



DIVISION OF  
CORPORATION FINANCE

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

September 12, 2013

Via E-Mail

Terrence E. Winters, Ph.D.  
Co-Chairman of the Board &  
Chief Executive Officer  
Vital Therapies, Inc.  
15222 Avenue of Science, Suite B  
San Diego, CA 92128

**Re: Vital Therapies, Inc.  
Revised Draft Registration Statement on Form S-1  
Submitted August 30, 2013  
CIK No. 0001280776**

Dear Dr. Winters:

We have reviewed your amended draft registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by providing the requested information and either submitting an amended draft registration statement or publicly filing your registration statement on EDGAR. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing the information you provide in response to these comments and your amended draft registration statement or filed registration statement, we may have additional comments.

Critical Accounting Policies and Significant Judgments and Estimates  
Stock-based Compensation, page 46

1. Refer to your response to comment 22, including your new disclosure on page F-26. We are deferring a final evaluation of stock compensation and other costs until your estimated offering price is specified. We may have further comments in this regard, when the amendment containing this information is filed. In your response, please confirm that no new equity issuances, including future purchase rights, options, convertible preferred stock, etc., have been issued subsequent to the balance sheet date.

Notes to the Financial Statements

7. Redeemable Convertible Preferred Stock  
Future Purchase Rights, page F-25

2. For each issuance of future purchase rights, please disclose the number of future purchase rights issued, the fair value recorded, the fair value of the common stock assumed in the calculation, and any beneficial conversion feature recorded in connection with the issuance. Also, for each beneficial conversion feature recorded, provide us with a calculation. In addition, on page 45, you assert that a gain or loss on future purchase rights liabilities depends in part upon fluctuations in the fair value of your common stock. Please explain how the gain of \$3.1 million recognized in 2012 and loss of \$3.5 million recognized in 2013, as disclosed on page F-22, are consistent with this assertion, particularly considering the fluctuations in the fair value of your common stock, as disclosed on page 48. Please note that we are deferring a final evaluation of the future purchase rights and other costs until your estimated offering price is specified.

General

If you intend to respond to these comments with an amended draft registration statement, please submit it and any associated correspondence in accordance with the guidance we provide in the Division's October 11, 2012 announcement on the SEC website at <http://www.sec.gov/divisions/corpfin/cfannouncements/drsfilingprocedures101512.htm>.

You may contact Franklin Wyman at (202) 551-3660 or Mary Mast at (202) 551-3613 if you have questions regarding comments on the financial statements and related matters. Please contact Christina De Rosa at (202) 551-3577, Bryan Pitko at (202) 551-3203 or me at (202) 551-3715 with any other questions.

Sincerely,

/s/ Bryan J. Pitko for

Jeffrey P. Riedler  
Assistant Director

cc: Via E-Mail  
Martin J. Waters  
Wilson Sonsini Goodrich & Rosati,  
Professional Corporation  
12235 El Camino Real, Suite 200  
San Diego, CA 92130-3002