

OBOYLE KEVIN C  
 Form 4  
 February 16, 2007

**FORM 4**

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

OMB APPROVAL

OMB Number: 3235-0287  
 Expires: January 31, 2005  
 Estimated average burden hours per response... 0.5

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

**STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES**

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person \*  
**OBOYLE KEVIN C**

(Last) (First) (Middle)

4545 TOWNE CENTRE COURT

(Street)

SAN DIEGO, CA 92121

(City) (State) (Zip)

2. Issuer Name and Ticker or Trading Symbol  
**NUVASIVE INC [NUVA]**

3. Date of Earliest Transaction (Month/Day/Year)  
**02/14/2007**

4. If Amendment, Date Original Filed(Month/Day/Year)

5. Relationship of Reporting Person(s) to Issuer

(Check all applicable)

\_\_\_ Director \_\_\_ 10% Owner  
 Officer (give title below) \_\_\_ Other (specify below)

CFO and Executive VP

6. Individual or Joint/Group Filing(Check Applicable Line)  
 Form filed by One Reporting Person  
 \_\_\_ Form filed by More than One Reporting Person

**Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned**

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)	4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)	5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
				(A) or (D) Code V Amount (D) Price			
Common Stock <sup>(1)</sup>	02/14/2007		M	6,000 A \$ 0.63	46,264	D	
Common Stock <sup>(1)</sup>	02/14/2007		S <sup>(2)</sup>	6,000 D \$ 24.173	40,264	D	

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

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SEC 1474 (9-02)

**Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned**  
(e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)	5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5)	6. Date Exercisable and Expiration Date (Month/Day/Year)	7. Title and Amount of Underlying Securities (Instr. 3 and 4)	8. Amount or Number of Shares
Stock Option (Right to Buy)	\$ 0.63	02/14/2007		M	6,000	<sup>(3)</sup> 01/15/2013	Common Stock	6,000

## Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
OBOYLE KEVIN C 4545 TOWNE CENTRE COURT SAN DIEGO, CA 92121			CFO and Executive VP	

## Signatures

/s/ Kevin O'Boyle  
02/16/2007

\*\*Signature of Reporting Person  
Date

## Explanation of Responses:

- \* If the form is filed by more than one reporting person, see Instruction 4(b)(v).
- \*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations. See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).
- (1) The shares sold were acquired contemporaneously upon the cashless exercise of a stock option at an exercise price of \$0.63 per share.
- (2) The sale reported on this Form 4 was effected pursuant to a Rule 10b5-1 trading plan adopted by the Reporting Person on September 14, 2006.
- (3) This option is immediately exercisable, but shares purchased under this option are subject to repurchase by the Issuer at the option exercise price to the extent the Reporting Person has not vested in such shares as of the date of the Reporting Person's termination of service to the Issuer. 25% of the total shares subject to the option vested on January 15, 2004, which was the first anniversary of the date of grant; the remaining shares vest in 36 equal monthly installments thereafter.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure. Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.