FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB APPROVAL OMB Number: Estimated average burden hours per response: 0.5

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

| Name and Address of Reporting Person* SEGAL ROBERT-MD | | | | | | | 2. Issuer Name and Ticker or Trading Symbol DISCOVERY LABORATORIES INC /DE/ [DSCO] | | | | | | | | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner Officer (give title Other (specify | | | | |
|--|---|--|--|--------|---|---|--|------|---|------|--|---------------------|--|--|---|---|--|--|--|
| (Last) (First) (Middle) 2600 KELLY ROAD SUITE 100 | | | | | 05 | 3. Date of Earliest Transaction (Month/Day/Year) 05/13/2005 | | | | | | | | Snr VP, Chief Medical Officer | | | | | |
| (Street) WARRINGTON PA 18976 | | | | | _ 4. | 4. If Amendment, Date of Original Filed (Month/Day/Year) | | | | | | | | Individual or Joint/Group Filing (Check Applicable Line) X Form filed by One Reporting Person Form filed by More than One Reporting Person | | | | | |
| (City) (State) (Zip) | | | | | | | | | | | | | | | | | | | |
| | | Tal | ole I - Noi | n-Deri | ivativ | e Se | curitie | s Ac | quired, | Dis | osed o | f, or Be | neficial | ly Owned | l | | | | |
| 1. Title of Security (Instr. 3) 2. Transplate (Month/I | | | | | | | 2A. Deemed Execution Date, if any (Month/Day/Year) | | 3. Transaction Code (Instr. 8) | | 4. Securities Acquired (A) Disposed Of (D) (Instr. 3, 4 5) | | | and Securities Beneficially Owned Follow | | Form (D) o | n: Direct r Indirect str. 4) | 7. Nature of Indirect Beneficial Ownership | |
| | | | | | | | | | Code | v | Amount | (A) or (D) | Price | Reporte Transac (Instr. 3 | tion(s) | | | (Instr. 4) | |
| Common Stock ⁽¹⁾ 10/22 | | | | | 22/200 | 2004 | | | A | V | 243 | A | \$6.7 | 3,877 | | | D | | |
| Common Stock ⁽¹⁾ 02/15 | | | | | 15/200 | 2005 | | | A | V | 221 | A | \$7.33 | 7 4, | 4,098 | | D | | |
| Common Stock ⁽¹⁾ 04/26 | | | | | 26/200 | 2005 | | A | V | 311 | A \$5.6 | | 3 4, | 4,409 | | D | | | |
| | | | Table II - | | | | | | | | | or Bend ble secu | | Owned | | | | | |
| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | 3A. Deeme Execution if any (Month/Day | Date, | 4. Transaction Code (Instr. 8) | | | | 6. Date Exercisa Expiration Date (Month/Day/Yea | | | of Securities | | 8. Price of Derivative Security (Instr. 5) | 9. Number derivative Securities Beneficial Owned Following Reported Transactio (Instr. 4) | ve es ially ng ed etion(s) | 10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) | |
| | | | | | Code | v | (A) | (D) | Date Exercisab | | expiration Date | Title | Amount or Number of Shares | | | | | | |
| Incentive Stock Option (right to buy) ⁽²⁾ | \$9.02 | 12/17/2004 | | | A | | 8,695 | | 12/17/200 |)4 1 | 2/17/2014 | Common Stock | 8,695 | \$0 | 8,695 | 5 | D | | |
| Non- Qualified Stock Option (right to | \$9.02 | 12/17/2004 | | | A | | 41,305 | | 12/17/200 |)4 1 | 2/17/2014 | Common Stock | 41,305 | \$0 | 41,30 | 5 | D | | |

- 1. Transaction reported on Table I represents Issuer's matching stock contribution pursuant to 401(k) plan.
- 2. This employee stock option shall vest 25% on the date of the grant, and the balance shall vest in a series of successive equal monthly installments over the next 36 months.

Robert Segal, MD

05/17/2005

** Signature of Reporting Person

Date

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

- * 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).

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

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