



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

DIVISION OF  
CORPORATION FINANCE

September 30, 2010

Dr. Phillip Frost  
OPKO Health, Inc.  
4400 Biscayne Boulevard  
Miami, Florida 33137

**Re: OPKO Health, Inc.**  
**Form 10-K for fiscal year ended December 31, 2009**  
**Filed March 17, 2010**  
**File No. 001-33528**

Dear Dr. Frost:

We have limited our review of your filing to those issues we have addressed in our 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 within ten business days by providing the requested information or by advising us when you will provide the requested response.

After reviewing the information you provide in response to our comment, we may have additional comments.

Item 1. Business

Pharmaceutical Business, page 8

1. In your applicable future filings, please provide more detailed disclosure regarding the products currently being sold by Pharma Genexx and Pharmacos Exakta. Indicate in your disclosure if those products are proprietary or if you are reselling products made by third parties.

Item 1A. Risk Factors

Risks Related to Ownership of our Common Stock, page 38

2. We note that you currently have outstanding shares of Series A and Series D preferred stock and 29 million warrants. Please add a risk factor in your applicable future filings

that addresses the dilution to your common stockholders if the preferred stock is converted into shares of common stock and if the warrants are exercised. Indicate the number of shares of common stock into which the preferred stock can be converted and the number of shares issuable upon exercise of the warrants as of the latest practicable date. Please also indicate that the preferred shares are entitled to liquidation preferences and quantify such amounts as of the latest practicable date.

Part III, page 85

3. We note your discussion of the \$12 million line of credit with the Frost Group on page 15 of the proxy statement that you have incorporated by reference. In your applicable future filings, please include disclosure of the largest aggregate amount of principal outstanding during the period for which disclosure is provided, the amount thereof outstanding as of the latest practicable date, the amount of principal paid during the period for which disclosure is provided and the amount of interest paid during the period for which disclosure is provided. Refer to Item 404(a)(5) of Regulation S-K.
4. We refer to your disclosure under "Our Policies Regarding Related Party Transactions" on page 17 of the proxy statement that you have incorporated by reference. In your applicable future filings, please disclose the standards to be applied in deciding whether to approve or ratify any related party transaction. Refer to Item 404(b)(1)(ii) of Regulation S-K.
5. We refer to your disclosure under the caption "Equity Compensation" on page 21 of the proxy statement that you have incorporated by reference. We note minimal, if any, discussion and analysis as to how the stock option grants were determined. In your applicable future filings, please include substantive analysis and insight into how your Compensation Committee made its stock option grant determinations with respect to each named executive officer. Refer to subparagraphs (b)(1)(iii) and (v) of Item 402 of Regulation S-K. For example, please discuss and analyze how the Compensation Committee determined the actual number of shares underlying the stock options that were awarded to your named executive officers and how and why those awards varied among the named executive officers.
6. We note your disclosure under "Employment Agreements and Change in Control Arrangements" on page 26 of the proxy statement that you have incorporated by reference into your Form 10-K. In future filings, please disclose the information required by Item 402(j) of Regulation S-K. For example, please describe and explain the specific circumstances that would trigger accelerated vesting of securities issued under the 2007 Equity Incentive Plan and provide quantitative disclosure regarding estimated payments and benefits that would be provided in each circumstance, applying the assumptions that the triggering event took place on the last business day of your last completed fiscal year.

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Item 15. Exhibits, Financial Statements Schedules, page 86

7. Please resolve any outstanding comments on your pending request for confidential treatment relating to Exhibit 10.25.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

You may contact Tim Buchmiller at (202) 551-3635 or Allicia Lam at (202) 551-3316 if you have any questions.

Sincerely,

Russell Mancuso  
Branch Chief