FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

| OMB APPROVAL | | | | | | | | | | |
|----------------------|-----------|--|--|--|--|--|--|--|--|--|
| OMB Number: | 3235-0287 | | | | | | | | | |
| Estimated average bu | rden | | | | | | | | | |
| hours por rosponso: | 0 5 | | | | | | | | | |

| | REYNOLDS FRANCIS | | 2. Issuer Name and Ticker or Trading Symbol INVIVO THERAPEUTICS HOLDINGS | | ionship of Reporting Person(s) to Issuer all applicable) | | |
|------------------------|-------------------|----------|---|--------------------|---|---------|-----------------------|
| | <u>Thun (Cib</u> | | CORP. [NVIV] | | Director | Х | 10% Owner |
| (Last) 81 LAKE SHOP | (First) RE RD. | (Middle) | 3. Date of Earliest Transaction (Month/Day/Year) 02/20/2014 | | Officer (give title below) | | Other (specify below) |
| (Street) | | | 4. If Amendment, Date of Original Filed (Month/Day/Year) | 6. Indivi Line) | dual or Joint/Group F | iling (| Check Applicable |
| SALEM | NH | 03079 | | X | Form filed by One F | eport | ing Person |
| , | | | | | Form filed by More | than C | One Reporting |
| (City) | (State) | (Zip) | | | 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) | Transaction Code (Instr. | | | | | 5. Amount of Securities Beneficially Owned Following Reported | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) | |
|---------------------------------|--|---|-----------------------------|---|--------|---------------|--------|---|---|---|--|
| | | | Code | v | Amount | (A) or (D) | Price | Transaction(s) (Instr. 3 and 4) | | (1130.4) | |
| Common Stock | 02/20/2014 | | S ⁽¹⁾ | | 12,500 | D | \$2.23 | 9,848,920 | D | | |
| Common Stock | 02/21/2014 | | S ⁽²⁾ | | 12,500 | D | \$2.23 | 9,836,420 | D | | |
| Common Stock | | | | | | | | 23,488 | I | 401K Plan | |

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. Transa Code (8) | | | | 6. Date Exerc Expiration Da (Month/Day/Y | 7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4) | | Derivative Security | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4) | 10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | Beneficial Ownership (Instr. 4) | |
|---|---|--|---|------------------------------|---|-----|-----|--|---|-------|--|--|--|---------------------------------------|--|
| | | | | Code | v | (A) | (D) | Date Exercisable | Expiration Date | Title | Amount or Number of Shares | | | | |

Explanation of Responses:

1. All sales between \$2.21 - \$2.24.

2. All sales between \$2.20 - \$2.26.

Remarks:

All Sold under 105B-1 Sales plan.

/s/ Francis Reynolds

02/21/2014 on Date

** Signature of Reporting Person

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

* 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).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.