UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, DC 20549

Form S-3

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

OPKO HEALTH, INC.

(Exact Name of Registrant as Specified in Its Charter)

Delaware

(State or Other Jurisdiction of Incorporation or Organization)

75-2402409 (I.R.S. Employer Identification Number)

4400 Biscayne Blvd. Miami, Florida 33137 (305) 575-4100

(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)

Kate Inman, Esquire Deputy General Counsel and Secretary OPKO Health, Inc. 4400 Biscayne Blvd. Miami, Florida 33137 (305) 575-4138

(Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Agent For Service)

Copy to:

Rodney H. Bell, Esquire Holland & Knight LLP 701 Brickell Ave., Suite 3000 Miami, Florida 33131 (305) 374-8500

Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this registration statement.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box. \square

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. \Box

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of

(Do not check if a smaller reporting company)

CALCULATION OF REGISTRATION FEE

	Amount to	Proposed Maximum	Proposed Maximum	Amount of
Title of Each Class of	be	Offering Price	Aggregate	Registration
Securities to be Registered	Registered	Per Share	Offering Price	Fee(3)
Common Stock, par value \$0.01 per share	(1)	(2)	\$250,000,000	\$29,025

(1) We are registering an indeterminate number of shares of common stock as shall have an aggregate initial offering price not to exceed \$250,000,000. The shares registered also include, pursuant to Rule 416 under the Securities Act, such additional number of shares of common stock that may become issuable as a result of any stock split, stock dividends, or similar event.

(2) The proposed maximum aggregate offering price per share of common stock will be determined from time to time by the registrant in connection with the issuance by the registrant of the common stock registered hereunder.

(3) Calculated pursuant to Rule 457(o).

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED FEBRUARY 10, 2011

PROSPECTUS

OPKO HEALTH, INC.

\$250,000,000

Common Stock

We may from time to time offer to sell shares of our common stock. The aggregate public offering price of the securities that we may offer through this prospectus will be up to \$250,000,000.

We will provide the specific terms of the securities offered by us in supplements to this prospectus at the time of sale. This prospectus may not be used to sell securities unless accompanied by a prospectus supplement. Please read the prospectus and prospectus supplement carefully before you invest in our securities.

We may, from time to time, offer and sell these shares directly or through one or more underwriters, agents or dealers, through underwriting syndicates managed or co-managed by one or more underwriters, or directly to purchasers, on or off the NYSE Amex at prevailing market prices or at privately negotiated prices, on a continuous or delayed basis.

Our common stock is listed on the NYSE Amex under the trading symbol "OPK." On February 10, 2011, the last reported sale price of our common stock was \$4.51 per share on the NYSE Amex.

Investing in our securities involves certain risks. See "Risk Factors" on page 3.

We urge you to carefully read this prospectus and the accompanying prospectus supplement, together with the documents we incorporate by reference, which will describe the specific terms of the securities offered, before you make your investment decision.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is February , 2011

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INFORMATION CONCERNING FORWARD-LOOKING STATEMENTS

This prospectus and our consolidated financial statements and other documents incorporated by reference in this prospectus contain forward-looking statements that are subject to risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different than the results, performance or achievements expressed or implied by the forward-looking statements.

Forward-looking statements include statements about our expectations, beliefs, plans, objectives, intentions, assumptions and other statements that are not historical facts. Forward-looking statements can generally be identified by phrases such as "believes," "expects," "potential," "continues," "may," "should," "seeks," "predicts," "anticipates," "intends," "projects," "estimates," "plans," "could," "designed," "should be" and other similar expressions that denote expectations of future or conditional events rather than statements of fact. Forward-looking statements also may relate to strategies, plans and objectives for, and potential results of, future operations, financial condition, business prospects, growth strategy and liquidity, and are based upon management's current plans and beliefs or current estimates of future results or trends. Our actual results could differ materially from those anticipated in forward-looking statements for many reasons, including the factors described in the sections entitled "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our most recent Quarterly Report on Form 10-Q and Annual Report on Form 10-K, as amended, filed with the SEC. Accordingly, you should not unduly rely on these forward-looking statements. Except as required by law, we undertake no obligation to publicly revise any forward-looking statements, whether as a result of new information, future events or for any other reason. However, you should carefully review the risk factors set forth in other reports or documents we file from time to time with the SEC.

ABOUT THIS PROSPECTUS

Unless the context requires otherwise, in this prospectus, the terms the "Company", "OPKO", "we", "our", "ours", and "us" refers to OPKO Health, Inc., a Delaware corporation, including our wholly-owned subsidiaries.

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or the SEC, utilizing a "shelf" registration process. Under this shelf registration process, we may offer to sell shares of our common stock in one or more offerings up to a total dollar amount of \$250,000,000. Each time we offer to sell our common stock, we will provide a prospectus supplement that will contain specific information about the terms of that offering. The prospectus supplement may also add, update or change information contained in this prospectus. We may also add, update or change in any accompanying prospectus supplement or any free writing prospectus we may authorize to be delivered to you, any of the information contained in this prospectus. To the extent there is a conflict between the information contained in this prospectus and the prospectus supplement, you should rely on the information in the prospectus supplement, provided that if any statement in one of these documents is inconsistent with a statement in another document having a later date — for example, a document incorporated by reference in this prospectus or any prospectus supplement — the statement in the document having the later date modifies or supersedes the earlier statement. You should carefully read both this prospectus and any applicable prospectus supplement together with additional information described under the heading "Where You Can Find More Information" before deciding to invest in any of the securities being offered.

We have filed or incorporated by reference exhibits to the registration statement of which this prospectus forms a part. You should read the exhibits carefully for provisions that may be important to you.

The SEC allows us to "incorporate by reference" certain information that we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus, and information that we file later with the SEC will automatically update, supplement and/or supersede the information in this prospectus. Any statement contained in a document incorporated or deemed to be incorporated by reference into this prospectus shall be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus or in any other document which also is or is deemed to be incorporated by reference into this prospectus such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus. You should read the following summary together with the more detailed information regarding our Company, our common stock and our financial statements and notes to those statements appearing elsewhere in this prospectus or incorporated herein by reference.



You should rely only on the information contained in or incorporated by reference in this prospectus or any related prospectus supplement or free writing prospectus. We have not authorized anyone to provide you with different information. You should not assume that the information contained in or incorporated by reference in this prospectus is accurate as of any date other than the date on the front of this prospectus. You should not consider this prospectus to be an offer or solicitation relating to our common stock in any jurisdiction in which such an offer or solicitation relating to our common stock is not authorized. Furthermore, you should not consider this prospectus to be an offer or solicitation relating the offer or solicitation is not qualified to do so, or if it is unlawful for you to receive such an offer or solicitation

ABOUT OPKO HEALTH, INC.

We are a specialty healthcare company involved in the discovery, development and commercialization of products that address major unmet medical needs. Our objective is to establish industry-leading positions in large and rapidly growing medical markets by leveraging our preclinical and development expertise and our novel and proprietary technologies. We also actively explore opportunities to acquire complementary pharmaceuticals, compounds, technologies, and businesses, which could, individually or in the aggregate, materially increase the scale of our business.

Initially focused on the treatment and management of ophthalmic diseases, OPKO has since expanded into other areas of major unmet medical need such as oncology, infectious diseases, and neurological disorders. Our business presently consists of the development of a broad range of pharmaceutical products and diagnostic tests, and the development, commercialization and sale of ophthalmic diagnostic and imaging systems and instrumentation products, as well as the sale of pharmaceutical products, over-the-counter products and medical devices to government, private and institutional markets in Chile and Mexico. Our shares are publicly traded on the NYSE Amex under the ticker "OPK". We were originally incorporated in Delaware in October 1991. Our principal executive offices are located at 4400 Biscayne Boulevard, Miami, Florida 33137 and our telephone number is (305) 575-4100. We also have offices in Santiago, Chile, laboratory facilities at the Scripps Research Institute and Florida Atlantic University in Jupiter Florida, a manufacturing facility in Hialeah, Florida, and a research and development office in the United Kingdom, as well as offices and a manufacturing facility in Guadalajara, Mexico. Our Internet website address is <u>www.OPKO.com</u>.

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RISK FACTORS

Investing in our securities involves a high degree of risk. In addition to other information contained in this prospectus and any accompanying prospectus supplement, before investing in our securities, you should carefully consider the risks described under the heading "Risk Factors", and under the same or similar headings in our most recent Annual Report on Form 10-K, as amended, for the fiscal year ended December 31, 2009 and any subsequent Quarterly Reports on Form 10-Q, as amended, and in any other documents incorporated by reference into this prospectus, as updated by our future filings with the SEC, pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, or the Exchange Act. These risks are not the only ones faced by us. Without limitation, you should also carefully consider the risks noted under the caption "Information Concerning Forward-Looking Statements" in this prospectus. Additional risks not known or that are presently deemed immaterial could also materially and adversely affect our financial condition, results of operations, our products, business and prospects. Additional risk factors may be included in a prospectus supplement relating to a particular offering of securities. Each of the risks described in these documents could materially and adversely affect our business, financial condition, results of operations and prospects, and could result in a partial or complete loss of your investment. See "Where You Can Find More Information" section in this prospectus.

USE OF PROCEEDS

Unless otherwise indicated in a prospectus supplement, we intend to use the net proceeds from the sale of the securities for general corporate purposes, including research and development expenses, clinical trials, acquisitions of new technologies or businesses, and other business opportunities. If we elect at the time of the issuance of the securities to make different or more specific uses of proceeds other than as described in this prospectus, the change in use of proceeds will be described in the applicable prospectus supplement.

DILUTION

We will set forth in a prospectus supplement the following information regarding any material dilution of the equity interests of investors purchasing securities in an offering under this prospectus:

- the net tangible book value per share of our equity securities before and after the offering;
- the amount of the increase in such net tangible book value per share attributable to the cash payments made by purchasers in the offering; and
- the amount of the immediate dilution from the public offering price which will be absorbed by such purchasers.

PLAN OF DISTRIBUTION

We may sell the securities offered by this prospectus from time to time in one or more transactions, including without limitation:

- directly to purchasers;
- to or through underwriters or dealers;
- through agents; or
- through a combination of any of these methods.

In addition, the manner in which we may sell some or all of the securities covered by this prospectus includes, without limitation, through:

- block trades in which a broker-dealer will attempt to sell as agent, but may position or resell a portion of the block, as principal, in order to facilitate the transaction;
- purchases by a broker-dealer, as principal, and resale by the broker-dealer for its account;
- ordinary brokerage transactions and transactions in which a broker solicits purchasers; or
- privately negotiated transactions.



We may also sell the securities offered by this prospectus in "at the market offerings" within the meaning of Rule 415(a)(4) of the Securities Act of 1933, as amended, or the Securities Act, to or through a market maker, or into an existing trading market, on an exchange or otherwise.

A prospectus supplement will state the terms of the offering of the securities, including:

- the name or names of any underwriters or agents and the amounts of securities underwritten or purchased by each of them, if any;
- the public offering price or purchase price of the securities and the net proceeds to be received by us from the sale;
- any delayed delivery arrangements;
- any underwriting discounts or agency fees and other items constituting underwriters' or agents' compensation;
- · any discounts or concessions allowed or reallowed or paid to dealers; and
- any securities exchange on which the securities may be listed.

The offer and sale of the securities described in this prospectus by us, the underwriters or the third parties described above may be effected from time to time in one or more transactions, including privately negotiated transactions, either:

- at a fixed price or prices, which may be changed;
- at market prices prevailing at the time of sale;
- at prices related to the prevailing market prices; or
- at negotiated prices.

General

Any public offering price and any discounts, commissions, concessions or other items constituting compensation allowed or reallowed or paid to underwriters, dealers, agents, or remarketing firms may be changed from time to time. Underwriters, dealers, agents, and remarketing firms that participate in the distribution of the offered securities may be "underwriters" as defined in the Securities Act. Any discounts or commissions they receive from us and any profits they receive on the resale of the offered securities may be treated as underwriting discounts and commissions under the Securities Act. We will identify any underwriters, agents, or dealers and describe their commissions, fees or discounts in the applicable prospectus supplement or pricing supplement, as the case may be.

Underwriters and Agents

If underwriters are used in a sale, they will acquire the offered securities for their own account. The underwriters may resell the offered securities in one or more transactions, including negotiated transactions. These sales may be made at a fixed public offering price or prices, which may be changed, at market prices prevailing at the time of the sale, at prices related to such prevailing market price or at negotiated prices. We may offer the securities to the public through an underwriting syndicate or through a single underwriter. The underwriters in any particular offering will be mentioned in the applicable prospectus supplement or pricing supplement, as the case may be.

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Unless otherwise specified in connection with any particular offering of securities, the obligations of the underwriters to purchase the offered securities will be subject to certain conditions contained in an underwriting agreement that we will enter into with the underwriters at the time of the sale to them. The underwriters will be obligated to purchase all of the securities of the series offered if any of the securities are purchased, unless otherwise specified in connection with any particular offering of securities. Any initial offering price and any discounts or concessions allowed, reallowed or paid to dealers may be changed from time to time.

We may designate agents to sell the offered securities. Unless otherwise specified in connection with any particular offering of securities, the agents will agree to use their best efforts to solicit purchases for the period of their appointment. We may also sell the offered securities to one or more remarketing firms, acting as principals for their own accounts or as agents for us. These firms will remarket the offered securities upon purchasing them in accordance with a redemption or repayment pursuant to the terms of the offered securities. A prospectus supplement or pricing supplement, as the case may be, will identify any remarketing firm and will describe the terms of its agreement, if any, with us and its compensation.

In connection with offerings made through underwriters or agents, we may enter into agreements with such underwriters or agents pursuant to which we receive our outstanding securities in consideration for the securities being offered to the public for cash. In connection with these arrangements, the underwriters or agents may also sell securities covered by this prospectus to hedge their positions in these outstanding securities, including in short sale transactions. If so, the underwriters or agents may use the securities received from us under these arrangements to close out any related open borrowings of securities.

Dealers

We may sell the offered securities to dealers as principals. We may negotiate and pay dealers' commissions, discounts, or concessions for their services. The dealer may then resell such securities to the public either at varying prices to be determined by the dealer or at a fixed offering price agreed to with us at the time of resale. Dealers engaged by us may allow other dealers to participate in resales.

Direct Sales

We may choose to sell the offered securities directly. In this case, no underwriters or agents would be involved.

Institutional Purchasers

We may authorize agents, dealers, or underwriters to solicit certain institutional investors to purchase offered securities on a delayed delivery basis pursuant to delayed delivery contracts providing for payment and delivery on a specified future date. The applicable prospectus supplement or pricing supplement, as the case may be, will provide the details of any such arrangement, including the offering price and commissions payable on the solicitations.

We will enter into such delayed contracts only with institutional purchasers that we approve. These institutions may include commercial and savings banks, insurance companies, pension funds, investment companies, and educational and charitable institutions.

Indemnification; Other Relationships

We may have agreements with agents, underwriters, dealers, and remarketing firms to indemnify them against certain civil liabilities, including liabilities under the Securities Act. Agents, underwriters, dealers, and remarketing firms, and their affiliates, may engage in transactions with, or perform services for, us in the ordinary course of business. This includes commercial banking and investment banking transactions.

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Market-Making, Stabilization and Other Transactions

In connection with any offering of common stock, the underwriters may purchase and sell shares of common stock in the open market. These transactions may include short sales, syndicate covering transactions and stabilizing transactions. Short sales involve syndicate sales of common stock in excess of the number of shares to be purchased by the underwriters in the offering, which creates a syndicate short position. "Covered" short sales are sales of shares made in an amount up to the number of shares represented by the underwriters' over-allotment option. In determining the source of shares to close out the covered syndicate short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the over-allotment option. Transactions to close out the covered syndicate short involve either purchases of the common stock in the open market after the distribution has been completed or the exercise of the over-allotment option. The underwriters may also make "naked" short sales of shares in excess of the over-allotment option. The underwriters must close out any naked short position by purchasing shares of common stock in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the shares in the open market after pricing that could adversely affect investors who purchase in the offering. Stabilizing transactions consist of bids for or purchases of shares in the open market while the offering is in progress for the purpose of pegging, fixing or maintaining the price of the securities.

In connection with any offering, the underwriters may also engage in penalty bids. Penalty bids permit the underwriters to reclaim a selling concession from a syndicate member when the securities originally sold by the syndicate member are purchased in a syndicate covering transaction to cover syndicate short positions. Stabilizing transactions, syndicate covering transactions and penalty bids may cause the price of the securities to be higher than it would be in the absence of the transactions. The underwriters may, if they commence these transactions, discontinue them at any time.

Fees and Commissions

In compliance with the guidelines of the Financial Industry Regulatory Authority (the "FINRA"), the aggregate maximum discount, commission or agency fees or other items constituting underwriting compensation to be received by any FINRA member or independent broker-dealer will not exceed 8% of any offering pursuant to this prospectus and any applicable prospectus supplement or pricing supplement, as the case may be.

If more than 10% of the net proceeds of any offering of securities made under this prospectus will be received by FINRA members participating in the offering or affiliates or associated persons of such FINRA members, the offering will be conducted in accordance with FINRA Conduct Rule 2710(h).

TYPES OF SECURITIES TO BE OFFERED

We may offer, from time to time, shares of common stock through this prospectus. We will describe in a prospectus supplement, which we will deliver with this prospectus at the time of sale, the terms of the particular securities that we may offer in the future. The aggregate initial offering price of all securities sold will not exceed \$250,000,000. When we sell securities, we will determine the amounts of securities we will sell and the prices and other terms on which we will sell them. We may sell securities to or through underwriters, through agents or dealers or directly to purchasers.

DESCRIPTION OF COMMON STOCK

The following summary of the terms of our common stock is not meant to be complete and is qualified in its entirety by reference to our Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws, and any amendments thereto. Copies of our Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws, and any amendments thereto, are incorporated herein by reference and will be sent to you at no charge upon request. See "Where You Can Find More Information" below.

General

Our authorized capital stock consists of 510,000,000 shares of stock, of which: (i) 500,000,000 shares are designated as common stock, par value \$0.01 per share; and (ii) 10,000,000 shares are designated as preferred stock, par value \$0.01 per share. As of February 4, 2011, there were 255,649,034 shares of common stock, 722,700 shares of Series A preferred stock, 0 shares of Series C preferred stock, and 1,029,677 shares of Series D preferred stock outstanding. A description of the material terms and provisions of our Amended and Restated Certificate of Incorporation affecting the relative rights of the common stock and any preferred stock is set forth below.

Voting Rights

The holders of our common stock are entitled to one vote per share on all matters which they are entitled to vote upon at meetings of stockholders or upon actions taken by written consent pursuant to Delaware corporate law. The holders of our common stock do not have cumulative voting rights, which means that the holders of a plurality of the outstanding shares can elect all of our directors.

Dividend Rights

Subject to the rights of the holders of any shares of preferred stock currently outstanding or which may be issued in the future, the holders of the common stock are entitled to receive dividends from our funds legally available when, as and if declared by our board of directors. No dividends have been paid to holders of our common stock since our incorporation, and no cash dividends are anticipated to be declared or paid in the reasonably foreseeable future.

Liquidation Rights

Subject to the rights of the holders of any shares of preferred stock currently outstanding or which may be issued in the future, the holders of the common stock are entitled to share ratably in all of our assets available for distribution to holders of common stock upon the liquidation, dissolution or winding-up of our affairs subject to the liquidation preference, if any, of any then outstanding shares of preferred stock.

Other Matters

Holders of our common stock do not have any preemptive, subscription, redemption or conversion rights. All of the shares of our common stock currently issued and outstanding are fully-paid and nonassessable.

Certain Amended and Restated Certificate of Incorporation and Bylaws Provisions

Requirements for Advance Notification of Stockholder Nominations and Proposals

Our Bylaws establish advance notice procedures with respect to stockholder proposals and the nomination of candidates for election as directors, other than nominations made by or at the direction of the board of directors or one of its committees or other matters properly brought by a stockholder under Rule 14a-8 promulgated under the Exchange Act.

Special Meetings

Our Amended and Restated Certificate of Incorporation and Bylaws provide that, except as otherwise required by law, special meetings of the stockholders may only be called by the chairman of the board of directors, the Chief Executive Officer, or by the board of directors acting pursuant to a resolution approved by the affirmative vote of a majority of the directors then in office. Only those matters set forth in the notice of the special meeting may be considered or acted upon at a special meeting of stockholders.

No Cumulative Voting

The Delaware General Corporation Law provides that stockholders are denied the right to cumulate votes in the election of directors unless our certificate of incorporation provides otherwise. Our Amended and Restated Certificate of Incorporation does not provide for cumulative voting of shares.

Delaware Anti-Takeover Law

We are a Delaware corporation subject to Section 203 of the Delaware General Corporation Law. Under Section 203, certain "business combinations" between a Delaware corporation whose stock generally is publicly traded or held of record by more than 2,000 stockholders and an "interested stockholder" are prohibited for a three-year period following the date that such stockholder became an interested stockholder, unless:

the corporation has elected in its certificate of incorporation not to be governed by Section 203;



- the business combination or the transaction which resulted in the stockholder becoming an interested stockholder was approved by the board of directors of the corporation before the date of the business combination or the date such stockholder became an interested stockholder, as applicable;
- upon consummation of the transaction that made such stockholder an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the commencement of the transaction excluding voting stock owned by directors who are also officers or held in employee benefit plans in which the employees do not have a confidential right to tender stock held by the plan in a tender or exchange offer; or
- the business combination is approved by the board of directors of the corporation and authorized at a meeting by two-thirds of the voting stock which the interested stockholder did not own.

The three-year prohibition also does not apply to some business combinations proposed by an interested stockholder following the announcement or notification of an extraordinary transaction involving the corporation and a person who had not been an interested stockholder during the previous three years or who became an interested stockholder with the approval of a majority of the corporation's directors. The term "business combination" is defined generally to include mergers or consolidations between a Delaware corporation and an interested stockholder, transactions with an interested stockholder involving the assets or stock of the corporation or its majority-owned subsidiaries, and transactions which increase an interested stockholder's percentage ownership of stock. The term "interested stockholders who become beneficial owners of 15% or more of a Delaware corporation's voting stock, together with the affiliates or associates of that stockholder.

Listing

Our common stock is listed on the NYSE Amex under the trading symbol "OPK."

Transfer Agent and Registrar

The Transfer Agent and Registrar for our common stock is American Stock Transfer and Trust Company.

LEGAL MATTERS

The validity of the issuance of the shares of common stock offered hereby will be passed on for us by Holland & Knight LLP, Miami, Florida.

EXPERTS

The consolidated financial statements of OPKO Health, Inc. and subsidiaries appearing in OPKO Health, Inc. and subsidiaries' Annual Report (Form 10-K/A) for the year ended December 31, 2009, have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon, included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC under the Exchange Act. You may read and copy this information at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. You may obtain information on the operation of the SEC's Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC also maintains an Internet website that contains reports, proxy statements and other information about issuers, including OPKO Health, who file electronically with the SEC. The address of the website is http://www.sec.gov.

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We have filed with the SEC a registration statement (which term includes all amendments, exhibits, and schedules thereto) on Form S-3 under the Securities Act with respect to the securities offered by this prospectus. This prospectus is a part of the registration statement. This prospectus does not contain all the information set forth in the registration statement because certain information has been incorporated into the registration statement by reference in accordance with the rules and regulations of the SEC. Please review the documents incorporated by reference for a more complete description of the matters to which such documents relate. The registration statement may be inspected at the public reference facilities maintained by the SEC at 100 F Street NE, Washington, D.C. 20549 and is available to you on the SEC's web site.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" information into this document. This means that we can disclose important information to you by referring you to another document filed separately with the SEC. The information incorporated by reference is considered to be a part of this document, except for any information superseded by information that is included directly in this document or incorporated by reference subsequent to the date of this document.

This prospectus incorporates by reference the documents listed below, shall be deemed to incorporate by reference all filings filed by us pursuant to the Exchange Act after the date of the initial registration statement and prior to effectiveness of the registration statement, and incorporates by reference any future filings that we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (other than information in the documents or filings that is deemed to have been furnished and not filed), until all the securities offered under this prospectus are sold or this offering is terminated; provided, however, that we are not incorporating any information furnished under Item 2.02 or Item 7.01 of any current report on Form 8-K:

- Annual Report on Form 10-K for the fiscal year ended December 31, 2009 filed on March 17, 2010, as amended by the First Amendment to Annual Report on Form 10-K filed on November 10, 2010 and the Second Amendment to Annual Report on Form 10-K filed on February 3, 2011;
- Quarterly Report on Form 10-Q for the quarter ended March 31, 2010, filed on May 10, 2010, as amended by First Amendment to Quarterly Report on Form 10-Q, filed on November 10, 2010;
- Quarterly Report on Form 10-Q for the quarter ended June 30, 2010, filed on August 9, 2010, as amended by First Amendment to Quarterly Report on Form 10-Q, filed on November 10, 2010;
- Quarterly Report on Form 10-Q for the quarter ended September 30, 2010, filed on November 9, 2010;
- Current Reports on Form 8-K filed on February 18, 2010, April 15, 2010, May 7, 2010, June 1, 2010, November 9, 2010, December 14, 2010, and February 1, 2011; and
- Definitive Proxy Statement (those portions incorporated by reference into OPKO Health's Form 10-K only) filed on April 27, 2010.

See the section "Description of Common Stock" above for a description of our common stock.

Any previous statement contained in a document we incorporate by reference will be modified or superseded for all purposes to the extent that a statement contained in this prospectus (or in any other document that is subsequently filed with the SEC and incorporated by reference) modifies or is contrary to that previous statement. Any statement so modified or superseded will not be deemed a part of this prospectus except as so modified or superseded.

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Documents incorporated by reference are available from the SEC as described above or from OPKO Health without charge, excluding any exhibits to those documents unless the exhibit is specifically incorporated by reference as an exhibit in this document. You can obtain documents incorporated by reference in this prospectus at no cost by requesting them in writing or by telephone at the following address:

OPKO Health, Inc. 4400 Biscayne Boulevard Miami, Florida 33137 (305) 575-4100 Attention: Secretary

You can also find the above-referenced filings on our website at www.opko.com. Except as provided above, no other information, including information on our internet site, is incorporated by reference in this prospectus.

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PART II INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

The following table sets forth the costs and expenses to be borne by the registrant in connection with the offerings described in this Registration Statement.

SEC registration fee	\$29,025
6	. ,
NYSE Amex filing fee	*
Transfer agent and trustee fees and expenses	*
Printing	*
Accounting fees and expenses	*
Legal fees and expenses	*
Miscellaneous	*
Total	\$*

* Not presently known.

Item 15. Indemnification of Directors and Officers.

The following is a summary of the statutes, certificate of incorporation, and bylaw provisions or other arrangements under which the registrant's directors and officers are insured or indemnified against liability in their capacities as such. All the directors and officers of the registrants are covered by insurance policies maintained and held in effect by OPKO Health against certain liabilities for actions taken in their capacities as such, including liabilities under the Securities Act of 1933, as amended.

Section 145 of Delaware General Corporation Law.

OPKO Health is incorporated under the laws of the State of Delaware. Section 145 of the Delaware General Corporation Law, or DGCL, provides that a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation) by reason of the fact that the person is or was a director, officer, employee, or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by him in connection with such action, suit, or proceeding if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe the person's conduct was unlawful.

Section 145 also provides that a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending, or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of the fact that such person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against expenses (including attorneys' fees) actually and reasonably incurred by the person in connection with the defense or settlement of such action or suit if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation and except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery of Delaware or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery of Delaware or such other court shall deem proper.



To the extent that a present or former director or officer of a corporation has been successful on the merits or otherwise in defense of any action, suit, or proceeding referred to above, or in defense of any claim, issue, or matter therein, such person shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection therewith; provided that indemnification provided for by Section 145 or granted pursuant thereto shall not be deemed exclusive of any other rights to which the indemnified party may be entitled; and a Delaware corporation shall have power to purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against such person and incurred by such person in any such capacity or arising out of such person's status as such whether or not the corporation would have the power to indemnify such person against such liabilities under Section 145.

Certificate of Incorporation Provisions on Indemnification.

OPKO Health's Amended and Restated Certificate of Incorporation provides that a director of the Company shall not be personally liable to either the Company or any of its stockholders for monetary damages for a breach of fiduciary duty except for: (i) breaches of the duty of loyalty to the corporation or its stockholders; (ii) acts or omissions not in good faith or involving intentional misconduct or knowing violation of the law; (iii) as required by Section 174 of the DGCL; or (iv) a transaction resulting in an improper personal benefit. In addition the corporation has the power to indemnify any person serving as a director, officer or agent of the corporation to the fullest extent permitted by law.

Bylaws Provisions on Indemnification.

OPKO Health's Amended and Restated Bylaws provide generally that the Company shall indemnify its directors, officers, employees, and agents who are or were a party, or threatened to be made a party, to any threatened, pending, or contemplated action, suit or proceeding, whether civil, criminal, administrative, or investigative (other than an action by or in the right of the corporation), by reason of the fact that such person is or was the director, officer, employee, or agent of the corporation, or is or was serving in such a position at its request of any other corporation, partnership, joint venture, trust, or other enterprise.

Other Provisions on Indemnification.

The Company is also a party to indemnification agreements with each of the Company's directors and certain officers of Company. Consistent with the Company's bylaws, the indemnification agreements require the Company, among other things, to (i) maintain directors' and officers' liability insurance for each indemnitee, and (ii) indemnify each indemnitee to the fullest extent permitted by law for certain expenses incurred in a proceeding arising out of indemnitee's service to the Company or its subsidiaries. The indemnification agreements also provide for the advancement of such expenses to the indemnitee by the Company.

The above discussion of the Amended and Restated Certificate of incorporation and Amended and Restated Bylaws of the registrant and the indemnification agreements is not intended to be exhaustive and is qualified in its entirety by such certificate of incorporation, bylaws, and indemnification agreements.

Item 16. Exhibits.

The exhibits listed in the accompanying Exhibit Index are filed or incorporated by reference as part of this Registration Statement.

Item 17. Undertakings.

- (a) The undersigned registrant hereby undertakes:
 - (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that paragraphs (i), (ii) and (iii) above do not apply if the information required to be included in a posteffective amendment by those paragraphs is contained in reports filed with or furnished to the SEC by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in this registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

(A) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(B) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof; provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

(5) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities:

The undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;

(ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;

(iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and

(iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

(b) The undersigned registrant hereby undertakes to file an application for the purpose of determining the eligibility of the trustee to act under subsection (a) of Section 310 of the Trust Indenture Act in accordance with the rules and regulations prescribed by the SEC under Section 305(b)(2) of the Trust Indenture Act.

(c) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934, as amended (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(d) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

(e) The undersigned registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the Registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant, OPKO Health, Inc., certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Miami, State of Florida, on February 10, 2011.

OPKO HEALTH, INC.

/s/ Phillip Frost, M.D.

By: Phillip Frost, M.D. Title: President and Chief Executive Officer

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Steven Rubin and Rao Uppaluri, and each of them, his true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement, including any related registration statement filed pursuant to Rules 413 or 462 under the Securities Act of 1933, as amended, and to file the same, with all exhibits thereto, and all other documents in connection therewith, with the SEC, granting unto each said attorney-in-fact and agent full power and authority to do and perform each and every act in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or either of them or their or his or her substitute or substitutes may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Dr. Phillip Frost, M.D.	Chairman of the Board and Chief Executive	February 10, 2011
Dr. Phillip Frost, M.D.	Officer (Principal Executive Officer)	
/s/ Dr. Jane H. Hsiao	Vice Chairman and Chief Technical Officer	February 10, 2011
Dr. Jane H. Hsiao /s/ Steven D. Rubin	Director and Executive Vice President —	February 10, 2011
Steven D. Rubin /s/ Rao Uppaluri	Administration Senior Vice President and Chief Financial Officer	February 10, 2011
Rao Uppaluri	(Principal Financial Officer)	
/s/ Adam Logal	Executive Director of Finance, Chief Accounting	February 10, 2011
Adam Logal	Officer and Treasurer (Principal Accounting Officer)	
/s/ Robert Baron	Director	February 10, 2011
Robert Baron	Director	February 10, 2011
Thomas E. Beier	Director	February 10, 2011
Pascal J. Goldschmidt, M.D.	_	
	11.5	

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Signature	Title	Date
/s/ Richard A. Lerner, M.D.	Director	February 10, 2011
Richard A. Lerner, M.D. /s/ John A. Paganelli	Director	February 10, 2011
John A. Paganelli /s/ Richard C. Pfenniger, Jr.	Director	February 10, 2011
Richard C. Pfenniger, Jr.	Director	February 10, 2011
Alice Lin-Tsing Yu, M.D., Ph.D.		
	II-6	

EXHIBIT INDEX

Exhibit Number	Description
1.1*	Form of Underwriting Agreement
3.1(1)	Amended and Restated Certificate of Incorporation.
3.2(2)	Amended and Restated By-Laws.
5.1	Legal Opinion of Holland & Knight LLP
23.1	Consent of Ernst & Young LLP.
23.2**	Consent of Holland & Knight LLP
24.1	Power of Attorney (included on the signature page to this Registration Statement)

* To be filed by amendment or as an exhibit to a document to be incorporated or deemed to be incorporated by reference in this Registration Statement.

(1) Filed with the Company's Current Report on Form 8-A filed with the Securities and Exchange Commission on June 11, 2007, and incorporated herein by reference.

(2) Filed with the Company's Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 31, 2008 and incorporated herein by reference.

^{**} Included in Exhibit 5.1.

Holland & Knight

701 Brickell Avenue, Suite 3000 | Miami, FL 33131 | T 305.374.8500 | F 305.789.7799 Holland & Knight LLP | www.hklaw.com

February 10, 2011

OPKO Health, Inc. 4400 Biscayne Blvd. Miami, Florida 33137

Re: OPKO Health, Inc. Registration Statement on Form S-3

Ladies and Gentlemen:

We have acted as counsel to OPKO Health, Inc., a Delaware corporation (the "Company"), in connection with the registration statement on Form S-3 to be filed on the date hereof by the Company (the "Registration Statement") with the U.S. Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Act"). The Registration Statement relates to the issuance and sale by the Company from time to time, pursuant to Rule 415 of the rules and regulations promulgated under the Act, of an unspecified amount of securities of the Company, consisting of shares of common stock of the Company, \$0.01 par value per share (the "Common Stock" or the "Offered Securities"). The proposed maximum aggregate public offering price of the Offered Securities to be sold by the Company is \$250,000,000, on terms to be determined at the time of the offering thereof.

This opinion is being delivered in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Act.

In connection with this opinion, we have examined originals or copies, certified or otherwise identified to our satisfaction, of:

i. the Registration Statement; and

ii. certain resolutions adopted by the board of directors of the Company (the "Board of Directors") relating to the registration of the Offered Securities and related matters.

We have also examined originals or copies, certified or otherwise identified to our satisfaction, of such records of the Company, and such agreements and certificates of public officials, certificates of officers or other representatives of the Company and others, and such other documents, as we have deemed necessary or appropriate as a basis for the opinions set forth below.

As to any facts material to the opinions expressed herein which were not independently established or verified, we have relied upon oral or written statements and representations of officers and other representatives of the Company and others.

The opinions expressed below are limited to the General Corporation Law of the State of Delaware, including all Delaware statutes, all Delaware court decisions and all provisions of the Delaware constitution that affect the interpretation of the General Corporation Law, and the federal laws of the United States (the "Applicable Law"). Therefore, we express no opinion concerning matters governed by the laws of any other jurisdictions or the effects of such laws upon the transactions of the type covered by the Registration Statement. The Offered Securities may be issued from time to time on a delayed or continuous basis, and this opinion is limited to the laws, including

OPKO Health, Inc. February 10, 2011 Page 2

the rules and regulations, as in effect on the date hereof, which laws are subject to change with possible retroactive effect.

Based upon and in reliance on the documents and representations referred to above and subject to the foregoing, we are of the opinion that:

1. With respect to any series of Common Stock to be offered by the Company pursuant to the Registration Statement (the "Offered Common Stock"), when: (i) the Registration Statement, as finally amended (including all necessary post-effective amendments), has become effective under the Act; (ii) an appropriate prospectus supplement with respect to the Offered Common Stock has been prepared, delivered and filed in compliance with the Act and the applicable rules and regulations thereunder; (iii) if the Offered Common Stock is to be sold pursuant to a firm commitment underwritten offering, the underwriting agreement with respect to the Offered Common Stock has been duly authorized, executed and delivered by the Company and the other parties thereto; (iv) the Board of Directors, including any appropriate committee appointed thereby, and appropriate officers of the Company have taken all necessary corporate action (including obtaining stockholder approval, if necessary) to approve the issuance and terms of the Offered Common Stock and related matters; (v) the Offered Common Stock has been issued and delivered so as not to violate any Applicable Law, the Amended and Restated Certificate of Incorporation"), the Amended and Restated Bylaws (the "Bylaws"), or result in a default under or breach of any agreement or instrument binding upon the Company; and (vi) the certificates of the Offered Common Stock (if required) have been duly executed by the Company, countersigned by the transfer agent therefor and duly delivered to the purchasers thereof against payment in full therefor, then the Offered Common Stock, when issued and sold as contemplated in the Registration Statement and the appropriate prospectus supplement and in accordance with any applicable duly authorized, executed and delivered purchase, underwriting or similar agreement, will have been duly authorized and validly issued and will be fully paid and non-assessable.

In rendering the opinions set forth above, we have assumed that:

i. the consideration paid for any Offered Common Stock will comply with Section 153(a) or (b) of the Delaware General Corporate Law or any successor provision; and

ii. after the issuance of the Offered Common Stock, the total number of issued shares of Common Stock, together with the total number of shares of Common Stock reserved for issuance upon the exercise, exchange or conversion, as the case may be, of any exercisable, exchangeable or convertible security, as the case may be, then outstanding, will not exceed the total number of authorized shares of Common Stock under the Company's Certificate of Incorporation.

We hereby consent to the filing of this opinion with the Commission as an exhibit to the Registration Statement. We also consent to the reference to our firm under the caption "Legal Matters" in the prospectus which forms a part of the Registration Statement. In giving this consent, we do not thereby admit that we are included in the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the Commission promulgated thereunder. This opinion is expressed as of the date hereof unless otherwise expressly stated, and we disclaim any undertaking to advise you of any subsequent changes in the facts stated or assumed herein or of any subsequent changes in Applicable Law.

Very truly yours,

/s/ Holland & Knight LLP

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CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the reference to our firm under the caption "Experts" in the Registration Statement (Form S-3 No. 333-00000) and related Prospectus of OPKO Health, Inc. and subsidiaries for the registration of shares of its common stock with an aggregate offering price of up to \$250,000,000 and to the incorporation by reference therein of our report dated March 17, 2010, except for the effects of the restatement described in Note 21, as to which the date is November 10, 2010, with respect to the consolidated financial statements of OPKO Health, Inc. and subsidiaries, and our report dated March 17, 2010, except for the effects of the material weakness described in the seventh paragraph of such report, as to which the date is November 10, 2010 with respect to the effectiveness of internal control over financial reporting of OPKO Health, Inc. and subsidiaries as of December 31, 2009 included in its Annual Report (Form 10-K/A) for the year ended December 31, 2009, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP Certified Public Accountants

Miami, Florida, February 10, 2011