

AMBIT BIOSCIENCES CORP  
Form SC 13D  
May 31, 2013

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UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

SCHEDULE 13D

(Rule 13d-102)

INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT  
TO RULE 13d-1(a) AND AMENDMENTS THERETO FILED PURSUANT TO  
RULE 13d-2(a)

(Amendment No. \_\_\_)\*

Ambit Biosciences Corporation  
(Name of Issuer)

Common Stock, par value \$0.001 per share  
(Title of Class of Securities)

02318X 10 0  
(CUSIP Number)

Lloyd Appel  
Aisling Capital  
888 Seventh Avenue, 30th Floor  
New York, NY 10106  
(212) 651-6380  
(Name, Address and Telephone Number of Person  
Authorized to Receive Notices and Communications)

May 21, 2013  
(Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box " ".

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See §240.13d-7 for other parties to whom copies are to be sent.

\* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to

the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be “filed” for the purpose of Section 18 of the Securities Exchange Act of 1934 (the “Act”) or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

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CUSIP No. 02318X SCHEDULE 13D  
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Page 2 of 14

1 NAME OF REPORTING PERSONS  
I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS

Perseus-Soros BioPharmaceutical Fund, LP

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a)   
(b)

3 SEC USE ONLY

4 SOURCE OF FUNDS

OO

5 CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

7 SOLE VOTING POWER

1,670,676

(including 15,905 shares of the Issuer's common stock issuable upon the exercise of warrants expiring on June 5, 2019, 4,615 shares of the Issuer's common stock issuable upon the exercise of warrants expiring on September 29, 2020 and 103,712 shares of the Issuer's common stock issuable upon exercise of warrants expiring on May 18, 2021 (collectively, the "Warrants"))

NUMBER OF  
SHARES  
BENEFICIALLY  
OWNED BY  
EACH  
REPORTING  
PERSON  
WITH

8 SHARED VOTING POWER

0

9 SOLE DISPOSITIVE POWER

1,670,676

10 SHARED DISPOSITIVE POWER

0

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

1,670,676

12 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN o  
SHARES

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

9.4% (1)

14 TYPE OF REPORTING PERSON

PN

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(1)Based on 17,712,558 shares of the Issuer's common stock issued and outstanding following the initial public offering of the Issuer's common stock, as reported in the Issuer's final prospectus filed with the Securities Exchange Commission (the "SEC") on May 15, 2013.

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CUSIP No. 02318X SCHEDULE 13D  
10 0

Page 3 of 14

1 NAME OF REPORTING PERSONS  
I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS

Perseus-Soros Partners, LLC

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) o  
(b) x

3 SEC USE ONLY

4 SOURCE OF FUNDS

OO

5 CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e) o

6 CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

7 SOLE VOTING POWER

1,670,676

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH

(including 124,232 shares of the Issuer's common stock issuable upon the exercise of the Warrants)

8 SHARED VOTING POWER

0

9 SOLE DISPOSITIVE POWER

1,670,676

10 SHARED DISPOSITIVE POWER

0

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

1,670,676

12 o

CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

9.4% (2)

14 TYPE OF REPORTING PERSON

OO

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(2)Based on 17,712,558 shares of the Issuer's common stock issued and outstanding following the initial public offering of the Issuer's common stock, as reported in the Issuer's final prospectus filed with the SEC on May 15, 2013.

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CUSIP No. 02318X SCHEDULE 13D  
10 0

Page 4 of 14

1 NAME OF REPORTING PERSONS  
I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS

Aisling Capital LLC

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

(a)   
(b)

3 SEC USE ONLY

4 SOURCE OF FUNDS

OO

5 CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

7 SOLE VOTING POWER

1,670,676

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH

(including 124,232 shares of the Issuer's common stock issuable upon the exercise of the Warrants)

8 SHARED VOTING POWER

0

9 SOLE DISPOSITIVE POWER

1,670,676

10 SHARED DISPOSITIVE POWER

0

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

1,670,676

12

CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

9.4% (3)

14 TYPE OF REPORTING PERSON

OO

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(3)Based on 17,712,558 shares of the Issuer's common stock issued and outstanding following the initial public offering of the Issuer's common stock, as reported in the Issuer's final prospectus filed with the SEC on May 15, 2013.

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CUSIP No. 02318X SCHEDULE 13D  
10 0

Page 5 of 14

1 NAME OF REPORTING PERSONS  
I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS

Steve Elms

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a)   
(b)

3 SEC USE ONLY

4 SOURCE OF FUNDS

OO

5 CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION

United States

7 SOLE VOTING POWER

0

NUMBER OF SHARES 8 SHARED VOTING POWER

BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH

1,670,676

(including 124,232 shares of the Issuer's common stock issuable upon the exercise of the Warrants)

9 SOLE DISPOSITIVE POWER

0

10 SHARED DISPOSITIVE POWER

1,670,676

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

1,670,676

12

CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

9.4% (4)

14 TYPE OF REPORTING PERSON

IN

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(4)Based on 17,712,558 shares of the Issuer's common stock issued and outstanding following the initial public offering of the Issuer's common stock, as reported in the Issuer's final prospectus filed with the SEC on May 15, 2013.

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CUSIP No. 02318X SCHEDULE 13D  
10 0

Page 6 of 14

1 NAME OF REPORTING PERSONS  
I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS

Dennis Purcell

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a)   
(b)

3 SEC USE ONLY

4 SOURCE OF FUNDS

OO

5 CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION

United States

7 SOLE VOTING POWER

0

NUMBER OF  
SHARES 8 SHARED VOTING POWER

BENEFICIALLY  
OWNED BY  
EACH  
REPORTING  
PERSON  
WITH

1,670,676

(including 124,232 shares of the Issuer's common stock issuable upon the exercise of the Warrants)

9 SOLE DISPOSITIVE POWER

0

10 SHARED DISPOSITIVE POWER

1,670,676

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

1,670,676

12

CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

9.4% (5)

14 TYPE OF REPORTING PERSON

IN

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(5)Based on 17,712,558 shares of the Issuer's common stock issued and outstanding following the initial public offering of the Issuer's common stock, as reported in the Issuer's final prospectus filed with the SEC on May 15, 2013.

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CUSIP No. 02318X SCHEDULE 13D  
10 0

Page 7 of 14

1 NAME OF REPORTING PERSONS  
I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS

Andrew Schiff

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a)   
(b)

3 SEC USE ONLY

4 SOURCE OF FUNDS

OO

5 CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)

6 CITIZENSHIP OR PLACE OF ORGANIZATION

United States

7 SOLE VOTING POWER

0

NUMBER OF SHARES 8 SHARED VOTING POWER

BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH

1,670,676

(including 124,232 shares of the Issuer's common stock issuable upon the exercise of the Warrants)

9 SOLE DISPOSITIVE POWER

0

10 SHARED DISPOSITIVE POWER

1,670,676

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

1,670,676

12

CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

9.4% (6)

14 TYPE OF REPORTING PERSON

IN

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(6)Based on 17,712,558 shares of the Issuer's common stock issued and outstanding following the initial public offering of the Issuer's common stock, as reported in the Issuer's final prospectus filed with the SEC on May 15, 2013.

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CUSIP No. 02318X SCHEDULE 13D  
10 0

Page 8 of 14

Item 1. Security and Issuer.

The security to which this statement relates is common stock, par value \$0.001 per share (the “Common Stock”). The principal executive offices of Ambit Biosciences Corporation (the “Issuer”) are located at 11080 Roselle St., San Diego, California 92121.

Item 2. Identity and Background.

(a) This Schedule 13D is being filed on behalf of the following persons (each, a “Reporting Person” and collectively, the “Reporting Persons”):

- (i) Perseus-Soros BioPharmaceutical Fund, LP (“PSBF”);
- (ii) Perseus-Soros Partners, LLC (“PSPGP”), the general partner of PSBF;
- (iii) Aisling Capital LLC (“Aisling”), the managing member of PSPGP;

(iv) Mr. Dennis Purcell, a managing member of Aisling;

(v) Mr. Steve Elms, a managing member of Aisling;

(vi) Mr. Andrew Schiff, a managing member of Aisling (together with Mr. Dennis Purcell and Mr. Steve Elms, the “Managers”).

(b) The principal business address for each of the Reporting Persons is 888 Seventh Avenue, 30th Floor, New York, New York 10106.

(c) PSBF was formed in order to engage in the acquiring, holding and disposing of investments in various companies. PSPGP is the general partner of PSBF and was formed to act as the general partner of PSBF, to make investments through PSBF and to fulfill such other purposes as may be determined by PSBF from time to time. Aisling is the managing member of PSPGP and was formed to act as a manager of affiliated funds. Dennis Purcell, Steve Elms and Andrew Schiff are the Managers of Aisling. Accordingly, pursuant to the regulations promulgated under Section 13(d) of the Securities Exchange Act of 1934, PSPGP, Aisling, Mr. Elms, Mr. Purcell and Mr. Schiff each may be deemed to be a beneficial owner of the Common Stock held for the account of PSBF.

(d) None of the Reporting Persons has, during the last five years, been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors).

(e) None of the Reporting Persons has, during the last five years, been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding

CUSIP No. 02318X SCHEDULE 13D  
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Page 9 of 14

were or are subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, Federal or state securities laws or finding any violation with respect to such laws.

(f) PSBF is a Delaware limited partnership. Each of PSPGP and Aisling is a Delaware limited liability company. Each of Steven Elms, Dennis Purcell and Andrew Schiff is a United States citizen.

### Item 3. Source and Amount of Funds or Other Consideration.

As of the date hereof, each of the Reporting Persons may be deemed to beneficially own 1,670,676 shares of Common Stock, consisting of (i) 219 shares of Common Stock acquired by the Reporting Persons prior to the Issuer's initial public offering of Common Stock ("IPO"), (ii) 423,635 shares of Common Stock, which were acquired on May 21, 2013 in a private placement by the Issuer (the "Private Placement") concurrent with the IPO with an aggregate purchase price of \$3,389,080 (the "Purchase"), (iii) 1,122,590 shares of Common Stock issued upon the conversion of the Issuer's 28,901 shares of Series B Preferred Stock, 57,448 shares of Series C Preferred Stock, 227,801 shares of Series D Preferred Stock, 456,393 shares of Series D-2 Preferred Stock and 352,047 shares of Series E Preferred Stock at the closing of the IPO on May 21, 2013 (such conversion collectively, the "Conversion") and (iv) 124,232 shares of the Issuer's common stock issuable upon the exercise of the Warrants. The source of the purchase price for the Purchase was capital contributions from the partners of PSBF. No borrowed funds were used to purchase the Common Stock.

### Item 4. Purpose of Transaction.

Each Reporting Person expects to evaluate on an ongoing basis the Issuer's financial condition and prospects and its interest in, and intentions with respect to, the Issuer and their investment in the securities of the Issuer, which review may be based on various factors, including the Issuer's business and financial condition, results of operations and prospects, general economic and industry conditions, the securities markets in general and those for the Issuer's securities in particular, as well as other developments and other investment opportunities, which, if effected, could result in, among other things, any of the matters identified in Items 4(a)–(j) of Schedule 13D. Accordingly, each Reporting Person reserves the right to change its intentions and develop plans or proposals at any time, as it deems appropriate. In particular, each Reporting Person may at any time and from time to time, (i) in the open

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market, in privately negotiated transactions or otherwise, acquire additional Common Stock or other securities of the Issuer, including acquisitions from affiliates of the Reporting Persons; (ii) dispose or transfer of all or a portion of the securities of the Issuer, including the Common Stock, that the Reporting Persons now own or may hereafter acquire to any person or entity, including dispositions to affiliates of the Reporting Persons; (iii) enter into derivative transactions with institutional counterparties with respect to the Issuer's securities; (iv) cause or seek to cause the Issuer or any of its subsidiaries to acquire all or a portion of another person's assets or business, including acquisitions from affiliates of the Reporting Persons; (v) cause or seek to cause the Issuer or any of its subsidiaries to enter into one or more acquisitions, business combinations or mergers or to sell, transfer or otherwise dispose of all or any portion of its assets or business to any person or entity, including acquisitions, business combinations, mergers, sales, transfers and other dispositions with or to affiliates of the Reporting Persons; (vi) restructure the Issuer's or any of its subsidiaries' capitalization, indebtedness or holding company arrangements; (vii) make personnel changes to the present management of the Issuer deemed necessary or desirable; (viii) change the identity of the directors of the Issuer; (ix) make or propose any other material change in the Issuer's or any of its subsidiaries' corporate structure or business; or (x) engage in communications with one or more stockholders, officers or directors of the Issuer and other persons regarding any of the matters described in clauses (i) through (ix) above.

Item 5. Interest in Securities of the Issuer.

(a) The aggregate percentage of shares of Common Stock reported as owned by each Reporting Person is based on 17,712,558 shares of the Issuer's common stock issued and outstanding following the IPO, as reported in the Issuer's final prospectus filed with the SEC on May 15, 2013. Based on calculations made in accordance with Rule 13d-3(d), each Reporting Person may be deemed to beneficially own 1,670,676 shares of Common Stock, including 124,232 shares of Common Stock issuable upon the exercise of the Warrants, constituting approximately 9.4% of the outstanding shares of Common Stock.

(b) (i) Each of PSBF, PSPGP and Aisling may be deemed to have sole power to direct the voting and disposition of the 1,670,676 shares of Common Stock that may be deemed to be beneficially owned by the Reporting Persons.

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CUSIP No. 02318X SCHEDULE 13D  
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Page 11 of 14

(ii) By virtue of the relationships between and among the Reporting Persons described in Item 2 of this Schedule 13D, each of the Messrs. Elms, Purcell and Schiff may be deemed to share the power to direct the voting and disposition of the 1,670,676 shares of Common Stock beneficially owned by the Reporting Persons.

(c) On May 21, 2013, PSBF acquired 423,635 shares of Common Stock in the Private Placement with an aggregate purchase price of \$3,389,080 at \$8.00 per share.

(d) The partners of PSBF have the right to participate in the receipt of dividends from, or proceeds from the sale of, the shares of Common Stock held for the account of PSBF in accordance with their ownership interests in PSBF.

(e) Not applicable.

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer.

On December 14, 2012, PSBF entered into a lock-up agreement with Citigroup Global Markets Inc. and Leerink Swann LLC, as representatives of the several underwriters in connection with the IPO (the "Lock-up Agreement"), and agreed that until November 11, 2013, it will not offer, sell, contract to sell, pledge or otherwise dispose of, directly or indirectly, any shares of Common Stock or securities convertible into or exchangeable or exercisable for any shares of Common Stock. Such restrictions do not apply, subject to certain conditions, to transactions relating to (i) bona fide gifts, (ii) shares of Common Stock acquired in the open market on or after the completion of the IPO, (iii) the transfer of shares of Common Stock to a family member or a trust for the benefit of the restricted party or a family member (including by will or intestacy) or (iv) a distribution to the partners, members or shareholders of the restricted party, provided that the recipient agrees in writing prior to such transfer to be bound by the foregoing restrictions.

Pursuant to the Sixth Amended and Restated Investor Rights Agreement (the "Investor Rights Agreement"), dated October 25, 2012, by and among the Issuer and the holders of Common Stock issuable upon the conversion of the Issuer's preferred stock, as well as holders of the Issuer's warrants, listed in Exhibit A thereto, including PSBF (the "Holders"), the Issuer may be required to register under the Securities Act of 1933, as amended (the "Securities Act"), 1,246,822 shares of Common Stock held by PSBF, consisting of (i) 1,122,590 shares of Common Stock issued upon the Conversion and (ii) 124,232 shares of the Issuer's common stock issuable upon the exercise of the Warrants. Pursuant to the Investors

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CUSIP No. 02318X SCHEDULE 13D  
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Page 12 of 14

Rights Agreement, (i) beginning on November 11, 2013, upon a written request to the Issuer from any Holder or Holders of at least a majority of the Registrable Securities (as defined in the Registration Rights Agreement), the Issuer is required to register all or a portion of such Holder's or Holders' shares on any registration statement (other than on Form S-3 unless the Issuer becomes eligible to use Form S-3 as further described below) if the anticipated aggregate offering price is at least \$25,000,000 (net of underwriting discounts and commissions), subject to certain exceptions, and the Issuer is required to effect up to three such registrations; (ii) the Issuer is required to use its best efforts to qualify for registration on Form S-3 and as soon as the Issuer becomes eligible, any Holder or Holders of the then-outstanding Registrable Securities may request the Issuer to register its or their shares on Form S-3 if the anticipated aggregate offering price is at least \$1,000,000 (net of underwriting discounts and commissions), subject to certain exceptions, and the Issuer is required to effect up to six such registrations on Form S-3; and (iii) if at any time the Issuer determines to register any of its securities, it is required to promptly notify all Holders and include in such registration, or "piggy-back," all the Registrable Securities specified in a written request or requests from any Holder or Holders. The Issuer will pay any registration expenses relating to the registration rights of the Holders, subject to certain conditions. The registration rights described above will terminate on May 15, 2018.

From time to time, each of the Reporting Persons may lend portfolio securities to brokers, banks or other financial institutions. These loans typically obligate the borrower to return the securities, or an equal amount of securities of the same class, to the lender and typically provide that the borrower is entitled to exercise voting rights and to retain dividends during the term of the loan. From time to time, to the extent permitted by applicable laws, each of the Reporting Persons may borrow securities, including the Common Stock, for the purpose of effecting, and may effect, short sale transactions, and may purchase securities for the purpose of closing out short positions in such securities.

On May 31, 2013, each of the Reporting Persons entered into an agreement (the "Joint Filing Agreement") in which the parties agreed to the joint filing on behalf of each of them of statements on Schedule 13D with respect to the securities of the Issuer to the extent required by applicable law. The Joint Filing Agreement is attached as an exhibit hereto and is incorporated herein by reference.

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CUSIP No. 02318X SCHEDULE 13D  
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Page 13 of 14

Item 7. Material to be Filed as Exhibits.

Exhibit Joint Filing Agreement dated as of May 31, 2013, as required by Rule 13d-1(k)(1) under the Securities  
1: Exchange Act of 1934, as amended.

Exhibit Lock-up Agreement, dated as of December 14, 2012, by and among PSBF, Citigroup Global Markets Inc.  
2: and Leerink Swann LLC.

Exhibit Sixth Amended and Restated Investor Rights Agreement, dated October 25, 2012, by and among the Issuer  
3: and the holders of Common Stock issuable upon the Conversion, as well as holders of the Warrants, listed in  
Exhibit A thereto, the form of which was filed and incorporated herein by reference to Exhibit 10.18 to the  
Issuer's Registration Statement on Form S-1 (File No. 333-186760), filed with the SEC on February 20, 2013.

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CUSIP No. 02318X SCHEDULE 13D  
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Page 14 of 14

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Date: May 31, 2013

PERSEUS-SOROS BIOPHARMACEUTICAL FUND,  
LP

By: Perseus-Soros Partners, LLC  
General Partner

By: Aisling Capital LLC  
Managing Member

By: /s/ Dennis Purcell  
Name: Dennis Purcell  
Title: Managing Member

PERSEUS-SOROS PARTNERS, LLC

By: Aisling Capital LLC  
Managing Member

By: /s/ Dennis Purcell  
Name: Dennis Purcell  
Title: Managing Member

AISLING CAPITAL LLC

By: /s/ Dennis Purcell  
Name: Dennis Purcell  
Title: Managing Member

By: /s/ Steve Elms  
Name: Steve Elms  
Title: Managing Member

By: /s/ Andrew Schiff  
Name: Andrew Schiff

Title: Managing Member

Attention. Intentional misstatements or omissions of fact constitute Federal criminal violations (see 18 U.S.C. 1001).

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JOINT FILING AGREEMENT

Each of the undersigned hereby acknowledges and agrees, in compliance with the provisions of Rule 13d-1(k)(1) promulgated under the Securities Exchange Act of 1934, as amended, that the Schedule 13D to which this Agreement is attached as an Exhibit (the "Schedule 13D"), and any amendments thereto, will be filed with the Securities and Exchange Commission jointly on behalf of the undersigned. This Agreement may be executed in one or more counterparts.

Date: May 31, 2013

PERSEUS-SOROS BIOPHARAMCEUTICAL FUND,  
LP

By: Perseus-Soros Partners, LLC  
General Partner

By: Aisling Capital LLC  
Managing Member

By: /s/ Dennis Purcell  
Name: Dennis Purcell  
Title: Managing Member

PERSEUS-SOROS PARTNERS, LLC

By: Aisling Capital LLC  
Managing Member

By: /s/ Dennis Purcell  
Name: Dennis Purcell  
Title: Managing Member

AISLING CAPITAL LLC

By: /s/ Dennis Purcell  
Name: Dennis Purcell  
Title: Managing Member

By: /s/ Steve Elms  
Name: Steve Elms  
Title: Managing Member

By: /s/ Andrew Schiff  
Name: Andrew Schiff  
Title: Managing Member



Ambit Biosciences Corporation  
Public Offering of Common Stock

LOCK-UP AGREEMENT

December 14 , 2012

Citigroup Global Markets Inc.  
Leerink Swann LLC  
As Representatives of the several Underwriters,

c/o Citigroup Global Markets Inc.  
388 Greenwich Street  
New York, New York 10013

c/o Leerink Swann LLC  
One Federal Street, 37th Floor  
Boston, Massachusetts 02110

Re: Ambit Biosciences Corporation Initial Public Offering

Ladies and Gentlemen:

This letter is being delivered to you in connection with the proposed Underwriting Agreement (the “Underwriting Agreement”), between Ambit Biosciences Corporation, a Delaware corporation (the “Company”), and each of you as representatives of a group of Underwriters named therein (the “Underwriters”), relating to an underwritten public offering of Common Stock, \$0.001 par value (the “Common Stock”), of the Company (the “Offering”).

In order to induce you and the other Underwriters to enter into the Underwriting Agreement, the undersigned will not, without the prior written consent of Citigroup Global Markets Inc. and Leerink Swann LLC, on behalf of the several Underwriters, offer, sell, contract to sell, pledge or otherwise dispose of, (or enter into any transaction which is designed to, or might reasonably be expected to, result in the disposition (whether by actual disposition or effective economic disposition due to cash settlement or otherwise) by the undersigned or any affiliate of the undersigned or any person in privity with the undersigned or any affiliate of the undersigned), directly or indirectly, including the filing (or participation in the filing) of a registration statement with the Securities and Exchange Commission in respect of, or establish or increase a put equivalent position or liquidate or decrease a call equivalent position within the meaning of Section 16 of the Securities Exchange Act of 1934, as amended, and the rules and regulations of the Securities and Exchange Commission promulgated thereunder with respect to,

any shares of capital stock of the Company or any securities convertible into, or exercisable or exchangeable for such capital stock, or publicly announce an intention to effect any such transaction, for a period from the date hereof until 180 days after the date of the Underwriting Agreement (the "Lock-Up Period"). If the undersigned is an officer or director of the Company, the undersigned further agrees that the foregoing restrictions shall be equally applicable to any issuer-directed shares of Common Stock the undersigned may purchase in the Offering. If the undersigned is an officer or director of the Company, (i) Citigroup Global Markets Inc. and Leerink Swann LLC, as representatives of the several Underwriters, agree that, at least three business days before the effective date of any release or waiver of the foregoing restrictions in connection with a transfer of shares of Common Stock, they will notify the Company of the impending release or waiver, and (ii) the Company will agree in the Underwriting Agreement to announce the impending release or waiver by press release through a major news service at least two business days before the effective date of the release or waiver. Any release or waiver granted by Citigroup Global Markets Inc. and Leerink Swann LLC, as representatives of the several Underwriters, hereunder to any such officer or director shall only be effective two business days after the publication date of such press release. The provisions of this paragraph will not apply if (a) the release or waiver is effected solely to permit a transfer not for consideration and (b) the transferee has agreed in writing to be bound by the same terms described in this letter to the extent and for the duration that such terms remain in effect at the time of the transfer.

The foregoing paragraph shall not apply to (a) transactions relating to Common Stock or other securities of the Company acquired in open market transactions after the completion of the Offering, provided that no filing by any party under the Securities Exchange Act of 1934 (the "Exchange Act") shall be required or shall be voluntarily made in connection with subsequent sales of Common Stock or other securities acquired in such open market transactions or (b) transfers of Common Stock or other securities of the Company (i) as a bona fide gift, (ii) to any trust for the direct or indirect benefit of the undersigned or the immediate family of the undersigned, (iii) as a distribution by a partnership to its partners or former partners or by a limited liability company to its members or retired members or by a corporation to its stockholders or former stockholders or (iv) to any affiliate, as defined in Rule 405 under the Securities Act of 1933, of the undersigned; provided that in the case of any transfer pursuant to clause (b), (A) each transferee shall sign and deliver a lock-up agreement in the form of this letter agreement and (B) no filing by any party (donor, donee, transferor or transferee) under the Securities Exchange Act of 1934 shall be required or shall be voluntarily made in connection with such transfer during the Lock-Up Period (other than a filing on a Form 5 made after the expiration of such restricted period). In addition, the foregoing paragraph shall not be deemed to restrict or prohibit the entry into or modification of a so-called "10b5-1" plan at any time, if then permitted by the Company and applicable law; provided that (a) no shares subject to such plan may be sold during the Lock-Up Period and (b) none of the Company, the undersigned or any of their respective representatives shall announce or publicly disclose the establishment of such a plan during the Lock-Up Period.

The undersigned also agrees and consents to the entry of stop transfer instructions with the Company's transfer agent and registrar against the transfer of the undersigned's shares of Common Stock, except in compliance with the foregoing restrictions.

The undersigned hereby represents and warrants that the undersigned has full power and authority to enter into this letter agreement. All authority herein conferred or agreed to be conferred and any obligations of the undersigned shall be binding upon the successors, assigns, heirs or personal representatives of the undersigned.

The undersigned agrees that, without the prior written consent of Citigroup Global Markets Inc. and Leerink Swann LLC, it will not, during the Lock-Up Period, make any demand for or exercise any right with respect to, the registration of any shares of capital stock of the Company or any securities convertible into, or exercisable or exchangeable for such capital stock and hereby waives any and all notice requirements and other rights (including, if applicable, those rights set forth in the Sixth Amended and Restated Investor Rights Agreement dated as of October 25, 2012 by and among the Company and the parties listed as "Investors" therein, as such may be amended from time to time), with respect to any such registration, including with respect to this Offering.

This letter agreement shall automatically terminate and be of no further effect (i) prior to the execution of the Underwriting Agreement, upon such date the Company notifies Citigroup Global Markets Inc. and Leerink Swann LLC in writing that it does not intend to proceed with the Offering, (ii) upon the termination of the Underwriting Agreement prior to the Closing Date (as defined in the Underwriting Agreement) in accordance with the terms thereof, or (iii) if the Offering does not close on or before June 30, 2013; provided, however, that the Underwriters and the Company may, by written notice to you prior to June 1, 2013, extend such date for a period of up to three additional months.

The undersigned understands that, if the Underwriting Agreement does not become effective, or if the Underwriting Agreement (other than the provisions thereof which survive termination) shall terminate or be terminated prior to payment for and delivery of the Common Stock to be sold thereunder, the undersigned shall be released from all obligations under this letter agreement.

Yours very truly,

Perseus-Soros Biopharmaceutical Fund,  
LP

By: /s/ Lloyd Appel  
Name: Lloyd Appel  
Title: CFO

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