UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT

PURSUANT TO SECTION 13 or 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

April 3, 2012 Date of Report (Date of earliest event reported)

INVIVO THERAPEUTICS HOLDINGS CORP.

(Exact Name of Registrant as Specified in Charter)

NEVADA (State or Other Jurisdiction of Incorporation) 000-52089 (Commission File Number) 36-4528166 (IRS Employer Identification No.)

One Broadway, 14th Floor Cambridge, Massachusetts 02142 (Address of Principal Executive Offices) (Zip Code)

(617) 475-1520 (Registrant's telephone number, including area code)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (*see* General Instruction A.2. below):

□ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

□ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

Dere-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

D Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 5.02 Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

(b) On April 3, 2012, Christi M. Pedra informed InVivo Therapeutics Holdings Corp. (the "Company") of her intention not to stand for re-election at the 2012 Annual Meeting of Shareholders in order to focus on her responsibilities at Cardinal Health, Inc., where she serves as Senior Vice President Marketing, Pharmaceutical Distribution. Ms. Pedra will continue to serve as a director of the Company until the expiration of her term at the conclusion of the 2012 Annual Meeting, which is expected to be held on May 30, 2012.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

INVIVO THERAPEUTICS HOLDINGS CORP.

By: /s/ Frank M. Reynolds

Frank M. Reynolds Chief Executive Officer

Date: April 6, 2012