

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, DC 20549

SCHEDULE 13G

INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT
TO RULES 13d-1(b), (c) AND (d) AND AMENDMENTS THERETO FILED
PURSUANT TO RULE 13d-2(b)
(Amendment No.)1

REGENERON PHARMACEUTICALS, INC.

(Name of Issuer)

COMMON STOCK, PAR VALUE \$0.001 PER SHARE

(Title of Class of Securities)

75886F107

(CUSIP Number)

DECEMBER 31, 2004

(Date of Event Which Requires Filing of this Statement)

CHECK THE APPROPRIATE BOX TO DESIGNATE THE RULE PURSUANT TO WHICH THIS SCHEDULE
IS FILED:

- RULE 13D-1(B)
- RULE 13D-1(C)
- RULE 13D-1(D)

1 The remainder of this cover page shall be filled out for a reporting person's
initial filing on this form with respect to the subject class of securities, and
for any subsequent amendment containing information which would alter the
disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be
deemed to be "filed" for the purpose of Section 18 of the Securities Exchange
Act of 1934 ("Act") or otherwise subject to the liabilities of that section of
the Act but shall be subject to all other provisions of the Act (however, see
the Notes).

1 NAME OF REPORTING PERSON
I.R.S. IDENTIFICATION NO. OF ABOVE PERSON (ENTITIES ONLY)

P. ROY VAGELOS, M.D.

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) ()
(b) ()

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION
United States of America

NUMBER OF 5 SOLE VOTING POWER
SHARES 2,437,684 (SEE ITEM 4)
BENEFICIALLY

OWNED BY 6 SHARED VOTING POWER
426,744 (SEE ITEM 4)

EACH 7 SOLE DISPOSITIVE POWER
REPORTING 2,437,684 (SEE ITEM 4)

PERSON 8 SHARED DISPOSITIVE POWER
WITH 426,744 (SEE ITEM 4)

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
2,864,428 (SEE ITEM 4)

10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES ()

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9
5.0% (SEE ITEM 4)

12 TYPE OF REPORTING PERSON
IN

*SEE INSTRUCTIONS BEFORE FILLING OUT!

ITEM 1(A). NAME OF ISSUER:
Regeneron Pharmaceuticals, Inc.

ITEM 1(B). ADDRESS OF ISSUER'S PRINCIPAL EXECUTIVE OFFICES:
770 Old Saw Mill River Road
Tarrytown, New York 10591

ITEM 2(A). NAMES OF PERSONS FILING: P. Roy Vagelos, M.D.

ITEM 2(B). ADDRESS OF PRINCIPAL BUSINESS OFFICE OR, IF NONE, RESIDENCE:

c/o Regeneron Pharmaceuticals, Inc.
770 Old Saw Mill Road
Tarrytown, New York 10591

ITEM 2(C). CITIZENSHIP:

United States of America

ITEM 2(D). TITLE OF CLASS OF SECURITIES:

Common Stock, par value \$0.001 per share

ITEM 2(E). CUSIP NUMBER:

75886F105

ITEM 3. IF THIS STATEMENT IS FILED PURSUANT TO RULE 13D-1(B), OR 13D-2(B) OR (C), CHECK WHETHER THE PERSON FILING IS A: Not applicable.

- (a) Broker or dealer registered under Section 15 of the Exchange Act;
- (b) Bank as defined in Section 3(a)(6) of the Exchange Act;
- (c) Insurance company as defined in Section 3(a)(19) of the Exchange Act;
- (d) Investment company registered under Section 8 of the Investment Company Act;
- (e) An investment adviser in accordance with Rule 13d-1(b)(1)(ii)(E);
- (f) An employee benefit plan or endowment fund in accordance with Rule 13d-1(b)(1)(ii)(F);
- (g) A parent holding company or control person in accordance with Rule 13d-1(b)(1)(ii)(G);
- (h) A savings associations as defined in Section 3(b) of the Federal Deposit Insurance Act;
- (i) A church plan that is excluded from the definition of an investment company under Section 3(c)(14) of the Investment Company Act;
- (j) Group, in accordance with Rule 13d-1(b)(1)(ii)(J).

ITEM 4. OWNERSHIP.

(a) Amount beneficially owned:

2,864,428 shares, including 203,199 shares held by the Marianthi Foundation and 223,545 shares held by the Pindaros Foundation. These Foundations are not-for-profit corporations of which Dr. Vagelos is an officer and director. Dr. Vagelos disclaims beneficial ownership of the shares held by these Foundations.

(b) Percent of class:

5.0%, based on 53,502,004 shares outstanding as of December 31, 2004, as reported by the Issuer, and 1,514,199 shares underlying options held by Dr. Vagelos which were exercisable as of December 31, 2004 or became exercisable within 60 days thereafter as described in Item 4(c).

(c) Number of shares as to which such person has:

(i) Sole power to vote or to direct the vote:

2,437,684 shares which consist of (i) 1,128 shares held in an account under the Issuer's 401(k) Plan as of December 31, 2004; (ii) 1,514,999 shares purchasable upon exercise of options granted to Dr. Vagelos under the Issuer's 1990 and 2000 Long - Term Incentive Plans which were exercisable as of December 31, 2004 or became exercisable within 60 days thereafter; (iii) 465,220 shares held in a charitable lead annuity trust of which Dr. Vagelos is the sole trustee; and (iv) an aggregate of 456,337 shares held in three grantor retained annuity trusts of which Dr. Vagelos is the sole trustee.

(ii) Shared power to vote or to direct the vote:

426,744 shares which consist of 203,199 shares held by the Marianthi Foundation and 223,545 shares held by the Pindaros Foundation. Dr. Vagelos disclaims beneficial ownership of these shares.

(iii) Sole power to dispose or to direct the disposition of:

2,437,684 shares which consist of (i) 1,128 shares held in an account under the Issuer's 401(k) Plan as of December 31, 2004; (ii) 1,514,999 shares purchasable upon exercise of options granted to Dr. Vagelos under the Issuer's 1990 and 2000 Long - Term Incentive Plans which were exercisable as of December 31, 2004 or became exercisable within 60 days thereafter; (iii) 465,220 shares held in a charitable lead annuity trust of which Dr. Vagelos is the sole trustee; and (iv) an aggregate of 456,337 shares held in three grantor retained annuity trusts of which Dr. Vagelos is the sole trustee.

(iv) Shared power to dispose or to direct the disposition of:

426,744 shares which consist of 203,199 shares held by the Marianthi Foundation and 223,545 shares held by the Pindaros Foundation. Dr. Vagelos disclaims beneficial ownership of these shares.

ITEM 5. OWNERSHIP OF FIVE PERCENT OR LESS OF A CLASS.

Not applicable.

ITEM 6. OWNERSHIP OF MORE THAN FIVE PERCENT ON BEHALF OF ANOTHER PERSON.

Not applicable.

ITEM 7. IDENTIFICATION AND CLASSIFICATION OF THE SUBSIDIARY WHICH ACQUIRED THE SECURITY BEING REPORTED ON BY THE PARENT HOLDING COMPANY OR CONTROL PERSON.

Not applicable.

ITEM 8. IDENTIFICATION AND CLASSIFICATION OF MEMBERS OF THE GROUP.

Not applicable.

ITEM 9. NOTICE OF DISSOLUTION OF GROUP.

Not applicable.

ITEM 10. CERTIFICATION.

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

SIGNATURES

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this Statement is true, complete and correct.

Dated: April 1, 2005

/s/ P. Roy Vagelos

P. Roy Vagelos