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

SCHEDULE 13D

Under the Securities Exchange Act of 1934
(Amendment No. 1)*

InVivo Therapeutics Holdings Corp.
(Name of Issuer)

Common Stock
(Title of Class of Securities)

46186M 100
(CUSIP Number)

Francis M. Reynolds
81 Lake Shore Road
Salem, NH 03079
(484) 919-6424

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

January 19, 2012
(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 ("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).

1.	NAMES OF REPORTING PERSON Francis M. Reynolds		
2.	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (see instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/>		
3.	SEC USE ONLY		
4.	SOURCE OF FUNDS (see instructions) OO		
5.	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e) <input type="checkbox"/>		
6.	CITIZENSHIP OR PLACE OF ORGANIZATION United States		
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7.	SOLE VOTING POWER 9,809,908	
	8.	SHARED VOTING POWER 0	
	9.	SOLE DISPOSITIVE POWER 9,809,908	
	10.	SHARED DISPOSITIVE POWER 0	
11.	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 9,809,908		
12.	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES (see instructions) <input type="checkbox"/>		
13.	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 12.5%*		
14.	TYPE OF REPORTING PERSON (see instructions) IN		

* Based upon 78,729,618 shares of the Company's common stock outstanding as of November 5, 2013.

Explanatory Note

This Amendment No. 1 to Schedule 13D (“Amendment No. 1”) amends and supplements the Schedule 13D as originally filed by the Reporting Person with the Securities and Exchange Commission on November 1, 2010 (the “Original Schedule 13D”) with respect to shares of common stock, \$0.00001 par value per share (the “Common Stock”) of InVivo Therapeutics Holdings Corp. (the “Company”).

This Amendment No.1 is being filed with respect to the disposition of shares of Common Stock discussed in more detail below under Item 3 and the Reporting Person’s intention to nominate himself to the board of directors of the Company for election at the Company’s 2014 annual meeting of stockholders. January 19, 2012 was the date the Reporting Person’s ownership percentage of the Company was first decreased by an amount in excess of 1% following the filing of the Original Schedule 13D.

Item 1. Security and Issuer.

This Amendment No. 1 relates to the Common Stock of the Company. The address of the principal executive offices of the Company is One Kendall Square, Building 1400 East, 4th Floor, Cambridge, MA 02139.

Item 2. Identity and Background.

- (a) This statement is filed by Francis M. Reynolds (the “Reporting Person”).
- (b) The Reporting Person’s residential address is 81 Lake Shore Road, Salem, New Hampshire 03079.
- (c) The Reporting Person’s principal occupation is Chief Executive Officer of PixarBio Corporation.
- (d) The Reporting Person has not, during the last five years, been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors).
- (e) The Reporting Person has not, during the last five years, been party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is 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) The Reporting Person is a citizen of the United States.

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

The Reporting Person acquired 15,147,660 shares of Common Stock from the Company in exchange for 1,100,000 shares of common stock, \$0.001 par value, of InVivo Therapeutics Corporation, a Delaware corporation (“InVivo Delaware”) in connection with the Company’s acquisition of InVivo Delaware on October 26, 2010.

From November 29, 2011 until the date of this Amendment No. 1, the Reporting Person disposed of an aggregate of 5,303,730 shares of Common Stock comprised of 3,250,190 shares sold in the public market by the Reporting Person and 2,053,540 shares transferred by gift by the Reporting Person.

Item 4. Purpose of Transaction.

All of the shares of Common Stock owned by the Reporting Person were received in connection with the Company's acquisition of InVivo Delaware. The Reporting Person is party to a Rule 10b5-1 trading plan (the "Plan") relating to his ownership of shares of Common Stock and as such expects to make additional dispositions of shares of Common Stock pursuant to the terms of the Plan.

The Reporting Person has submitted notice to the Company of his intent to nominate himself as director for election at the Company's 2014 annual meeting of shareholders. The Reporting Person has provided consent to the Company to be nominated as a director of the Company, to being named as a director nominee in any proxy solicitation materials of the Company and to serve on the board of the Company if elected or appointed. The Reporting Person believes that a holder of 12.5% of the Company's Common Stock should have representation on the Company's Board of Directors, and the Reporting Person intends to represent and advance the interests of all shareholders of the Company through any board representation that he attains.

As of the date of this Amendment No. 1, the Reporting Person beneficially owns 9,809,908 shares of the Common Stock of the Company.

Other than as set forth above in this Item 4, the Reporting Person does not have any plans or proposals which relate to or would result in:

- (a) The acquisition by any person of additional securities of the Company, or the disposition of securities of the Company;
- (b) An extraordinary corporate transaction, such as a merger, reorganization or liquidation, involving the Company or any of its subsidiaries;
- (c) A sale or transfer of a material amount of assets of the Company or of any of its subsidiaries;
- (d) Any change in the present board of directors or management of the Company, including any plans or proposals to change the number or term of directors or to fill any existing vacancies on the board;
- (e) Any material change in the present capitalization or dividend policy of the Company;
- (f) Any other material change in the Company's business or corporate structure, including but not limited to, if the Company is a registered closed-end investment company, any plans or proposals to make any changes in its investment policy for which a vote is required by Section 13 of the Investment Company Act of 1940;
- (g) Changes in the Company's charter, bylaws or instruments corresponding thereto or other actions which may impede the acquisition of control of the Company by any person;
- (h) Causing a class of securities of the Company to be delisted from a national securities exchange or to cease to be authorized to be quoted in an inter-dealer quotation system of a registered national securities association;
- (i) A class of equity securities of the Company becoming eligible for termination of registration pursuant to Section 12(g)(4) of the Act; or
- (j) Any action similar to any of those enumerated above.

Item 5. Interest in Securities of the Issuer.

- (a),(b) The aggregate number of shares of Common Stock beneficially owned by the Reporting Persons is 9,809,908 as of the date of this Amendment No.1. The aggregate number of shares of Common Stock beneficially owned by the Reporting Person represents a 12.5% ownership interest of the Company.

The Reporting Person has the sole power to vote and dispose all of the shares of Common Stock that he holds.

- (c) The Reporting Person has effected open market dispositions in the Company's common stock during the past 60 days set forth on Exhibit A hereto.
- (d) None.

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

None.

Item 7. Material to Be Filed as Exhibits.

None.

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: March 5, 2014

/s/ Francis M. Reynolds

Francis M. Reynolds

Exhibit A

Dispositions in the Shares During the Past 60 Days

<u>Date of Purchase</u>	<u>Shares of Common Stock Purchased</u>	<u>Price Per Share (\$)</u>
2/28/2014	12,500	2.51
2/27/2014	12,500	2.37
2/26/2014	12,500	2.31
2/25/2014	12,500	2.28
2/24/2014	12,500	2.24
2/21/2014	12,500	2.23
2/20/2014	12,500	2.23
2/19/2014	12,500	2.23
2/18/2014	12,500	2.26
2/14/2014	12,500	2.24
2/13/2014	12,500	2.23
2/12/2014	12,500	2.24
2/11/2014	12,500	2.25
2/10/2014	12,500	2.25
2/07/2014	12,500	2.23
2/06/2014	12,500	2.23
2/05/2014	12,500	2.21
2/04/2014	12,500	2.24
2/03/2014	12,500	2.19
1/31/2014	12,500	2.16
1/30/2014	12,500	2.17

1/29/2014	12,500	2.19
1/28/2014	12,500	2.21
1/27/2014	12,500	2.25
1/24/2014	12,500	2.26
1/23/2014	12,500	2.23
1/21/2014	12,500	2.37
1/17/2014	12,500	2.38
1/16/2014	12,500	2.34
1/15/2014	12,500	2.25
1/14/2014	12,500	2.21
1/13/2014	12,500	2.21
1/10/2014	12,000	2.28
1/09/2014	12,000	2.42
1/08/2014	12,000	2.49
1/07/2014	12,000	2.43
1/06/2014	12,000	2.42
1/03/2014	12,000	2.19
1/02/2014	12,000	2.23
12/31/2013	12,000	2.16
12/30/2013	12,000	2.26