



February 7, 2011

Via: EDGAR

Mr. Russell Mancuso
Branch Chief
Division of Corporation Finance
United States Securities and Exchange Commission

Washington, DC 20549

Re: Response to Comments on Form 10-K for fiscal year ended December 31, 2009

Dear Mr. Mancuso:

On October 5, 2010, we submitted a letter in response to your comments of September 30, 2010, on our Form 10-K for the fiscal year ended December 31, 2009 ("Form 10-K"). We believe that our response letter addressed each of your comments, with the exception of Comment 7, which related to a pending treatment for confidential treatment. For convenience, we have included that Comment in italics below along with our response. References in our response to "we", "our", "us", or the "Company" mean OPKO Health, Inc. and its subsidiaries.

Comment

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.

Response

The Company initially sought confidential treatment on March 12, 2010 for the Asset Purchase Agreement, dated October 12, 2009, between Schering Corporation and the Company (the "Purchase Agreement"). Since such date, we have been engaged in ongoing dialog with the SEC regarding various aspects of our confidential treatment request. We received our latest correspondence on the confidential treatment request from the SEC on January 24, 2011. In response, we filed an amendment to our Form 10-K on February 3, 2011, which resolved all outstanding comments on the pending request for confidential treatment. On February 4, 2011, the SEC issued an Order Granting Confidential Treatment.

General

In connection with the Staff's comments, we acknowledge 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
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- 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.

Yours truly,

/s/ Rao Uppaluri
Rao Uppaluri
Senior Vice President and
Chief Financial Officer

cc: Tim Buchmiller
Allicia Lam