

☐ 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

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	
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<p>1. Name and Address of Reporting Person*</p> <p><u>Moran Sean E.</u></p> <hr/> <p>(Last) (First) (Middle)</p> <p>C/O INVIVO THERAPEUTICS HOLDINGS CORP.</p> <p>ONE KENDALL SQUARE, SUITE B14402</p> <hr/> <p>(Street)</p> <p>CAMBRIDGE MA 02139</p> <hr/> <p>(City) (State) (Zip)</p>	<p>2. Issuer Name and Ticker or Trading Symbol</p> <p><u>INVIVO THERAPEUTICS HOLDINGS CORP.</u> [NVIV]</p> <hr/> <p>3. Date of Earliest Transaction (Month/Day/Year)</p> <p>09/03/2013</p> <hr/> <p>4. If Amendment, Date of Original Filed (Month/Day/Year)</p>	<p>5. Relationship of Reporting Person(s) to Issuer (Check all applicable)</p> <table border="0"> <tr> <td>Director</td> <td>10% Owner</td> </tr> <tr> <td><input checked="" type="checkbox"/> Officer (give title below)</td> <td>Other (specify below)</td> </tr> <tr> <td colspan="2">Acting Chief Financial Officer</td> </tr> </table> <hr/> <p>6. Individual or Joint/Group Filing (Check Applicable Line)</p> <p><input checked="" type="checkbox"/> Form filed by One Reporting Person</p> <p>Form filed by More than One Reporting Person</p>	Director	10% Owner	<input checked="" type="checkbox"/> Officer (give title below)	Other (specify below)	Acting Chief Financial Officer	
Director	10% Owner							
<input checked="" type="checkbox"/> Officer (give title below)	Other (specify below)							
Acting Chief Financial Officer								

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)
			Code	V	Amount	(A) or (D)	Price			
COMMON STOCK	09/03/2013		P		20,000	A	\$1.02 ⁽¹⁾	60,000	D	

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

[illegible]

Explanation of Responses:

1. The price reported in column 4 is a weighted average price. These shares were purchased in multiple transactions at prices ranging from \$1.01 to \$1.03, inclusive. The reporting person undertakes to provide InVivo Therapeutics Holdings Corp. ("InVivo"), any security holder of InVivo, or the staff of the Securities and Exchange Commission, upon request, full information regarding the number of shares purchased at each separate price within the ranges set forth in footnote 1.

/s/ Sean F. Moran

09/04/2013

** Signature of Reporting Person

Date _____

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.