

Cornwall G Bryan
 Form 4
 December 18, 2006

FORM 4

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

OMB APPROVAL

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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 *
 Cornwall G Bryan

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

5. Relationship of Reporting Person(s) to Issuer

(Check all applicable)

(Last) (First) (Middle)
 4545 TOWNE CENTRE COURT
 (Street)

3. Date of Earliest Transaction (Month/Day/Year)
 12/15/2006

____ Director _____ 10% Owner
 Officer (give title below) _____ Other (specify below)
 VP, Research & Development

SAN DIEGO, CA 92121
 (City) (State) (Zip)

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

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 Ownership (Instr. 4) |
|---------------------------------|--------------------------------------|--|--------------------------------|---|---|--|-----------------------------------|
| | | | Code | V Amount (A) or (D) Price | | | |
| Common Stock ⁽¹⁾ | 12/15/2006 | | M | 2,500 A \$ 3.75 | 6,500 | D | |
| Common Stock ⁽¹⁾ | 12/15/2006 | | S ⁽²⁾ | 2,500 D \$ 23.6 | 4,000 | D | |

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

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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) | \$ 3.75 | 12/15/2006 | | M | 2,500 | ⁽³⁾ 01/19/2014 | Common Stock | 2,500 |

Reporting Owners

| Reporting Owner Name / Address | Relationships | | | |
|--|---------------|-----------|----------------------------|-------|
| | Director | 10% Owner | Officer | Other |
| Cornwall G Bryan 4545 TOWNE CENTRE COURT SAN DIEGO, CA 92121 | | | VP, Research & Development | |

Signatures

/s/ Jason Hannon,
Attorney-in-fact

12/15/2006

 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 \$3.75 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 12, 2006.

The option is immediately exercisable, but shares purchased upon exercise of such option are subject to repurchase by the Issuer at the option exercise price in the event the Reporting Person's services to the Issuer terminate prior to the date the shares vest. 25% of the total shares subject to the option vested on January 19, 2005, which was the first anniversary of the date of grant; the remaining shares vest in 36 equal monthly installments thereafter.
 - (3)

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.