FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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

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

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* Culloy Brian M						2. Issuer Name and Ticker or Trading Symbol ADVENTRX PHARMACEUTICALS INC							5. Relationship of Reporting Person(s) to Issuer (Check all applicable)					
<u>Culley Brian M</u>					ANX]							Director			10% Ow			
(Last) (First) (Middle)				_ `	1							Officer (give title below)			Other (sp below)	ecify		
` ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '					2 2 4 4 5 5 4 4 4 5 5 4 4							Chief Executive Officer						
6725 MESA RIDGE RD.					3. Date of Earliest Transaction (Month/Day/Year) 02/02/2010													
SUITE 100					02/02/2010													
(Street)					4. If Amendment, Date of Original Filed (Month/Day/Year)							6. Individual or Joint/Group Filing (Check Applicable Line)						
SAN DIEGO CA			92121									X Form filed by One Reporting Person						
				<u> </u>								Form file	d by More	than C	One Reportir	ng Person		
(City)	(9	State)	(Zip)															
Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned																		
1. Title of Security (Instr. 3) 2. Trans Date (Month/						2A. Deemed Execution Date, if any (Month/Day/Year		, Transaction Dispose Code (Instr.		rities Acquired (A) or d Of (D) (Instr. 3, 4 and		5. Amount Securities Beneficiall Owned Fo	y	Form:	Direct II Indirect E tr. 4) C	7. Nature of Indirect Beneficial Ownership		
								Code V	Amount	(A) (D)	Price	Reported Transactio (Instr. 3 an			"	nstr. 4)		
Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned																		
								s, options										
1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	Code (Instr.		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)		8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s)		10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)		
				Code	v	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares		(Instr. 4)	J.1(J)				
Stock Option (Right to	\$0.32	02/02/2010		A		1,600,000		(1)	02/02/2020	Common Stock	1,600,000	\$0	1,600,0	000	D			

Explanation of Responses:

1. Twenty-five percent of the shares subject to this option vests and becomes exercisable on each of January 1, 2011, January 1, 2012, January 1, 2013 and January 1, 2014.

Brian M. Culley

02/02/2010

Date

** Signature of Reporting Person

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.