

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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

OMB APPROVAL

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

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| 1. Name and Address of Reporting Person* <u>Toselli Richard M.</u> (Last) (First) (Middle) <u>C/O INVIVO THERAPEUTICS HOLDINGS CORP.</u> <u>ONE KENDALL SQUARE, SUITE B14402</u> (Street) <u>CAMBRIDGE MA 02139</u> (City) (State) (Zip) | 2. Issuer Name and Ticker or Trading Symbol <u>INVIVO THERAPEUTICS HOLDINGS CORP. [NVIV]</u> 3. Date of Earliest Transaction (Month/Day/Year) <u>04/22/2019</u> 4. If Amendment, Date of Original Filed (Month/Day/Year) | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) <u>See Remarks</u> 6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person Form filed by More than One Reporting Person |
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| 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 ⁽¹⁾ | 04/22/2019 | | F | | 79 | D | \$1.45 | 10,693 | D | |
| Common Stock | | | | | | | | 5,228 ⁽²⁾ | I | By 401(k) 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. 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 Securities Underlying Derivative Security (Instr. 3 and 4) | | 8. Price of Derivative Security (Instr. 5) | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4) | 10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) |
| | | | | | | | | | | | | | | | |
| | | | | Code | V | (A) | (D) | Date Exercisable | Expiration Date | Title | Amount or Number of Shares | | | | |

Explanation of Responses:

1. Represents shares sold by the reporting person pursuant to a Rule 10b5-1 trading plan adopted by the reporting person on November 20, 2018 to satisfy tax withholding obligations applicable to the vesting of 250 stock-settled RSUs.

2. The reporting person holds 5,228 shares of NVIV common stock under the NVIV 401(k) plan. The information in this report is based on a plan statement dated as of April 24, 2019.

Remarks:

President and Chief Executive Officer; Exhibit List: Exhibit 24.1 - Power of Attorney

/s/ Richard M. Toselli04/24/2019

** Signature of Reporting PersonDate

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.

Power of Attorney

I, Richard Toselli, the undersigned, hereby constitute and appoint Richard Christopher, Heather Hamel, and Rosemary Reilly, and each of them individually, as my true and lawful attorney-in-fact to:

1. Complete and execute on my behalf, as an officer of InVivo Therapeutics Holdings Corp., a Nevada corporation (the "Company"), Forms 3, 4, and 5 required to be filed by me under Section 16(a) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") and the rules and regulations thereunder;
2. Do and perform any and all acts for and on my behalf which may be necessary or desirable to complete and execute any such Forms 3, 4 and 5 and any amendment or amendments thereto, and timely file such forms with the U.S. Securities and Exchange Commission (the "SEC") and any stock exchange or similar authority, including without limitation the filing of a Form ID or any other application materials to enable me to gain or maintain access to the Electronic Data Gathering, Analysis and Retrieval system of the SEC; and
3. Seek or obtain, as my representative and on my behalf, information regarding transactions in the Company's securities from any third party, including brokers, employee benefit plan administrators and trustees, and I hereby authorize any such person to release any such information to such attorney-in-fact and approve and ratify any such release of information; and
4. Take any other action of any type whatsoever in connection with the foregoing, which in the opinion of such attorney-in-fact may be of benefit to, in the best interest of, or legally required of me, it being understood that the documents executed by such attorney-in-fact on my behalf pursuant to this Power of Attorney shall be in such form and shall contain such information as such attorney-in-fact may approve in such attorney-in-fact's discretion.

I hereby grant to each of such attorneys-in-fact full power and authority to do and perform all and every act which is necessary, proper or desirable to be done in the exercise of any of the rights, powers and authority granted in this Power of Attorney, with full power of substitution and revocation, and I ratify and confirm every act that such attorney-in-fact lawfully performs or causes to be done by virtue of this Power of Attorney and the powers and authority granted herein.

I acknowledge that the attorneys-in-fact appointed in this Power of Attorney, in serving in such capacity at my request, are not assuming or relieving, and the Company is not assuming or relieving, any of my responsibilities to comply with Section 16 of the Exchange Act or the rules or regulations thereunder. I acknowledge that neither the Company nor the foregoing attorneys-in-fact assume

(i) any liability for my responsibility to comply with the requirements of the Exchange Act, (ii) any liability of mine for any failure to comply with such requirements, or (iii) any obligation or liability of mine for profit disgorgement under Section 16(b) of the Exchange Act.

This Power of Attorney shall supersede and revoke any Power of Attorney previously filed in my name and on my behalf.

This Power of Attorney shall remain in full force and effect until I am no longer required to file Forms 3, 4 and 5 with respect to my holdings or transactions in securities issued by the Company, unless I earlier revoke this Power of Attorney in a signed writing delivered to the foregoing attorneys-in-fact.

IN WITNESS WHEREOF, the undersigned has executed this Power of Attorney as of April 24, 2019.

/s/ Richard Toselli

Print Name: Richard Toselli
