| FORM 4 | 4 |
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| Check this box if no |
|-----------------------|
| longer subject to |
| Section 16. Form 4 or |
| Form 5 obligations |
| may continue. See |
| Instruction 1(b). |

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

OMB APPROVAL OMB Number: 3235-0287 Estimated average burden hours per response... 0.5

02)

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

| (Print or Type Respons | (5) | | | | | | | | | | | | | |
|---|---------|--|--|--------------------|--------------------|-----------|---|--|---|----------------------------------|--|--|----------------------------------|-------------------------|
| 1. Name and Address of Reporting Person – FROST PHILLIP MD ET AL | | | 2. Issuer Name a Opko Health, In | | or Tra | ading Syr | nbol | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) X Director X 10% Owner | | | | | | |
| ODVIO VELLEVA DIG. 1100 DIGGLADIE | | | 3. Date of Earliest Transaction (Month/Day/Year) 09/02/2010 | | | | | | X Officer (give title below) Other (specify below) CEO & Chairman CEO & Chairman | | | | | |
| (Street) MIAMI, FL 33137 | | | 4. If Amendment, Date Original Filed(Month/Day/Year) | | | | | | 6. Individual or Joint/Group Filing(Check Applicable Line) Form filed by One Reporting Person _X_Form filed by More than One Reporting Person | | | | | |
| (City) | (State) | (Zip) | Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned | | | | | | | | | | | |
| 1.Title of Security (Instr. 3) | | 2. Transaction Date (Month/Day/Year) | 2A. Deemed Execution Date, if any (Month/Day/Year) | Code (Instr. 8) | Code (Instr. 8) | | tion 4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) | | (A) or Disposed of (D) | | 5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4) | Ownership o Form: E Direct (D) O | Ownership Form: Direct (D) | Beneficial Ownership |
| | | | | Code | V | Amount | (A) or (D) | Price | | or Indirect (I) (Instr. 4) | (Instr. 4) | | | |
| Common Stock | | 09/02/2010 | | Р | | 5,000 | A | \$ 2.14 | 97,800,552 | I | See Footnote (1) | | | |
| Common Stock | | | | | | | | | 15,490,546 | I | See Footnote (2) | | | |

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

Persons who respond to the collection of information SEC 1474 (9contained in this form are not required to respond unless the form displays a currently valid OMB control number.

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned

| (<i>e.g.</i> , puts, calls, warrants, options, convertible securities) | | | | | | | | | | | | | | | |
|---|-------------|------------------|--------------------|------------|------|-----------|------|--------------|------------|--------|---------|-------------|----------------|-------------|-------------|
| 1. Title of | 2. | 3. Transaction | 3A. Deemed | 4. | 5. | . Nun | nber | 6. Date Exer | cisable | 7. Tit | le and | 8. Price of | 9. Number of | 10. | 11. Nature |
| Derivative | Conversion | Date | Execution Date, if | Transactio | n oi | f | | and Expirati | on Date | Amo | unt of | Derivative | Derivative | Ownership | of Indirect |
| Security | or Exercise | (Month/Day/Year) | any | Code | D |)eriva | tive | (Month/Day | /Year) | Unde | rlying | Security | Securities | Form of | Beneficial |
| (Instr. 3) | Price of | | (Month/Day/Year) | (Instr. 8) | S | ecurit | ties | | | Secu | rities | (Instr. 5) | Beneficially | Derivative | Ownership |
| | Derivative | | | | Α | cquir | red | | | (Instr | . 3 and | | Owned | Security: | (Instr. 4) |
| | Security | | | | (/ | A) or | | | | 4) | | | Following | Direct (D) | |
| | | | | | | Dispos | | | | | | | Reported | or Indirect | |
| | | | | | | f (D) | | | | | | | Transaction(s) | < / < | |
| | | | | | | nstr. | - | | | | | | (Instr. 4) | (Instr. 4) | |
| | | | | | 4, | 4, and 5) | | | | | | | | | |
| | | | | | | | | | | | Amount | | | | |
| | | | | | | | | Date | Expiration | | or | | | | |
| | | | | | | | | Exercisable | | Title | Number | | | | |
| | | | | | | | | Exercisable | Date | | of | | | | |
| | | | | Code V | / (| A) | (D) | | | | Shares | | | | |

Reporting Owners

| Reporting Owner Name / Address | Relationships | | | | | | | | |
|---|---------------|-----------|----------------|-------|--|--|--|--|--|
| Reporting Owner Funct / Hurress | Director | 10% Owner | Officer | Other | | | | | |
| FROST PHILLIP MD ET AL OPKO HEALTH, INC. 4400 BISCAYNE BLVD. MIAMI, FL 33137 | Х | Х | CEO & Chairman | | | | | | |
| Frost Gamma Investments Trust 4400 BISCAYNE BLVD. MIAMI, FL 33137 | | Х | | | | | | | |

Signatures

Phillip Frost, M.D., Individually and as Trustee **Signature of Reporting Person

09/03/2010 Date

Explanation of Responses:

* If the form is filed by more than one reporting person, see Instruction 4(b)(v).

- ** Intentional misstatements or omissions of facts constitute Federal Criminal Violations. See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).
- The securities are held by Frost Gamma Investments Trust, of which Phillip Frost M.D., is the trustee. Frost Gamma L.P. is the sole and exclusive beneficiary of Frost Gamma Investments Trust. Dr. Frost is one of two limited partners of Frost Gamma L.P. The general partner of Frost Gamma L.P. is Frost Gamma, Inc., and the sole (1) shareholder of Frost Gamma, Inc. is Frost-Nevada Corporation. Dr. Frost is also the sole shareholder of Frost-Nevada Corporation. The reporting person disclaims beneficial ownership of these securities, except to the extent of any pecuniary interest therein and this report shall not be deemed an admission that the reporting person is the beneficial owner of these securities for purposes of Section 16 or for any other purpose.
- These securities are owned directly by The Frost Group, LLC. Frost Gamma Investments Trust is a principal member of The Frost Group, LLC. The reporting person (2) disclaims beneficial ownership of these securities, except to the extent of any pecuniary interest therein and this report shall not be deemed an admission that the reporting person is the beneficial owner of these securities for purposes of Section 16 or for any other purpose.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.

JOINT FILER INFORMATION

Name: Frost Gamma Investments Trust

Address: 4400 Biscayne Blvd. Miami, FL 33137

Designated Filer: Phillip Frost, M.D.

Issuer Name and Ticker Symbol: OPKO Health, Inc. (OPK)

Date of Earliest Transaction: September 2, 2010

Relationship to Issuer: 10% Owner

FROST GAMMA INVESTMENTS TRUST

By: /s/ Phillip Frost, M.D., as trustee Phillip Frost, M.D., Trustee