| SEC F | Form 4 |
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FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549 STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB APPROVAL

| OMB Number: | 3235-0287 |
|-------------------------|-------------------------|
| Estimated average burde | n |
| hours per response: | 0.5 |
| | Estimated average burde |

| Section obligat | this box if no lo n 16. Form 4 or ions may contin tion 1(b). | | STAT | | ed pu | rsuant | to Sectio | n 16(| (a) | of the Sec | curiti | es Exchar | nge Act | of 19 | | HIP | Estim | Numbe ated av per res | erage burder | 3235-0287 1 0.5 | |
|---|---|--|--|---------|-----------------|---|--|-------|-----------|--|--------|------------------|-----------------|-------------------------------|-------------------------------------|---|--|--|---|--|--|
| 1. Name and Address of Reporting Person* Culley Brian M (Last) (First) (Middle) 12390 EL CAMINO REAL, SUITE 150 | | | | | A A 3. | 2. Issuer Name and Ticker or Trading Symbol <u>ADVENTRX PHARMACEUTICALS INC</u> [ANX] 3. Date of Earliest Transaction (Month/Day/Year) 02/01/2011 | | | | | | | | | [(Che | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner X Officer (give title Other (specify below) Chief Executive Officer | | | | | |
| (Street) SAN DII (City) | | A itate) | 92130 (Zip) | | 4. | 4. If Amendment, Date of Original Filed (Month/Day/Year) | | | | | | | | 6. Inc Line) | | | | | | | |
| | | Та | ble I - Non | n-Deriv | vativ | ve Se | curitie | s Ac | cq | quired, C | Dis | posed c | of, or | Ben | eficially | Owned | | | | | |
| 1. Title of Security (Instr. 3) Date (Month/E | | | | | | | 2A. Deemed Execution Date if any (Month/Day/Yea | | Code (Ins | | | | | | | | Form | Direct Indirect str. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) | | |
| | | | | | | | | | Code | | v | Amount | () | A) or D) | Price | Transaction(s) (Instr. 3 and 4) | | | | | |
| | | | Table II - I (| | | | | | | uired, Di , options | | | | | | Owned | | | | | |
| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | 3A. Deemed Execution Da if any (Month/Day/Y | Co | ransa ode (l | | 5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) | | E | 6. Date Exercisable and Expiration Date (Month/Day/Year) | | | of Sec Under | curities rlying ative S | Security | 8. Price of Derivative Security (Instr. 5) | 9. Numbe derivative Securitie Beneficia Owned Following Reported | e Ownersl s Form: Illy Direct (E or Indire g (I) (Instr. | Ownership | Beneficial) Ownership ct (Instr. 4) | |
| | | | | Ca | ode | v | (A) | (D) | | Date Exercisable | | xpiration ate | Title | | Amount or Number of Shares | | Transact (Instr. 4) | | | | |
| Stock Option (Right to Buy) | \$2.29 | 02/01/2011 | | A | | | 100,000 | | | (1) | 0 | 2/01/2021 | Comm Stoc | | 100,000 |),000 \$0.00 | | 100,000 | | | |

Explanation of Responses:

1. Twenty-five percent of the shares subject to this option vest and become exercisable on each of January 1, 2012, January 1, 2013, January 1, 2014 and January 1, 2015.

Remarks:

/s/ Brian M. Culley

** Signature of Reporting Person

02/03/2011

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.