each other Nuvelo executive officer. Target ranges for stock option grants are based on position, salary level, and competitive practices of peer companies, as reported to Nuvelo by its compensation consultants. As with cash compensation, Nuvelo targets the 65th percentile for option grants at peer companies. Actual awards also reflect individual performance and potential, as well as retention objectives. In addition, in 2007 equity awards were subject to dilution constraints established by the compensation committee by reference to guidelines recommended by proxy advisors such as Institutional Shareholder Services.

Options are granted to all Nuvelo employees, including Nuvelo executives, when they are hired, and once each year in connection with annual performance reviews. New hire stock option grants are effective on the first day of the employee s employment with Nuvelo, and the exercise price for those option grants is the market price on that date.

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Based on the revised annual performance and compensation calendar, in January 2007, the Nuvelo compensation committee approved annual performance stock options grants, which were effective on February 1, 2007. Using the criteria noted above, consistent with his market based option ranges and performance, Mr. Bendekgey received options to purchase 100,000 share of Nuvelo common stock.

Executive Change in Control and Severance Benefit Plan

In 2004 Nuvelo s board of directors adopted the Executive Change in Control and Severance Benefit Plan, or Severance Plan, which is applicable to employees at the level of vice president and above. The board of directors determined that companies considered peers at that time commonly offered benefits comparable to those offered under the Severance Plan, which are described in the tables that follow. Given the risks associated with the biopharmaceutical industry and the increasing frequency of acquisitions in the industry, the Nuvelo compensation committee continues to believe that this plan is necessary to attract and retain qualified executives.

Other Elements of Executive Compensation Program

The remaining elements of Nuvelo s executive compensation program, like its broader employee compensation programs, are intended to make Nuvelo s overall compensation program competitive with those of its peer companies, keeping in mind the constraints imposed by Nuvelo s reliance on capital markets as a primary source of cash. With the exception of the Severance Plan, all of the remaining elements of Nuvelo s executive compensation program (including its 401(k) plan, medical, dental, and vision plans, life and disability insurance, and employee stock purchase plan) are available to all Nuvelo employees.

Allocations between Base Salary, Cash Bonus and Equity Compensation for Executives.

The development and commercialization of pharmaceutical products involves a high degree of risk, particularly in the early stages of clinical development. It takes many years of clinical development to reduce this risk. Like most other biotechnology companies that have not yet commercialized any products, Nuvelo has been heavily dependent on capital markets for cash. Given the limitations on Nuvelo s cash, and the long-term risks associated with Nuvelo s achievement of its vision, Nuvelo has in recent years weighted its total compensation, for executives as well as the rest of its work force, toward equity, in order to minimize the use of cash while achieving total compensation packages that have allowed it to attract and retain talented employees, including those in its executive ranks. Nuvelo believes that this strategy has been successful, as demonstrated by the backgrounds of its executives and other employees.

Internal Revenue Code Section 162(m)

Under Section 162(m) of the Code, the amount of compensation paid to certain executive officers that is deductible with respect to Nuvelo s corporate taxes is limited to $1,000,000 annually. It is the current policy of the Nuvelo compensation committee to maximize, to the extent reasonably possible, Nuvelo s ability to obtain a corporate tax deduction for compensation paid to Nuvelo s executive officers to the extent consistent with the best interests of Nuvelo and its stockholders.

Insider Trading Policy

Nuvelo has insider trading policies in effect that prohibit its officers, directors and employees from: trading in Nuvelo s securities while possessing material nonpublic information; providing material nonpublic information concerning Nuvelo to any outside person that is not authorized by Nuvelo to receive such information; trading in the securities of another company while possessing material nonpublic information concerning that company; disclosing material nonpublic information concerning any other company to anyone who is not authorized by Nuvelo to receive it; providing trading advice about Nuvelo to anyone while possessing material nonpublic information about Nuvelo; and trading in any interest or position relating to the future price of Nuvelo securities, such as a put, call, or short sale.

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Compensation Committee Interlocks and Insider Participation in Compensation Decisions

The compensation committee of the combined company is expected to consist of , as the chairperson, and . None of , or (i) was formerly an officer or employee of either Nuvelo or ARCA, (ii) was formerly an officer of either Nuvelo or ARCA, nor any of Nuvelo or ARCA s subsidiaries, or (iii) engaged in any related transactions as defined in Item 404(a) of Regulation S-K. During the fiscal year ended December 31, 2007, none of the individuals that will serve as an executive officer of the combined company served as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving on Nuvelo s or ARCA s board of directors or compensation committee.

Summary Compensation Table

The following table presents summary information concerning all compensation paid to or earned by Mr. Brewer, Dr. Bristow and Mr. Ozeroff for services rendered to ARCA in all capacities during the fiscal year ended December 31, 2007. The following table also presents summary information concerning compensation paid to or earned by Mr. Bendekgey for services rendered to Nuvelo in all capacities during the fiscal years ended December 31, 2006 and 2007. These individuals are referred to below collectively as the named executive officers. The named executive officers are the only individuals who served as the principal executive officer, principal financial officer or one of the next three most highly compensated executive officers of either ARCA or Nuvelo as of December 31, 2007 and who will also continue to serve in similar capacities at Nuvelo following the merger:

Summary Compensation Table

Name and Principal Position	Year	Salary ($)	Bonus ($)	Option Awards ($)(1)	Non-Equity Incentive Plan Compensation ($)	All Other Compensation ($)	Total ($)
Richard B. Brewer	2007	300,000		22,832	97,500(2)	37,250(4)	457,582
ARCA President and Chief Executive Officer							
Michael R. Bristow, M.D., Ph.D.	2007	250,000	150,000		81,250(2)	15,114(5)	481,250
ARCA Chief Science and Medical Officer							
Lee Bendekgey	2007	364,500		553,650	121,275(3)	925(6)	1,040,350
Nuvelo Senior Vice President, Chief Financial Officer and General Counsel	2006	352,917		686,499	126,449(3)	450(6)	1,166,315
Christopher D. Ozeroff	2007	220,000			37,750(2)	9,246(5)	257,750
ARCA Executive Vice President of Business Development and General Counsel							

(1) The amounts set forth in this column represent the share-based compensation expense recognized in fiscal 2007 and 2006 for financial reporting purposes under Statement of Financial Accounting Standards No. 123(R), Share-Based Payment, excluding any estimate of forfeitures related to service-based vesting conditions. The methodology, including underlying estimates and assumptions used in calculating these values with respect to Mr. Brewer, is set forth in Note 1(n) to ARCA s audited financial statements included elsewhere in this proxy statement/prospectus/consent solicitation, and with respect to Mr. Bendekgey, are disclosed in Note 1 to Nuvelo s audited financial statements, included elsewhere in this proxy statement/prospectus/consent solicitation.

(2) These amounts consist of the actual cash bonuses awarded to the named executive officers under the ARCA performance bonus program described above under ARCA s Compensation Discussion and Analysis. These bonuses were earned in fiscal year 2007 and were paid in March 2008.

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(3) These amounts reflects cash bonuses earned in 2007 and 2006 under the Nuvelo cash bonus program, as described in more detail in Nuvelo s Compensation Discussion and Analysis. Cash bonuses that were earned in 2007 and 2006 were paid in February 2008 and 2007, respectively.

(4) This amount represents the value of 250,000 shares of common stock issued to Mr. Brewer in consideration for prior services pursuant to a Restricted Stock Agreement dated November 2, 2006, as amended.

(5) These amounts consist of matching contributions made by ARCA under ARCA s 401(k) Plan.

(6) These amounts consist of contributions made by Nuvelo to Nuvelo s 401(k) Plan for Mr. Bendekgey.

Grants of Plan-Based Awards

The following table shows information concerning estimated payouts under non-equity incentive plan awards and the grant of equity awards to the named executive officers in the fiscal year ended December 31, 2007. In 2007, ARCA did not make any grants of stock options or restricted stock to any named executive officers. All references to options or shares held by Mr. Bendekgey refer to options or shares of Nuvelo.

			Estimated Possible Payouts Under Non-Equity Incentive Plan Awards			All Other Option Awards: Number of Securities	Exercise of Base Price of Option	Grant Date Fair Value of Stock and Option
Name	Grant Date	Approval Date	Threshold ($)	Target ($)	Maximum ($)	Underlying Options (#)	Awards ($/Sh)(1)	Awards ($)(2)
Richard B. Brewer				150,000(3)				
Lee Bendekgey	02/01/07	01/29/07				100,000	3.54	248,340
	N/A	N/A		131,250(4)				
Michael R. Bristow, M.D., Ph.D.				125,000(3)				
Christopher D. Ozeroff				66,000(3)				

(1) The exercise price of all stock options granted by Nuvelo is set at the fair market value of a share of Nuvelo s common stock on the grant date. For stock options granted under the 2004 Plan, the fair market value, as defined by the 2004 Plan, is the average of the high and low prices of a share of Nuvelo s common stock as reported on Nasdaq for any applicable date. The exercise price indicated above was higher than the closing market price of Nuvelo s common stock on the grant date of the related stock options.

(2) Grant date fair value was determined in accordance with SFAS 123R. Assumptions used in the valuation of stock options are disclosed in Note 1 to Nuvelo s audited financial statements included elsewhere in this proxy statement/prospectus/consent solicitation.

(3) These amounts reflect the amount of cash bonus payable to the named executive officers under the ARCA performance bonus program described above under ARCA s Compensation Discussion and Analysis if all of the fiscal 2007 corporate and individual goals were met. The Summary Compensation Table above reflects the actual amounts paid to these individuals under the performance bonus program for fiscal 2007.

(4) Amount reflects the amount of cash bonus payable to Mr. Bendekgey under Nuvelo s cash bonus program if all 2007 corporate goals as well as his individual goals for the functional organization that Mr. Bendekgey is managing have been accomplished. Mr. Bendekgey s actual cash bonuses, which was approved by the compensation committee, was paid in February 2008 and is shown in the Summary Compensation Table above. There are no threshold or maximum bonus amounts established under Nuvelo s cash bonus program, which is

discussed in more details in Nuvelo s Compensation Discussion and Analysis.

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Holdings of Previously Awarded Equity

The following table sets forth outstanding equity awards held by the named executive officers as of December 31, 2007, each of which were awarded under the ARCA Plan, except for awards to Mr. Bendekgey, which were awarded under Nuvelo s equity incentive plans.

2007 Outstanding Equity Awards at Fiscal Year-End

	Option Awards				Stock Awards	
	Number of Securities Underlying Unexercised Options (#)					
Name	Exercisable	Unexercisable	Option Exercise Price ($)	Option Expiration Date	Number of Shares of Stock That Have Not Vested (#)	Market Value of Shares of Stock That Have Not Vested ($)
Richard B. Brewer	992,000(2)		0.15	11/02/2016	500,000(5)	155,000(5)
Lee Bendekgey(1)	106,771	18,229(6)	8.41	07/11/2014		
	29,167	20,833(7)	9.83	01/07/2015		
	87,500	62,500(8)	9.17	08/01/2015		
	16,667	33,333(9)	16.74	08/01/2016		
	27,778	72,222(10)	3.54	02/01/2017		
Michael R. Bristow, M.D., Ph.D.	531,435(3)	177,145	0.01	01/03/2015		
Christopher D. Ozeroff	294,750(4)	98,250	0.01	01/03/2015		

(1) All references to options or shares held by Mr. Bendekgey refer to options or shares of Nuvelo. References to options or shares held by all other executive officers in the table refer to options or shares of ARCA.

(2) These options vested immediately, subject to ARCA s right of repurchase, which lapses at the rate of 6.25% of the shares subject to the option at the end of each three-month period following the first anniversary of the November 2, 2006 grant date. Of these options, as of December 31, 2007, 744,000 were subject to a right of repurchase in favor of ARCA.

(3) These stock options were granted on January 3, 2005, and vest (i) with respect to 25% of the shares subject to the options, on October 18, 2005, and (ii) with respect to the remaining shares subject to the options, at the rate of 6.25% of such shares at the end of each three-month period thereafter.

(4) These stock options were granted on January 3, 2005, and vest (i) with respect to 25% of the shares subject to the options, on October 18, 2005, and (ii) with respect to the remaining shares subject to the options, at the rate of 6.25% of such shares at the end of each three-month period thereafter.

(5) All shares are scheduled to vest upon the closing of the merger. The market value of the shares is based on the $0.31 per share fair value of ARCA s common stock as of December 31, 2007 as determined by the ARCA board of directors.

(6) Mr. Bendekgey was granted these stock options on July 12, 2004, at the commencement of his employment with Nuvelo. These stock options vest over four years: 1/4th vests 12 months after the date of grant and the remaining at a rate of 1/48th per month thereafter.

(7) These stock options were granted on January 7, 2005, and vest over five years at a rate of 1/60th per month.

(8) These stock options were granted on August 1, 2005, and vest over four years at a rate of 1/48th per month.

(9) These stock options were granted on August 1, 2006, and vest over four years at a rate of 1/48th per month.

(10) These stock options were granted on February 1, 2007, and vest over three years at a rate of 1/36th per month.

Option Exercises and Stock Vested

No stock options were exercised and no shares of restricted stock held by any of the named executive officers vested during fiscal 2007.

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Employment Agreements and Potential Payment Upon Termination or Change of Control

Richard B. Brewer Employment and Retention Agreement; Stock Option Agreements; Restricted Stock Agreement

Mr. Brewer is employed as ARCA s president and chief executive officer under an Employment and Retention Agreement dated November 2, 2006 that was amended and restated as of July 7, 2008. Under his employment agreement, Mr. Brewer is entitled to receive an annual base salary of $300,000, subject to annual increases if approved by the ARCA board of directors (or ARCA s compensation committee) and is eligible to receive an annual bonus as determined by the board of directors (or ARCA s compensation committee) in its sole discretion. Mr. Brewer is permitted to serve on a maximum of four outside corporate board of directors, so long as it does not interfere with his duties as president and chief executive officer of ARCA.

If ARCA terminates Mr. Brewer s employment without cause, or if Mr. Brewer terminates his employment with good reason (as these terms are defined in his employment agreement), ARCA has agreed to pay Mr. Brewer a severance payment equivalent to (i) 12 months of his base salary and (ii) a pro rata portion of any bonus compensation under any employee bonus plan that has been approved by the board of directors payable to him for the fiscal year in which his employment terminated to be paid at the same time that the incentive bonus would have been paid had the termination not occurred. ARCA may elect to pay Mr. Brewer additional severance equal to up to 12 months of his base salary, which additional payments would extend Mr. Brewer s obligations under his Employee Intellectual Property, Confidentiality and Non-Compete Agreement for such additional period. Severance payments may be made by ARCA on a monthly basis or, at ARCA s election, in a lump sum. The severance payment is conditioned on the execution by Mr. Brewer of a legal release in a form acceptable to ARCA. A termination for cause includes willful misconduct, gross negligence, theft, fraud or other illegal or dishonest conduct, any of which are considered to be materially harmful to ARCA; refusal, unwillingness, failure or inability to perform material job duties or habitual absenteeism; or violation of fiduciary duty, violation of any duty of loyalty or material breach of any material term of the employment agreement or the Employee Intellectual Property, Confidentiality and Non-Compete Agreement, or any other agreement, with ARCA. Good reason includes a decrease in current base salary, with certain exceptions; change in title or reporting relationship; failure of the ARCA stockholders to elect Mr. Brewer to the board of directors; a move of the ARCA headquarters to a location greater than 60 miles from Denver, Colorado; resignation within 90 days of a corporate transaction; or ARCA s unilateral decision to significantly and detrimentally reduce Mr. Brewer s job responsibilities.

In connection with the execution of his employment agreement, in November 2006, Mr. Brewer was granted the option to purchase 992,000 shares of ARCA s common stock pursuant to a Stock Option Agreement between ARCA and Mr. Brewer and the other terms and conditions of the ARCA 2004 Stock Incentive Plan. The options were exercisable immediately, subject to ARCA s right to repurchase any shares that have been exercised at the exercise price upon a voluntarily resignation by Mr. Brewer, his termination for cause or upon his death or disability. ARCA s right of repurchase lapses at the rate of 6.25% at the end of each quarter following the first anniversary of the grant date. In addition, ARCA s right of repurchase lapses in full upon the earlier of a corporate transaction (as defined in his employment agreement) or upon a termination other than for cause or by Mr. Brewer for good reason. The closing of the merger will not result in the acceleration in the rate at which ARCA s right of repurchase lapses with respect to these options.

In addition to the options, Mr. Brewer was issued 500,000 shares of restricted stock pursuant to a Restricted Stock Agreement dated November 2, 2006 that was amended on February 19, 2007. Mr. Brewer paid $37,750 for 250,000 of the shares and received the remaining shares in consideration for prior services. The amount Mr. Brewer paid for the shares was equal to the fair market value of the stock on the date of issuance. Under his Restricted Stock Agreement, the shares are unvested and subject to ARCA s repurchase right at the purchase price until the earlier to occur of the listing of ARCA s common stock on a national securities exchange or a change in control. In October 2008, Mr. Brewer s Restricted Stock Agreement was amended to provide that the shares of restricted stock will vest in full upon the closing of the merger. As of October 15, 2008, no shares of restricted stock had vested.

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Michael R. Bristow, M.D., Ph.D. Employment and Retention Agreement; Stock Option Agreement

Michael R. Bristow, M.D., Ph.D. serves as ARCA s chief science and medical officer under an Employment and Retention Agreement that was amended and restated as of June 4, 2008. Dr. Bristow is permitted to continue his academic work for the University of Colorado Health Sciences Center and for the Cardiovascular Institute, so long as it does not interfere with his duties as chairman and chief science and medical officer.

Under his employment agreement, Dr. Bristow is entitled to receive an annual base salary of $200,000, subject to annual increases if approved by the ARCA board of directors (or ARCA s compensation committee) and is eligible to receive an annual bonus as determined by the board of directors (or ARCA s compensation committee) in its sole discretion.

If ARCA terminates Dr. Bristow s employment without cause, or if Dr. Bristow terminates his employment with good reason (as these terms are defined in his employment agreement), ARCA has agreed to pay Dr. Bristow a severance payment equivalent to (i) 12 months of his base salary, (ii) a pro rata portion of any bonus compensation under any employee bonus plan that has been approved by the board of directors payable to him for the fiscal year in which his employment terminated to be paid at the same time that such incentive bonus would have been paid had the termination not occurred, and (iii) reimbursement to cover out-of-pocket costs to continue group health insurance benefits under COBRA for 12 months, whether he elects or is eligible to receive COBRA (provided, that even if he does not elect or is not eligible to receive COBRA, he will receive the equivalent of such out-of-pocket expenses paid by him not to exceed the costs that the benefits would equal under COBRA if he were so eligible). In addition ARCA may elect in its sole discretion, to pay additional severance equal to up to 12 months base salary, which additional payment would extend the covenants and obligations under Dr. Bristow s Employee Intellectual Property, Confidentiality and Non-Compete Agreement for such additional period. The severance payment is conditioned on the execution by Dr. Bristow of a legal release in a form acceptable to ARCA. A termination for cause includes willful misconduct, gross negligence, theft, fraud or other illegal or dishonest conduct, any of which are considered to be materially harmful to ARCA; refusal, unwillingness, failure or inability to perform material job duties or habitual absenteeism; or violation of fiduciary duty, violation of any duty of loyalty or material breach of any material term of the employment agreement or the Employee Intellectual Property, Confidentiality and Non-Compete Agreement, or any other agreement, with ARCA. Good reason includes a relocation of normal work location greater than 30 miles; a decrease in current base salary by more than 15%, with certain exceptions; and ARCA s unilateral decision to significantly and detrimentally reduce Dr. Bristow s job responsibilities.

In January 2005 Dr. Bristow was granted an option to purchase 708,850 shares of ARCA s common stock pursuant to a Stock Option Agreement between ARCA and Dr. Bristow and the other terms and conditions of the ARCA 2004 Stock Incentive Plan. Twenty-five percent of the shares issuable upon exercise of the option vested on October 18, 2005 and 6.25% of the shares issuable upon exercise vest at the end of each three-month period thereafter. If a change of control of ARCA occurs prior to expiration of the option and at a time when Dr. Bristow remains in service, 50% of the unvested option shares vest and become immediately exercisable and any remaining options continue to vest in accordance with the vesting schedule set forth above, provided, however, that on the earlier of (i) the one year anniversary of the closing date of any change of control and (ii) the date Dr. Bristow s employment is terminated by ARCA without cause or by Dr. Bristow for good reason within 12 months of a change of control of ARCA, any shares that remain unvested vest and become immediately exercisable. The closing of the merger will not result in the acceleration of any stock options held by Dr. Bristow.

Christopher D. Ozeroff Employment and Retention Agreement; Stock Option Agreement

Christopher D. Ozeroff is employed as the executive vice president of business development and general counsel pursuant to an employment agreement amended and restated as of June 12, 2008. Under his employment agreement, Mr. Ozeroff is entitled to receive an annual base salary of $200,000, subject to annual increases if

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approved by the ARCA board of directors (or ARCA s compensation committee) and is eligible to receive an annual bonus as determined by the ARCA board of directors (or ARCA s compensation committee) in its sole discretion.

If ARCA terminates Mr. Ozeroff s employment without cause, or if Mr. Ozeroff terminates his employment with good reason (as these terms are defined in his employment agreement), ARCA has agreed to pay Mr. Ozeroff a severance payment equivalent to (i) 12 months of his base salary, (ii) a pro rata portion of any bonus compensation under any employee bonus plan that has been approved by the board of directors payable to him for the fiscal year in which his employment terminated to be paid at the same time that such incentive bonus would have been paid had the termination not occurred, and (iii) reimbursement to cover out-of-pocket costs to continue group health insurance benefits under COBRA for 12 months, whether he elects or is eligible to receive COBRA (provided, that even if he does not elect or is not eligible to receive COBRA, he will receive the equivalent of such out-of-pocket expenses paid by him not to exceed the costs that the benefits would equal under COBRA if he were so eligible). In addition ARCA may elect in its sole discretion, to pay additional severance equal to up to 12 months base salary, which additional payment would extend the covenants and obligations under Mr. Ozeroff s Employee Intellectual Property, Confidentiality and Non-Compete Agreement for such additional period. The severance payment is conditioned on the execution by Mr. Ozeroff of a legal release in a form acceptable to ARCA. A termination for cause includes willful misconduct, gross negligence, theft, fraud or other illegal or dishonest conduct, any of which are considered to be materially harmful to ARCA; refusal, unwillingness, failure or inability to perform material job duties or habitual absenteeism; or violation of fiduciary duty, violation of any duty of loyalty or material breach of any material term of the employment agreement or the Employee Intellectual Property, Confidentiality and Non-Compete Agreement, or any other agreement, with ARCA. Good reason includes a relocation of normal work location greater than 30 miles; a decrease in current base salary by more than 15%, with certain exceptions; and ARCA s unilateral decision to significantly and detrimentally reduce Mr. Ozeroff s job responsibilities.

In January 2005 Mr. Ozeroff was granted an option to purchase 393,000 shares of ARCA s common stock pursuant to a Stock Option Agreement between ARCA and Mr. Ozeroff and the other terms and conditions of the ARCA 2004 Stock Incentive Plan. Twenty-five percent of the shares issuable upon exercise of the option vested on October 18, 2005 and 6.25% of the shares issuable upon exercise vest at the end of each three-month period thereafter. If a change of control of ARCA occurs prior to expiration of the option and at a time when Mr. Ozeroff remains in service, 50% of the unvested option shares vest and become immediately exercisable and any remaining options shall continue to vest in accordance with the vesting schedule set forth above, provided, however, that on the earlier of (i) the one year anniversary of the closing date of any change of control and (ii) the date Mr. Ozeroff s employment is terminated by ARCA without cause or by Mr. Ozeroff for good reason within 12 months of a change of control of ARCA, any shares that remain unvested vest and become immediately exercisable. The closing of the merger will not result in the acceleration of any stock options held by Mr. Ozeroff.

Nuvelo Executive Change in Control and Severance Benefit Plan Applicable to Mr. Bendekgey

Nuvelo s board of directors approved the Severance Plan in December 2004. The Severance Plan provides for the payment of severance benefits and/or change in control benefits to Nuvelo s eligible employees. All of Nuvelo s employees at the level of vice president or above have been designated by Nuvelo s board as participants in the Severance Plan. Nuvelo s board may designate additional individuals as participants. To the extent a participant is entitled to greater benefits under his or her employment agreement with Nuvelo, such additional benefits supersede the benefits payable pursuant to the Severance Plan. As Nuvelo s senior vice president, chief financial officer and general counsel, Mr. Bendekgey is eligible to participate in the Severance Plan.

The Severance Plan describes a change in control in Nuvelo as any one of the following events:

a sale or other disposition of all or substantially all of the assets of Nuvelo;

a merger, consolidation, or similar transaction involving Nuvelo where, immediately after the transaction, the stockholders of Nuvelo immediately prior to the transaction do not directly or

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indirectly own, voting securities representing at least 50% of the combined outstanding voting power of the surviving entity;

any person, entity, or group becomes the beneficial owner of securities of Nuvelo representing at least 50% of the combined voting power of Nuvelo s then-outstanding securities, other than by virtue of a merger, consolidation, or similar transaction; or

the individuals who, at the beginning of any period of two years or less, constituted the board of directors of Nuvelo cease, for any reason, to constitute at least a majority of the board, unless the election or nomination for election of each new director was approved by the vote of at least a majority of the directors then still in office who were directors at the beginning of the two year period.

If a change in control occurs, all Nuvelo stock options and stock awards held by a Severance Plan participant will become fully vested. The Nuvelo stock options and stock awards held by a Severance Plan participant will also become fully vested if the participant is terminated without cause or constructively terminated within one month preceding Nuvelo s change in control.

In addition, if a participant is terminated without cause or constructively terminated one month before or one year after a change in control, he or she will also be entitled to cash severance and benefits as follows:

payment equivalent to twelve months salary, paid over a twelve month period;

payment equal to the highest cash bonus received by the individual in any consecutive 11 month period within the preceding 36 months; and

reimbursement of premiums paid for continued medical coverage pursuant to COBRA for up to 12 months.

In addition, if a participant is terminated without cause or constructively terminated outside the context of a change in control, he or she will be entitled to 12 months of vesting of all stock options and stock awards held by him or her, and cash severance and benefits as follows:

payment equivalent to twelve months salary, paid over a twelve month period; and

reimbursement of premiums paid for continued medical coverage pursuant to COBRA for up to 12 months.

For the purposes of the Severance Plan, constructive termination includes a material diminution in authority, position, or responsibilities, a reduction in base salary, a change in the business location of more than 35 miles, a material breach by Nuvelo of any provisions of the Severance Plan, or any enforceable written agreement between Nuvelo and the participant, or any failure by Nuvelo to obtain assumption of the Severance Plan by a successor. Cause includes a refusal or failure to follow the directions of the Board or individual to whom the participant reports, failure to perform duties in a satisfactory manner, or crimes involving moral turpitude, fraud, or dishonesty.

Quantification of Termination Payments and Benefits

ARCA Executive Officers Potential Payments upon Termination or Change in Control

ARCA has entered into employment agreements, stock option agreements and/or restricted stock agreements with each of its named executive officers that provide for certain payments and acceleration and continuation of benefits upon specified terminations of employment or upon a change in control of ARCA. The post-termination arrangements under these agreements are described above under Employment Agreements and Potential Payment Upon Termination or Change of Control .

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The following table reflects the estimated potential payments upon certain terminations of employment or a change in control that would be payable to each of the named executive officers who were employed on December 31, 2007. For purposes of calculating the potential payments set forth in the tables below, ARCA has assumed that (i) the date of termination or change in control was December 31, 2007 and (ii) the value of each share subject to a stock option or a restricted stock grant that would be accelerated, or for which ARCA s right of repurchase lapses, in the circumstances set forth in the table below equals $0.31, which represents the fair value of ARCA s common stock as of December 31, 2007 as determined by ARCA s board of directors.

Except as noted in the footnotes following the table, the closing of the merger will not result in the payment or acceleration of any benefits to the named executive officers. The terms cause , good reason , disability and corporate transaction in the table and the footnotes below are as defined in the applicable agreement.

				Corporate Transaction	
Name	**Termination Without Cause**	**Resignation for Good Reason**	**Death or Disability**	**Termination Without Cause or Resignation for Good Reason**	**No Termination**
Richard B. Brewer					
Cash severance under Employment and Retention Agreement dated November 2, 2006	$ 397,500(1)	$ 397,500(1)		$ 397,500(1)	
Lapse of ARCA Repurchase Right under Incentive Stock Option Agreement dated November 2, 2006	119,040(2)	119,040(2)		119,040(2)	$ 119,040(2)
Lapse of ARCA Repurchase Right under Restricted Stock Agreement dated November 2, 2006, as amended				80,000(3)	80,000(3)
Michael R. Bristow, M.D., Ph.D.					
Cash severance under Employment and Retention Agreement dated January 3, 2005	331,250(4)	331,250(4)			
Acceleration of vesting under Incentive Stock Option Agreement dated January 3, 2005				53,146(5)	26,572(5)
Christopher D. Ozeroff					
Cash severance under Employment and Retention Agreement dated January 3, 2005	257,750(4)	257,750(4)			
Acceleration of vesting under Incentive Stock Option Agreement dated January 3, 2005				29,475(5)	14,738(5)

(1) Represents a severance benefit equal to 12 months of base salary for fiscal 2007 and the amount of the bonus compensation payable to Mr. Brewer under the performance bonus plan approved by ARCA s compensation committee for fiscal 2007. In each event, ARCA may elect, in its sole discretion, to pay Mr. Brewer additional severance equal to up to 12 months salary, which additional payment would extend Mr. Brewer s covenants and obligations under his Employee Intellectual Property, Confidentiality, and Non-Compete Agreement for such additional period.

(2) In November 2006, Mr. Brewer was granted the option to purchase 992,000 shares of ARCA s common stock. The options vested immediately, subject to ARCA s right of repurchase which lapses in full upon the earlier of a corporate transaction or upon a termination other than a termination for cause or a termination for good reason. The amount reflected in the table above represents the value of the shares with respect to which ARCA s right of repurchase would lapse following the occurrence of the events shown in the table.

(3) In November 2006, ARCA issued Mr. Brewer 500,000 shares of common stock pursuant to a restricted stock agreement. ARCA has repurchase rights (allowing ARCA to repurchase the shares at the price paid by Mr. Brewer) with respect to these shares, which lapse as to 250,000 of the shares if (a) ARCA s common stock is listed on a national exchange, when the date on which the average market

capitalization of ARCA, as reported by such exchange over the immediately preceding ten business days, is at least $250 million, or (b) a corporate transaction results in consideration paid by the acquirer is at least $250 million. Repurchase rights on the full 500,000 shares would lapse

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on the same terms as the first 250,000 if the two conditions above were met with values of at least $500 million. Amounts reflected in the table above assume ARCA s repurchase rights lapse with respect to all 500,000 of these shares. In October 2008, Mr. Brewer s restricted stock agreement was amended to provide that ARCA s repurchase rights will lapse with respect to all 500,000 shares on the closing of the merger.

(4) Represents a severance benefit equal to 12 months of base salary for fiscal 2007, the amount of the bonus compensation payable to the officers under the performance bonus plan approved by ARCA s compensation committee for fiscal 2007 and reimbursement of $1,515 per month for 12 months of group health insurance benefits under COBRA. These amounts are payable over a 12-month period or, at ARCA s discretion, in a lump sum payment. In each event, ARCA may elect, in its sole discretion, to pay the officers additional severance equal to up to 12 months salary, which additional payment would extend the officer s covenants and obligations under his Employee Intellectual Property, Confidentiality, and Non-Compete Agreement for such additional period.

(5) If a change of control of ARCA occurs prior to expiration of the option and at a time when the officer remains in service, 50% of the unvested option shares will vest and become immediately exercisable and any remaining options will continue to vest in accordance with the normal time-based vesting schedule, provided, however, that on the earlier of (i) the one year anniversary of the closing date of such change of control and (ii) the date the officer s employment is terminated by ARCA without cause or by the officer for good reason, any shares that remain unvested shall vest and become immediately exercisable.

Actual amounts that a named executive officer could receive in the future could differ materially from the amounts reported above as a result of many factors, including changes in ARCA s stock price, changes in base salary, target and actual bonus amounts, and the vesting provisions and grants of additional equity awards.

Nuvelo Executive Officers Potential Payments upon Termination or Change in Control

The table below shows the potential payments and benefits to which Mr. Bendekgey would be entitled under Nuvelo s Severance Plan adopted by the board of directors. The Severance Plan is described in more detail in the section preceding this table. The amounts shown in the table assume that termination was effective as of December 31, 2007 and that all eligibility requirements under the Severance Plan were met. While Mr. Bendekgey is expected to serve as chief financial officer for a temporary transition period following the consummation of the merger, it is anticipated that his employment will be terminated following this transition period and that he will be entitled to the benefits afforded under the Severance Plan.

		Termination without Cause or Constructively Terminated	
Name	**Benefits**	**Within the Context of change in Control**	**Outside the Context of Change in Control**
Lee Bendekgey	Cash severance	$ 375,000	$ 375,000
	Cash bonus	126,449	
	Medical benefits	20,105	20,105
	Stock option vesting acceleration(1)	1,153,315	625,210
	Total	$ 1,674,869	$ 1,020,315

(1) Amount represents the unrecognized fair value of unvested stock options that would be accelerated upon termination of employment as of December 31, 2007. The fair value was determined on the grant date of the respective options in accordance with SFAS 123R and, therefore, is not indicative of the value that would be ultimately realized by Mr. Bendekgey upon exercise of his options. As of December 31, 2007, the closing price of Nuvelo s common stock was $1.83, and the exercise prices of all stock options held by Mr. Bendekgey as of that date were above $1.83. Accordingly, Mr. Bendekgey would not receive any benefits from the acceleration of stock option vesting as provided in the Severance Plan if the termination occurred as of December 31, 2007.

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ARCA 2004 Stock Incentive Plan

General

ARCA has adopted the ARCA Plan to enhance the ability of ARCA and its affiliates ability to attract and retain highly qualified officer, directors, key employees and other persons, and to motivate them to serve ARCA and to expend maximum effort to improve the business results and earnings of ARCA, by providing to such officers, directors, key employees and other persons an opportunity to acquire or increase a direct proprietary interest in the operations and future success of ARCA. The ARCA Plan was originally adopted by the ARCA board of directors and stockholders on September 30, 2004, with certain amendments to the ARCA Plan having been subsequently approved by the board of directors and stockholders.

The ARCA Plan authorizes the granting of awards to ARCA s employees, officers, consultants and directors and to employees, officers, consultants and directors of its subsidiaries. The following awards are available under the ARCA Plan:

- options to purchase shares of common stock, which may be incentive stock options or non qualified stock options and
- restricted stock.

The aggregate number of shares of ARCA common stock reserved and available for awards under the ARCA Plan is 6,356,550 shares. As of October 15, 2008, there were 5,650,647 shares previously issued or subject to outstanding Plan awards and 705,903 shares were reserved for issuance pursuant to future awards under the ARCA Plan. Prior to the effective time of the merger, ARCA s board of directors intends to amend the ARCA Plan to increase the number of shares of ARCA common stock reserved and available for awards under the ARCA Plan by 2,000,000 shares to 8,356,550 shares, subject to ARCA stockholder approval. ARCA anticipates granting options awards prior to the effective time of the merger. Shares of ARCA common stock reserved for awards but not covered by awards made prior to the effective time of the merger will not be assumed by Nuvelo and after such effective time no further awards can be made under the ARCA Plan.

Administration

The ARCA board of directors has delegated to the compensation committee of the board of directors the full and final authority to administer the ARCA Plan, including the authority to:

- designate participants;
- determine the types of awards to grant to each participant;
- determine the number of shares of stock to be subject to be subject to a grant;
- establish the terms and conditions of each grant (including, but not limited to, the option price of any option, the nature and duration of any restriction or condition (or provision for lapse thereof) relating to the vesting, exercise, transfer or forfeiture of a grant or the shares of stock subject thereto and any terms or conditions that may be necessary to qualify options as incentive stock options);
- prescribe the form of each award agreement evidencing a grant; and
- amend, modify or supplement the terms of any outstanding grant.

The ARCA board of directors has also authorized a sub-committee of the compensation committee, or the award committee to approve and authorize stock option grants to employees.

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Awards

The following is a summary of the types of awards that the ARCA compensation and award committees of the ARCA board of directors may grant to participants pursuant to the ARCA Plan.

Stock Option

The ARCA compensation committee is authorized to grant both incentive stock options and nonqualified stock options. The exercise price of an incentive stock option may not be less than the fair market value of the underlying stock on the date of grant. If, however, a participant is a ten-percent stockholder, the option price of an incentive stock option granted to the participant may not be less than 110% of the fair market value of a share of ARCA common stock on the grant date. To the extent required by law, the exercise price of a nonqualified stock option may not be less than 85% of the fair market value of the underlying stock on the date of grant. In no case is the option price of any option less than the par value of a share of ARCA common stock. No option may have a term of more than 10 years from the grant date.

Restricted Stock

The ARCA compensation committee may make awards of restricted stock, subject to restrictions on transferability and other restrictions as the compensation committee may impose (including limitations on the right to vote restricted stock or the right to receive dividends, if any, on the restricted stock).

Limitations on Transfer; Beneficiaries

Shares acquired pursuant to a grant under the ARCA Plan may not be sold, pledged, assigned, gifted, transferred or otherwise disposed of to any person or entity without complying with conditions prescribed by the compensation or award committees, including first offering the shares to ARCA for purchase on the same terms and conditions as those offered the proposed transferee. This right of first refusal restriction does not apply to a transfer of stock that occurs as a result of the death of a participant or of any subsequent transferee (but does apply to the executor, the administrator or personal representative, the estate and the legatees, beneficiaries and assigns thereof). Furthermore, stock issued upon exercise of an option or pursuant to the grant of restricted stock may be subject to rights of repurchase or other transfer restrictions as the compensation and award committees may determine. Any additional restrictions are set forth in the applicable award agreement. The right of first refusal, repurchase right and other restrictions terminate as of the first date that the ARCA common stock is listed on the Nasdaq Global Market or is publicly traded in an established securities market.

Except for certain authorized transfers to family members: (i) during the lifetime of a participant, only the participant (or, in the event of legal incapacity or incompetency, the participant s guardian or legal representative) may exercise an option and (ii) no option shall be assignable or transferable by the participant to whom it is granted, other than by will or the laws of descent and distribution.

Assumption of Awards Upon Certain Reorganizations

If ARCA is the surviving entity in any reorganization, merger or consolidation with one or more entities and in which no change of control occurs, any outstanding awards under the ARCA Plan will pertain to and apply solely to the common stock to which the participant would have been entitled immediately following such reorganization, merger or consolidation with a corresponding adjustment in the price of any options.

Acceleration Upon Certain Events

In the event of a change of control (as defined in the ARCA Plan) of ARCA in which ARCA is not the surviving entity, all outstanding options and restricted stock may be assumed or continued, or substituted for new

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common stock options and new common stock restricted stock relating to the stock of a successor entity, or its parent or subsidiary, if provision is made in writing in connection with the change of control. In this event, appropriate adjustments as to the number of shares and option prices would be made and outstanding options and restricted stock would continue in the manner and under the terms so provided. If the options and restricted stock awards are not to be assumed, continued or substituted, then (i) all outstanding shares of restricted stock will be deemed to have vested, and with the exception of any rights of first refusal, repurchase rights or other restrictions as formerly discussed, all restrictions and conditions applicable to shares of restricted stock will be deemed to have lapsed immediately prior to such change of control, and (ii) either of the following two actions shall have been taken: (x) 15 days prior to the scheduled consummation of a change of control, all options outstanding shall become immediately exercisable and shall remain exercisable for a period of 15 days or (y) the compensation committee may elect to cancel any outstanding grants and pay or deliver, or cause to be paid or delivered, to each participant an amount in cash or securities having an equivalent value (as determined by the ARCA compensation committee in good faith).

Termination and Amendment

The ARCA compensation committee may, at any time and from time to time, amend, suspend or terminate the ARCA Plan as to any shares of stock as to which grants have not been made. An amendment to the ARCA Plan is contingent on approval of ARCA s shareholders only to the extent required by applicable law, regulations or rules. No grants can be made after termination of the ARCA Plan. No amendment, suspension or termination of the ARCA Plan will, without the consent of the participant, alter or impair rights or obligations under any grant theretofore awarded under the ARCA Plan.

Nuvelo Equity Incentive Plans

1995 Stock Option Plan

All options granted under Nuvelo s 1995 Stock Option Plan, as amended, and Nuvelo s Directors Plan become immediately exercisable in the event of a change of control (as defined in that plan). Change of Control under these plans means:

- an acquisition by any entity or group of beneficial ownership of more than 50% of Nuvelo s outstanding securities entitled to vote for the election of directors, or voting securities;
- the commencement by an entity or group of a tender offer (other than by Nuvelo or one of its subsidiaries) for more than 50% of Nuvelo s outstanding voting securities;
- a merger or consolidation in which the holders of Nuvelo s outstanding voting securities immediately prior to the merger hold less than 50% of the outstanding voting securities of the surviving or resulting corporation;
- a transfer of all or substantially all of Nuvelo s assets other than to an entity of which Nuvelo holds at least 80% of the voting securities; and
- the election of the lesser of three directors or directors constituting a majority of Nuvelo s board of directors without the approval of the incumbent board of directors.

2002 Equity Incentive Plan

In the event of an acquisition under Nuvelo s 2002 Equity Incentive Plan, or the 2002 Plan, the vesting of all options and restricted stock awards outstanding under the 2002 Plan will be accelerated and such awards will be fully exercisable. For purposes of the 2002 Plan, the term acquisition means:

the acquisition by any entity, person, or group of beneficial ownership, as that term is defined in Rule 13d-3 under the Exchange Act, of more than 50% of Nuvelo s outstanding voting securities;

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the effective time of (i) a merger or consolidation of Nuvelo with one or more corporations as a result of which the holders of Nuvelo s outstanding voting securities immediately prior to such merger hold less than 50% of the voting securities of the surviving or resulting corporation, or (ii) a transfer of substantially all of Nuvelo s property or assets other than to an entity of which Nuvelo owns at least 50% of the voting securities; or

the election to Nuvelo s board of directors, without the recommendation or approval of the incumbent board of directors, of directors constituting a majority of the number of Nuvelo s directors then in office.

2004 Equity Incentive Plan

Nuvelo s 2004 Equity Incentive Plan, or 2004 Plan, defines a change in control of Nuvelo as any of the following events upon which the stockholders of Nuvelo immediately before the event do not retain immediately after the event, in substantially the same proportions as their ownership of shares of Nuvelo s voting stock immediately before the event, direct or indirect beneficial ownership of a majority of the total combined voting power of the voting securities of Nuvelo, its successor, or the corporation to which the assets of Nuvelo were transferred:

a sale or exchange by the stockholders in a single or series of related transactions of more than 50% of Nuvelo s voting stock;

a merger or consolidation in which Nuvelo is a party;

the sale, exchange, or transfer of all or substantially all of the assets of Nuvelo; or

a liquidation or dissolution of Nuvelo.

If a change in control occurs, the surviving, continuing, successor, purchasing, or parent corporation thereof may either assume all outstanding awards or substitute new awards having an equivalent value. In the event of a change in control in which the outstanding stock options and stock appreciation rights are not assumed or replaced, then all unexercisable, unvested, or unpaid portions of such outstanding awards will become immediately exercisable, vested, and payable in full immediately prior to the date of the change in control.

In the event of a change in control, the lapsing of all vesting conditions and restrictions on any shares subject to any restricted stock award, restricted stock unit, or performance award held by a participant whose service with Nuvelo has not terminated prior to the change in control shall be accelerated effective as of the date of the change in control. For this purpose, the value of outstanding performance awards will be determined and paid on the basis of the greater of (i) the degree of attainment of the applicable performance goals prior to the date of the change in control or (ii) 100% of the pre-established performance goal target.

Any award not assumed, replaced, or exercised prior to the change in control will terminate. The 2004 Plan authorizes the compensation committee, in its discretion, to provide for different treatment of any award, as may be specified in such award s written agreement, which may provide for acceleration of the vesting or settlement of any award, or provide for longer periods of exercisability, upon a change in control.

ARCA 401(k) Plan

ARCA maintains a 401(k) employee savings and retirement plan that is intended to be a tax qualified defined contribution plan under Section 401(k) of the Internal Revenue Code. In general, substantially all employees of ARCA are eligible to participate in the 401(k) plan on the first day of the month following their date of hire. The ARCA 401(k) plan allows participants to contribute a portion of their current compensation to the plan, subject to statutory limits. The 401(k) plan provides for safe harbor matching contributions by ARCA,

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and for fiscal 2007 ARCA made matching contributions equal to 100% of the employee s first 3% of pretax deferrals and 50% of the employees next 2% of pretax deferrals. Participants are fully vested in the matching contributions.

Nuvelo 401(k) Plan

Nuvelo has a retirement savings plan, commonly known as a 401(k) plan, which is intended to be a tax qualified defined contribution plan under Section 401(k) of the Internal Revenue Code. The Nuvelo 401(k) plan allows all full-time employees to contribute from 1% to 60% of their pretax salary, subject to IRS limits. Nuvelo matches all employees contributions in an amount of up to 2% of each participant s compensation in the year. These contributions vest at the time the contributions are made.

Compensation of Directors

ARCA Director Compensation

ARCA compensates its independent, nonemployee directors through grants of stock options to attract and retain qualified candidates to serve on its board of directors. Directors who also are employees of ARCA or affiliated with its venture capital investors receive no compensation for their service as directors or as members of board committees, other than reimbursement of business expenses incurred in connection with serving on the board of directors. In setting director compensation, ARCA considers the significant amount of time that directors dedicate to the fulfillment of their director responsibilities, as well as the competency and skills required of directors.

Nuvelo Director Compensation

The nominating and corporate governance committee of the board of directors of Nuvelo, in accordance with its charter, is responsible for periodically making recommendations to the board of directors with respect to the compensation of board members. The Nuvelo nominating and corporate governance committee performed an evaluation of board member compensation in December 2007, and recommended no changes to Nuvelo board member compensation, which recommendation was accepted by the Nuvelo board of directors.

Annual Cash Retainer Fees

Each non-employee director is entitled to an annual retainer fee of $20,000. The audit committee chair is entitled to receive an additional $20,000 for service as the audit committee chair. If a non-employee director is the chair of any other committee, that director is entitled to receive an additional $10,000 per chair. Each of the members of the audit committee, other than the chair, is entitled to receive an additional $10,000 for his or her service on the audit committee. For membership on any other committee, except for the chair of such Committee, a non-employee director is entitled to receive an additional $5,000. Board members are not entitled to receive any other cash compensation for their board service. If a board member were to resign or assume additional board responsibilities within a year, the Board member s cash compensation would be adjusted the next quarter to reflect the change. Finally, each director has the option to convert the previously mentioned retainer fees into deferred stock units, in accordance with the terms of a deferred stock unit plan pursuant to Nuvelo s 2004 Plan.

Annual Stock Option Grants

On the date of the 2008 annual meeting of the stockholders, Ms. Pendergast and Dr. Sobel each received a fully vested option to purchase 15,000 shares of the Nuvelo s common stock under the 2004 Plan. The purchase price for these options was $0.73, which was equal to the average of the high and the low price for Nuvelo s common stock on the date of Nuvelo s 2008 annual meeting of stockholders.

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Appointment Grants

If at any time Nuvelo s board of directors appoints a new, non-employee chairman of the board, the new chairman will be granted an option to purchase 50,000 shares of Nuvelo s common stock at the average of the high and the low price for Nuvelo s common stock on the date of grant. If at any time Nuvelo s board appoints a new, non-employee vice chair of the board, the new vice chair will be granted an option to purchase 35,000 shares of Nuvelo s common stock at the average of the high and the low price for Nuvelo s common stock on the date of grant. If at any time the board appoints a new non-employee director, the new director will be granted an option to purchase 25,000 shares of Nuvelo s common stock at average of the high and the low price for Nuvelo s common stock on the date of grant. These grants of Nuvelo s common stock for appointments will vest 50% on the date of grant and 50% on the first year anniversary of the date of grant.

The annual grants issued to Nuvelo s board in 2007 and 2008 were made pursuant to the forms of Stock Option Agreement and Notice of Grant of Stock Option filed as exhibits to the Form 8-K filed by Nuvelo on September 20, 2004, as amended in March 2005. In March 2005, Nuvelo s compensation committee approved the amendment of the form of Stock Option Agreement for the members of Nuvelo s board to provide that the period of exercisability of the stock option following termination of service as a director will begin to run upon the expiration of any lock-up agreement that the director has entered into to facilitate a transaction, rather than upon termination of board service.

Non-Employee Director Compensation

The following table sets forth the fiscal year 2007 compensation paid to or earned by the individuals who are expected to serve as non-employee directors of the combined company upon completion of the merger. All references to options or shares held by Ms. Pendergast or Dr. Sobel refer to options or shares of Nuvelo. References to options or shares held by all other directors in the table refer to options or shares of ARCA.

Director Compensation Table

Name(1)	Fees Earned or Paid in Cash ($)	Option Awards ($)(2)	Total ($)
John L. Zabriskie, Ph.D.(4)		$ 624(3)	$ 624
J. William Freytag, Ph.D.(5)		$ 3,152(3)	$ 3,152
Jean-Francois Formela, M.D.			
Linda Grais, M.D.			
Mary K. Pendergast	$ 30,000	$ 40,115(6)	$ 70,115
Burton E. Sobel, M.D.	$ 35,000	$ 40,115(6)	$ 75,115
David G. Lowe			

(1) Ted W. Love, M.D. is expected to be a director of the combined company, and is currently the chief executive officer of Nuvelo, but is not a named executive officer for purposes of this proxy statement/prospectus/consent solicitation. Dr. Love served as a director of Nuvelo during fiscal year 2007 but received no additional compensation for his services as a director. Pursuant to Instruction 5(a)(ii) to Regulation S-K, he is omitted from this table.

(2) Amounts reflect stock-based compensation expense recognized for financial statement reporting purposes for the year ended December 31, 2007, in accordance with Statement of Financial Accounting Standards No. 123 (revised 2004), Share-Based Payment (SFAS 123R), and include amounts attributable to awards granted in and before 2007. Amounts shown above exclude the impact of estimated forfeitures related to service-based vesting conditions.

(3) Assumptions used in the determination of the grant date fair value of the stock options held by these directors are disclosed in Note 1(n) to ARCA s audited financial statements included in the elsewhere in this

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proxy statement/prospectus/consent solicitation. As of December 31, 2007, Dr. Zabriskie and Dr. Freytag held options to purchase 82,383 and 82,000, respectively, shares of the Company s common stock, respectively.

(4) As of December 31, 2007, Dr. Zabriskie held options to purchase 82,383 shares, of which 23,283, 34,100 and 25,000 shares vest in accordance with the standard four-year vesting provision commencing on August 3, 2005, August 3, 2006, and February 2, 2007, respectively. The exercise price of these options is equal to the fair market value of the common stock on the date of grant as determined by the board of directors.

(5) As of December 31, 2007, Dr. Freytag held options to purchase 82,000 shares, all of which vest in accordance with the standard four-year vesting provision commencing on February 2, 2007. The exercise price of these options is equal to the fair market value of the common stock on the date of grant as determined by the board of directors.

(6) The grant date fair values of options granted to each of the above indicated directors in 2007 were each $40,115. Grant date fair values were determined in accordance with SFAS 123R. Assumptions used in the valuation of stock options are disclosed in Note 1 to Nuvelo s audited financial statements included in the elsewhere in this proxy statement/prospectus/consent solicitation. As of December 31, 2007, Ms. Pendergast and Dr. Sobel held options to purchase 84,166 and 42,500 shares of the Company s common stock, respectively.

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RELATED PARTY TRANSACTIONS INVOLVING

DIRECTORS AND EXECUTIVE OFFICERS FOLLOWING THE MERGER

Nuvelo Transactions

Under Nuvelo s policies applicable to transactions involving related persons, transactions involving related persons are assessed by the independent directors on Nuvelo s board of directors. Related persons include Nuvelo directors and executive officers, as well as immediate family members of directors and officers. If the determination is made that a related person has a material interest in any Nuvelo transaction, then Nuvelo s independent directors would review, approve or ratify it, and the transaction would be required to be disclosed in accordance with the applicable law and Nasdaq listing requirements. If the related person at issue is a director of Nuvelo, or a family member of a director, then that director would not participate in those discussions. Other than transactions with respect to compensation otherwise described in this proxy statement/prospectus/consent solicitation, Nuvelo has not engaged in any related party transactions with individuals expected to serve as directors or executive officers of the combined company.

ARCA Transactions

Transactions Involving Stock Options with Executive Officers and Directors of ARCA

The following current executive officers and directors of ARCA, who will each also continue as an executive officer or director of the combined company following the merger, were granted stock options to purchase ARCA common stock as is set forth opposite such executive officer s or director s name in the following table. The options were granted under the ARCA Plan and are subject to the terms and conditions of stock option agreements between ARCA and each director and executive officer.

Name	Grant Date	Option Shares	Exercise Price	Exercise Date	Vesting
Richard B. Brewer	11/2/2006	992,000	$ 0.15	N/A	Fully vested at date of grant, subject to ARCA s right of repurchase(1)
Michael R. Bristow, M.D., Ph.D.	01/03/2005	708,580	$ 0.01	02/18/08(2)	25% on October 18, 2005; 6.25% at the end of each three month period thereafter
				09/09/08(3)	
John L. Zabriskie, Ph.D.	08/05/2005	23,283	$ 0.10	N/A	5,823 shares on May 5, 2006; 1,455 shares at the end of each quarter thereafter
	08/03/2006	34,100	$ 0.15	N/A	8,528 shares on August 3, 2007; 2,131 shares at the end of each quarter thereafter
	02/02/2007	25,000	$ 0.28	N/A	6,250 shares on February 2, 2008; 1,563 shares at the end of each quarter thereafter
	05/02/2008	25,000	$ 0.31	N/A	6,250 shares at the end of each quarter following the Grant Date
J. William Freytag, PhD	2/2/2007	82,000	$ 0.28	N/A	20,500 shares on February 2, 2008; 5,125 shares at the end of each quarter thereafter.
	5/2/2008	25,000	$ 0.31	N/A	6,250 shares at the end of each quarter following the Grant Date

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Name	Grant Date	Option Shares	Exercise Price	Exercise Date	Vesting
Jean-François Formela, M.D.					
David G. Lowe, Ph.D.					
Christopher D. Ozeroff	01/03/2005	393,000	$ 0.01	09/23/2008(4)	25% on October 18, 2005; 6.25% at the end of each three month period thereafter
Linda Grais, M.D.					
Randall St. Laurent	02/12/2008	180,000	$		