Issuer Free Writing Prospectus dated March 9, 2011
Filed Pursuant to Rule 433
Registration No. 333-172168
(Relating to the Preliminary Prospectus Supplement dated March 2, 2011
and the Prospectus dated February 11, 2011)

OPKO HEALTH, INC.

We have filed a registration statement, a prospectus and a preliminary prospectus supplement with the Securities and Exchange Commission, or SEC, for the offering to which this communication relates. Before you invest, you should read the preliminary prospectus supplement and related prospectus as well as the other documents we have filed with the SEC for more complete information about us and this offering. You may obtain these documents for free by visiting EDGAR on the SEC website at www.sec.gov. Alternatively, we or the underwriters for this offering will arrange to send you the preliminary prospectus supplement (or, if then available, the final prospectus supplement) and related prospectus if you request it by calling toll-free at 877-547-6340 or if you request it from Equity Syndicate Prospectus Department, Jefferies & Company, Inc., 520 Madison Avenue, 12th Floor, New York, NY, 10022, or at Prospectus_Department@Jefferies.com or if you request it from J.P. Morgan Securities LLC, c/o Broadridge Financial Solutions, 1155 Long Island Avenue, Edgewood, New York 11717 or by calling 1-866-803-9204. You may also access the preliminary prospectus supplement and related prospectus by clicking on the following link:

http://www.sec.gov/Archives/edgar/data/944809/000095012311021351/g26303b5e424b5.htm. The following information supplements and updates the information contained in the preliminary prospectus supplement and related prospectus.

Issuer

OPKO Health, Inc. (NYSE Amex: OPK)

Common stock offered by OPKO

27,000,000 shares of common stock. In addition, we have granted the underwriters an option for a period of 30 days to purchase up to an additional 4,050,000 shares of common stock to cover overallotments. As part of this offering, entities affiliated with two of our directors and executive officers, Dr. Phillip Frost, our Chairman and Chief Executive Officer and our principal stockholder, and Dr. Jane H. Hsiao, our Vice Chairman and Chief Technical Officer, as well as entities associated with an existing stockholder have indicated an interest in purchasing up to an aggregate of approximately 5,333,000 shares of the common stock offered in this offering at the public offering price. Because these indications of interest are not binding agreements or commitments to purchase, any or all of these entities may elect not to purchase any shares in this offering, or the underwriters may elect not to sell any shares in this offering to any or all of these entities. Except as otherwise indicated, all information in this issuer free writing prospectus assumes no exercise by the underwriters of their overallotment option and no exercise of outstanding options or warrants to purchase shares of common stock and no conversion of shares of Series A or Series D Preferred Stock into common stock.

Upon completion of this offering (assuming no exercise of the overallotment option), we will have 282,412,706 shares of common stock outstanding based on 255,412,706 shares of common stock outstanding as of December 31, 2010, which excludes as of that date:

- 14,708,146 shares of common stock issuable upon the exercise of stock options outstanding as of December 31, 2010 at a weighted average exercise price of \$2.31 per share;
- 11,106,725 shares of common stock reserved for future issuance under our 2007 Equity Incentive Plan as of December 31, 2010;
- 897,438 shares of our common stock issuable upon conversion of outstanding shares of our Series A Preferred Stock as of December 31, 2010;
- 12,096,770 shares of our common stock issuable upon conversion of outstanding shares of our Series D Preferred Stock as of December 31, 2010; and
- 29,194,867 shares of our common stock subject to warrants outstanding at a weighted average exercise price of \$0.89 per share as of December 31, 2010.

Public offering price

\$3.75 per share.

Net proceeds to OPKO

We estimate that the net proceeds from the sale of the 27,000,000 shares of common stock that we are offering will be approximately \$96.4 million, or approximately \$110.7 million if the underwriters exercise in full their option to purchase up to 4,050,000 additional shares of common stock, after deducting the underwriting discounts and commissions and estimated offering expenses payable by us.

Trade date

March 9, 2011.

Closing date

On or about March 14, 2011.

Dilution

Our net tangible book value as of September 30, 2010 was approximately \$3.9 million, or \$0.02 per share. After giving effect to the sale of 27,000,000 shares of our common stock in this offering at the public offering price of \$3.75 per share, and after deducting the underwriting discounts and commissions and estimated offering expenses payable by us, our as adjusted net tangible book value as of September 30, 2010 would have been approximately \$100.3 million, or \$0.36 per share. This represents an immediate increase in net tangible book value of \$0.34 per share to existing stockholders and immediate dilution in net tangible book value of \$3.39 per share to new investors purchasing our common stock in this offering.

If the underwriters exercise in full their option to purchase 4,050,000 additional shares of common stock at the public offering price of \$3.75 per share, the as adjusted net tangible book value after this offering would be \$0.40 per share, representing an increase in net tangible book value of \$0.38 per share to existing stockholders and immediate dilution in net tangible book value of \$3.35 per share to new investors purchasing our common stock in this offering.

The above discussion is based on 255,313,174 shares outstanding as of September 30, 2010, and excludes as of that date:

- 14,723,100 shares of common stock issuable upon exercise of outstanding stock options at a weighted average exercise price of \$2.31 per share as of September 30, 2010;
- 11,133,725 shares of common stock reserved for issuance under our 2007 Equity Incentive Plan as of September 30, 2010;
- 955,029 shares of our common stock issuable upon conversion of outstanding shares of our Series A Preferred Stock as of September 30, 2010;
- 12,096,770 shares of our common stock issuable upon conversion of outstanding shares of our Series D Preferred Stock as of September 30, 2010; and
- 29,194,867 shares of our common stock subject to warrants outstanding at an exercise price of \$0.89 per share.

Joint book-running managers

Jefferies & Company, Inc. and J.P. Morgan Securities LLC.

Co-managers

UBS Securities LLC, Lazard Capital Markets LLC and Ladenburg Thalmann & Co. Inc.