

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, DC 20549

FORM 10-QSB

Quarterly report under Section 13 or 15(d) of the Securities Exchange Act of 1934

For the quarterly period ended March 31, 2004

Transition report under Section 13 or 15(d) of the Securities Exchange Act of 1934

For the transition period from _____ to _____

Commission file number 001-32157

ADVENTRX Pharmaceuticals, Inc.

(formerly Biokeys Pharmaceuticals, Inc.)

(Exact name of small business issuer as specified in its charter)

Delaware

(State or other jurisdiction of
incorporation or organization)

84-1318182

(IRS Employer
Identification No.)

9948 Hibert Street, Suite 100

San Diego, California 92131

(Address of principal executive offices)

(858) 271-9671

(Issuer's telephone number, including area code)

Check whether the issuer (1) filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act during the past 12 months (or for such shorter period that the registrant was required to file such report), and (2) has been subject to such filing requirements for the past 90 days. Yes No

As of April 30, 2004, 53,387,954 shares of the issuer's common stock, par value \$0.001 per share, were outstanding.

Transitional Small Business Disclosure Format (Check One): YES NO

ADVENTRX PHARMACEUTICALS, INC.
(formerly Biokeys Pharmaceuticals, Inc.)
FORM 10-QSB
March 31, 2004
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PART I. FINANCIAL INFORMATION

Item 1. Financial Statements.

ADVENTRX PHARMACEUTICALS, INC
(Formerly Biokeys Pharmaceuticals, Inc.)
(A Development Stage Enterprise)
Condensed Balance Sheets

	March 31, 2004	December 31, 2003
	(unaudited)	
Assets		
Current assets:		
Cash and cash equivalents	\$ 3,423,918	\$ 4,226,397
Prepaid expenses	135,735	28,376
Total current assets	3,559,653	4,254,773
Property and equipment, net	54,582	20,840
Other assets	7,743	7,743
Total assets	\$ 3,621,978	\$ 4,283,356
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable and accrued liabilities	\$ 51,469	\$ 90,243
Accrued dividends payable	—	72,800
Total liabilities	51,469	163,043
Commitments and contingencies	—	—
Shareholders' equity:		
Series A cumulative convertible preferred stock, \$0.01 par value. Authorized 8,000 shares; issued and outstanding, 473 shares in 2003 (aggregate involuntary liquidation preference \$473,000 December 31, 2003)	—	4
Series B convertible preferred series stock, \$0.01 par value. Authorized 200,000 shares; issued and outstanding, 200,000 shares in 2003 (no liquidation preference)	—	2,000
Common stock, \$0.001 par value. Authorized 100,000,000 shares; issued 42,970,330 shares in 2004 and issued and outstanding 42,491,708 shares in 2003	42,970	42,492
Additional paid-in capital	32,753,895	32,556,963
Deficit accumulated during the development stage	(29,191,609)	(28,481,146)
Treasury Stock, shares at cost; issued 23,165 shares	(34,747)	—
Total shareholders' equity	3,570,509	4,120,313
Total liabilities and shareholders' equity	\$ 3,621,978	\$ 4,283,356

See accompanying notes to condensed financial statements.

ADVENTRX PHARMACEUTICALS, INC.
(Formerly Biokeys Pharmaceuticals, Inc.)
(A Development Stage Enterprise)
Condensed Statements of Operations
(unaudited)

	Three months ended March 31,		Inception (June 12, 1996) through March 31, 2004
	2004	2003	
Net sales	\$ —	\$ —	\$ 174,830
Cost of goods sold	—	—	51,094
Gross margin	—	—	123,736
Grant revenue	—	3,603	129,733
Interest income	3,346	675	102,582
	3,346	4,278	356,051
Operating expenses:			
Research and development	296,375	(16,188)	5,026,301
General and administrative	414,382	423,504	8,829,226
Depreciation and amortization	3,052	1,494	10,101,759
Impairment loss – write off of goodwill	—	—	5,702,130
Interest expense	—	962	179,090
Equity in loss of investee	—	—	178,936
Total operating expenses	713,809	409,772	30,017,442
Loss before cumulative effect of change in accounting principle	(710,463)	(405,494)	(29,661,391)
Cumulative effect of change in accounting principle	—	—	(25,821)
Net loss	(710,463)	(405,494)	(29,687,212)
Preferred stock dividends	—	(9,460)	(602,320)
Net loss applicable to common stock	\$ (710,463)	\$ (414,954)	\$ (30,289,532)
Loss per common share – basic and diluted	\$ (.02)	\$ (.02)	

See accompanying notes to condensed financial statements.

ADVENTRX PHARMACEUTICALS, INC.
(Formerly Biokeys Pharmaceuticals, Inc.)
(A Development Stage Enterprise)
Condensed Statements of Shareholders' Equity (Deficit)
Inception (June 12, 1996) through March 31, 2004
(unaudited)

	Cumulative convertible preferred stock, series A		Cumulative convertible preferred stock, series B		Cumulative convertible preferred stock, series C		Common stock		Additional paid-in capital	Deficit accumulated during the development stage	Treasury Stock, at cost	Total shareholders' equity (deficit)
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount				
Balances at June 12, 1996 (date of incorporation)	—	\$ —	—	\$ —	—	\$ —	—	\$ —	\$ —	\$ —	—	\$ —
Sale of common stock without par value	—	—	—	—	—	—	503	5	5	—	—	10
Change in par value of common stock	—	—	—	—	—	—	—	(4)	4	—	—	—
Issuance of common stock and net liabilities assumed in acquisition	—	—	—	—	—	—	1,716,132	1,716	3,224	(18,094)	—	(13,154)
Issuance of common stock	—	—	—	—	—	—	2,010,111	2,010	456	(2,466)	—	—
Net loss	—	—	—	—	—	—	—	—	—	(259,476)	—	(259,476)
Balances at December 31, 1996	—	—	—	—	—	—	3,726,746	3,727	3,689	(280,036)	—	(272,620)
Sale of common stock, net of offering costs of \$9,976	—	—	—	—	—	—	1,004,554	1,004	1,789,975	—	—	1,790,979
Issuance of common stock in acquisition	—	—	—	—	—	—	375,891	376	887,874	—	—	888,250
Minority interest deficiency at acquisition charged to the Company	—	—	—	—	—	—	—	—	—	(45,003)	—	(45,003)
Net loss	—	—	—	—	—	—	—	—	—	(1,979,400)	—	(1,979,400)
Balances at December 31, 1997	—	—	—	—	—	—	5,107,191	5,107	2,681,538	(2,304,439)	—	382,206
Rescission of acquisition	—	—	—	—	—	—	(375,891)	(376)	(887,874)	561,166	—	(327,084)
Issuance of common stock at conversion of notes payable	—	—	—	—	—	—	450,264	451	363,549	—	—	364,000
Expense related to stock warrants issued	—	—	—	—	—	—	—	—	260,000	—	—	260,000
Net loss	—	—	—	—	—	—	—	—	—	(1,204,380)	—	(1,204,380)
Balances at December 31, 1998	—	—	—	—	—	—	5,181,564	5,182	2,417,213	(2,947,653)	—	(525,258)
Sale of common stock	—	—	—	—	—	—	678,412	678	134,322	—	—	135,000
Expense related to stock warrants issued	—	—	—	—	—	—	—	—	212,000	—	—	212,000
Net loss	—	—	—	—	—	—	—	—	—	(1,055,485)	—	(1,055,485)
Balances at December 31, 1999	—	—	—	—	—	—	5,859,976	5,860	2,763,535	(4,003,138)	—	(1,233,743)
Sale of preferred stock, net of offering costs of \$76,500	3,200	32	—	—	—	—	—	—	3,123,468	—	—	3,123,500
Issuance of common stock at conversion of notes and interest payable	—	—	—	—	—	—	412,487	412	492,085	—	—	492,497
Issuance of common stock at conversion of notes payable	—	—	—	—	—	—	70,354	70	83,930	—	—	84,000
Issuance of common stock to settle obligations	—	—	—	—	—	—	495,111	496	1,201,664	—	—	1,202,160
Issuance of common stock for acquisition	—	—	—	—	—	—	6,999,990	7,000	9,325,769	—	—	9,332,769
Issuance of warrants for acquisition	—	—	—	—	—	—	—	—	4,767,664	—	—	4,767,664
Stock issued for acquisition costs	—	—	—	—	—	—	150,000	150	487,350	—	—	487,500
Expense related to stock warrants issued	—	—	—	—	—	—	—	—	140,000	—	—	140,000
Dividends payable on preferred stock	—	—	—	—	—	—	—	—	(85,000)	—	—	(85,000)
Cashless exercise of warrants	—	—	—	—	—	—	599,066	599	(599)	—	—	—
Net loss	—	—	—	—	—	—	—	—	—	(3,701,084)	—	(3,701,084)
Balances at December 31, 2000	3,200	32	—	—	—	—	14,586,984	14,587	22,299,866	(7,704,222)	—	14,610,263
Dividends payable on preferred stock	—	—	—	—	—	—	—	—	(256,000)	—	—	(256,000)
Repurchase of warrants	—	—	—	—	—	—	—	—	(55,279)	—	—	(55,279)
Sale of warrants	—	—	—	—	—	—	—	—	47,741	—	—	47,741
Cashless exercise of warrants	—	—	—	—	—	—	218,493	219	(219)	—	—	—
Issuance of common stock to pay preferred dividends	—	—	—	—	—	—	93,421	93	212,907	—	—	213,000
Detachable warrants issued with notes payable	—	—	—	—	—	—	—	—	450,000	—	—	450,000
Issuance of warrants to pay operating expenses	—	—	—	—	—	—	—	—	167,138	—	—	167,138
Issuance of common stock to pay operating expenses	—	—	—	—	—	—	106,293	106	387,165	—	—	387,271
Issuance of preferred stock to pay operating expenses	137	1	—	—	—	—	—	—	136,499	—	—	136,500
Net loss	—	—	—	—	—	—	—	—	—	(16,339,120)	—	(16,339,120)
Balances at December 31, 2001	3,337	33	—	—	—	—	15,005,191	15,005	23,389,818	(24,043,342)	—	(638,486)
Dividends payable on preferred stock	—	—	—	—	—	—	—	—	(242,400)	—	—	(242,400)
Repurchase of warrants	—	—	—	—	—	—	—	—	—	—	—	—
Sale of warrants	—	—	—	—	—	—	240,000	240	117,613	—	—	117,853
Cashless exercise of warrants	—	—	—	—	—	—	100,201	100	(100)	—	—	—
Excercise of warrants	—	—	—	—	—	—	344,573	345	168,477	—	—	168,822
Sale of preferred stock	—	—	200,000	2,000	70,109	701	—	—	998,392	—	—	1,001,093
Conversion of preferred stock into common stock	(3,000)	(30)	—	—	—	—	1,800,000	1,800	(1,770)	—	—	—
Preferred stock dividends forgiven	—	—	—	—	—	—	—	—	335,440	—	—	335,440
Issuance of warrants to pay operating expenses	—	—	—	—	—	—	—	—	163,109	—	—	163,109

Issuance of common stock to pay operating expenses	—	—	—	—	—	—	6,292	6	12,263	—	—	12,269
Issuance of preferred stock to pay operating expenses	136	1	—	—	—	—	—	—	6,000	—	—	6,001
Issuance of stock options to employees	—	—	—	—	—	—	—	—	329,296	—	—	329,296
Net loss	—	—	—	—	—	—	—	—	—	(2,105,727)	—	(2,105,727)
Balances at December 31, 2002	473	4	200,000	2,000	70,109	701	17,496,257	17,496	25,276,138	(26,149,069)	—	(852,730)
Dividends payable on preferred stock	—	—	—	—	—	—	—	—	(37,840)	—	—	(37,840)
Conversion of Series C preferred stock into common stock	—	—	—	—	(70,109)	(701)	14,021,860	14,022	(13,321)	—	—	—
Issuance of common stock to pay interest on Bridge Notes	—	—	—	—	—	—	165,830	165	53,326	—	—	53,491
Sale of common stock at \$0.40 per share, net of issuance costs	—	—	—	—	—	—	6,640,737	6,676	2,590,656	—	—	2,597,332
Sale of common stock at \$1.00 per share, net of issuance costs	—	—	—	—	—	—	3,701,733	3,668	3,989,181	—	—	3,992,849
Exchange of warrants	—	—	—	—	—	—	235,291	235	49,486	—	—	49,721
Issuance of common stock to pay operating expenses	—	—	—	—	—	—	230,000	230	206,569	—	—	206,799
Issuance of warrants to pay operating expenses	—	—	—	—	—	—	—	—	156,735	—	—	156,735
Issuance of stock options to employees	—	—	—	—	—	—	—	—	286,033	—	—	286,033
Net loss	—	—	—	—	—	—	—	—	—	(2,332,077)	—	(2,332,077)
Balances at December 31, 2003	473	4	200,000	2,000	—	—	42,491,708	42,492	32,556,963	(28,481,146)	—	4,120,313
Extinguishment of dividends payable on preferred stock	—	—	—	—	—	—	—	—	72,800	—	—	72,800
Conversion of Series A cumulative preferred stock	(473)	(4)	—	—	—	—	236,500	236	(232)	—	—	—
Conversion of Series B preferred stock	—	—	(200,000)	(2,000)	—	—	200,000	200	1,800	—	—	—
Exercise of warrants	—	—	—	—	—	—	42,122	42	2,208	—	—	2,250
Payment of financing and offering costs	—	—	—	—	—	—	—	—	(1,251)	—	—	(1,251)
Issuance of stock options to employees	—	—	—	—	—	—	—	—	86,860	—	—	86,860
Acquisition of treasury stock	—	—	—	—	—	—	—	—	34,747	—	(34,747)	—
Net loss	—	—	—	—	—	—	—	—	—	(710,463)	—	(710,463)
Balances at March 31, 2004	—	\$ —	—	\$ —	—	—	\$ 42,970,330	\$ 42,970	\$ 32,753,895	\$ (29,191,609)	(34,747)	\$ 3,570,509

See accompanying notes to condensed financial statements

ADVENTRX PHARMACEUTICALS, INC.
(Formerly Biokeys Pharmaceuticals, Inc.)
(A Development Stage Enterprise)
Condensed Statements of Cash Flows
(unaudited)

	Three months ended March 31,		Inception (June 12, 1996) through March 31, 2004
	2004	2003	
Cash flows from operating activities:			
Net loss	\$ (710,463)	\$ (405,494)	\$ (29,687,212)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	3,052	1,494	10,101,759
Forgiveness of employee receivable	—	—	30,036
Impairment loss – write off of goodwill	—	—	5,702,130
Expenses paid by warrants	—	105,883	486,982
Expenses paid by preferred stock	—	—	142,501
Expenses related to stock warrants issued	—	—	612,000
Expenses related to employee stock options issued	86,860	49,919	702,189
Expenses paid by issuance of common stock	—	68,750	817,548
Equity in loss of investee	—	—	178,936
Write-off of license agreement	—	—	152,866
Cumulative effect of change in accounting principle	—	—	25,821
Changes in assets and liabilities, net of effect of acquisitions:			
(Increase) decrease in prepaid expenses	(107,359)	(3,690)	(282,846)
Increase (decrease) in accounts payable and accrued liabilities	(38,774)	(100,703)	(469,802)
Increase in sponsored research payable and license obligation	—	—	924,318
Net cash used in operating activities	(766,684)	(283,841)	(10,562,774)
Cash flows from investing activities:			
Purchase of certificate of deposit	—	—	(1,016,330)
Maturity of certificate of deposit	—	—	1,016,330
Purchases of property and equipment	(36,794)	—	(159,263)
Payment on obligation under license agreement	—	—	(106,250)
Cash acquired in acquisition of subsidiary	—	—	64,233
Issuance of note receivable – related party	—	—	(35,000)
Payments on note receivable	—	—	405,993
Advance to investee	—	—	(90,475)
Cash transferred in rescission of acquisition	—	—	(19,475)
Cash received in rescission of acquisition	—	—	230,000
Net cash provided by (used in) investing activities	(36,794)	—	289,763
Cash flows from financing activities:			
Proceeds from sale of preferred stock	—	—	4,200,993
Proceeds from sale of common stock	—	635,946	8,528,396
Proceeds from sale or exercise of warrants	2,250	—	384,237
Repurchase of warrants	—	—	(55,279)
Payment of financing and offering costs	(1,251)	—	(100,227)
Payments of notes payable and long-term debt	—	—	(605,909)
Proceeds from issuance of notes payable and detachable warrants	—	—	1,344,718
Net cash provided by financing activities	999	635,946	13,696,929
Net increase (decrease) in cash and cash equivalents	(802,479)	352,105	3,423,918
Cash and cash equivalents at beginning of period	4,226,397	103,928	—
Cash and cash equivalents at end of period	\$ 3,423,918	\$ 456,033	\$ 3,423,918

See accompanying notes to condensed financial statements.

ADVENTRX PHARMACEUTICALS, INC.
(A Development Stage Enterprise)
Notes to Condensed Financial Statements
Three months ended March 31, 2004 and 2003
(Unaudited)

(1) Description of the Company

ADVENTRX Pharmaceuticals, Inc., a Delaware corporation, (the Company), is a development stage enterprise, that conducts biomedical research and development focused on treatments for cancer and certain viral infections, including HIV. The Company currently does not manufacture, market, sell or distribute any product. Through its license agreements with University of Texas M.D. Anderson Cancer Center (M.D. Anderson), University of Southern California (USC), and the National Institutes of Health (NIH), the Company has rights to drug candidates in varying early stages of development.

On May 30, 2003, the Company merged its wholly-owned subsidiary, Biokeys, Inc., into itself and changed the name of the Company from Biokeys Pharmaceuticals, Inc. to ADVENTRX Pharmaceuticals, Inc. The merger had no effect on the financial statements of the Company.

(2) Basis of Presentation

In management's opinion, the accompanying unaudited condensed financial statements of the Company have been prepared in accordance with the interim reporting requirements of Form 10-QSB, pursuant to the rules and regulations of the Securities and Exchange Commission. However, they do not include all of the information and footnotes required by accounting principles generally accepted in the United States for complete financial statements.

In management's opinion, all adjustments (consisting of only normal recurring adjustments) considered necessary for a fair presentation have been included. Operating results for the three months ended March 31, 2004 are not necessarily indicative of results that may be expected for the year ending December 31, 2004. For additional information, refer to the Company's financial statements and notes thereto for the year ended December 31, 2003, contained in the Company's Form 10-KSB.

ADVENTRX PHARMACEUTICALS, INC.
(A Development Stage Enterprise)
Notes to Condensed Financial Statements
Three months ended March 31, 2004 and 2003(Unaudited)

Supplementary Cash Flow Information

Interest of \$962 was paid during the three months ended March 31, 2003. No income taxes were paid during 2004 and 2003.

Noncash investing and financing transactions excluded from the condensed statements of cash flows for the three months ended March 31, 2004 and 2003 and for the period from inception (June 12, 1996) through March 31, 2004 are as follows:

	2004	2003	Inception (June 12, 1996) through March 31, 2004
	<u> </u>	<u> </u>	<u> </u>
Issuance of warrants, common stock and preferred stock for:			
Conversion of notes payable and accrued interest	\$ —	\$ 26,649	\$ 1,213,988
Payment of operating expenses	—	—	1,224,281
Conversion of preferred stock	2,004	701	2,705
Acquisitions	—	—	14,617,603
Payment of dividends	—	—	213,000
Assumptions of liabilities in acquisitions	—	—	1,009,567
Acquisition of license agreement for long-term debt	—	—	161,180
Cashless exercise of warrants	38	—	3,316
Dividends accrued	—	9,460	621,040
Dividends extinguished	72,800	—	408,240
Trade payable converted to note payable	—	—	83,948
Issuance of warrants for return of common stock	—	50,852	50,852
Detachable warrants issued with notes payable	—	—	450,000

New Accounting Pronouncements

No new pronouncements were issued during the three months ended March 31, 2004 that are expected to have a material effect on the Company's financial position or results of operations.

ADVENTRX PHARMACEUTICALS, INC.

(A Development Stage Enterprise)

Notes to Condensed Financial Statements

Three months ended March 31, 2004 and 2003

(Unaudited)

(3) Equity Transactions

In March 2004, warrants to purchase a total of 53,750 shares of common stock at between \$0.50 and \$0.60 per share were exercised for aggregate gross proceeds of \$2,250. In addition, a warrant to purchase 3,750 shares of common stock was exercised for proceeds of \$2,250 and the Company issued 38,372 shares of common stock upon the cashless exercise of a warrant to purchase 50,000 shares of common stock.

In March 2004, 473 shares of Series A cumulative convertible preferred stock, representing all of the Series A cumulative convertible preferred stock then outstanding, was converted into 236,500 shares of common stock. In conjunction with the conversion, dividends payable of \$72,800 at December 31, 2003, were extinguished.

In March 2004, 200,000 shares of Series B convertible preferred stock, representing all of the Series B convertible preferred stock then outstanding, were converted into 200,000 shares of common stock.

Nonemployee stock-based compensation that is not valued at the fair value of consideration received is valued, as of the grant date, using the Black-Scholes pricing model with the following assumptions for grants in 2004 and 2003: no dividend yield for either year; expected volatility of 125% to 199%; risk-free interest rates 2.78% to 6.8%; and expected lives of three and seven years, respectively.

ADVENTRX PHARMACEUTICALS, INC.
(A Development Stage Enterprise)
Notes to Condensed Financial Statements
Three months ended March 31, 2004 and 2003
(Unaudited)

(4) Stock Compensation Plans

The value assigned to stock warrants granted to non-employees is accounted for in accordance with SFAS No. 123 and Emerging Issues Task Force (EITF) Issue 96-18, *Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services* (EITF 96-18). The Company values warrants using the Black-Scholes option pricing model. Common stock is valued using the market price of common stock on the measurement date as defined in EITF 96-18. Series A 8% convertible preferred stock is valued at the liquidation value of \$1,000 per share. Series B Preferred stock is valued at the purchase price of \$1 per share. The Company applies Statement of Financial Accounting Standards No. 123 and related interpretations in accounting for employee stock-based compensation.

In January and February 2004, three individuals became members of the Company's board of directors. Each new director was granted an option to purchase 50,000 shares of common stock at a purchase price of \$1.50 per share. The options begin vesting 90 days from the date of grant and vest in equal installments over the next four quarters. The options expire on December 30, 2008. The value of the options on the dates of grant was \$223,826.

In February 2004, an individual became a member of the Company's Scientific Advisory Board. The new member was granted an option to purchase 30,000 shares of common stock at a purchase price of \$1.50 per share. The option will vest in equal installments over eight quarters, starting March 1, 2004. The option will expire on December 30, 2008. The value of the option on the date of grant was \$45,350.

In March 2004, the Company granted an option to purchase 100,000 shares of common stock at a purchase price of \$1.50 per share to the Company's Vice President of Clinical and Medical Affairs. The option will vest in three installments over three years starting March 2004. The option will expire on March 1, 2007. The value of the option on the date of grant was \$152,050.

The Company recognized compensation expense of \$86,860 and \$49,919 in the three months ended March 31, 2004 and 2003, respectively, related to the portion of the options which vested in that period.

None of the foregoing options were issued pursuant to a stock option plan. The options expire on December 30, 2008 and vest on varying dates through April 2006.

(5) Net Loss per Common Share

The computation of basic and diluted net loss per share for the three months ended March 31, 2004 and 2003 is as follows:

	2004	2003
Numerator:		
Net loss	\$ (710,463)	\$ (405,494)
Preferred stock dividends	—	(9,460)
Numerator for basic and diluted loss per share	\$ (710,463)	\$ (414,954)
Denominator for basic and diluted loss per share – weighted average common shares outstanding	42,886,237	17,916,027
Loss per common share—basic and diluted	\$ (0.02)	\$ (0.02)

Net loss per common share is calculated according to Statement of Financial Accounting No. 128, *Earnings per Share*, using the weighted average number of shares of common stock outstanding during the period. At March 31, 2004 and 2003, 5,421,237 and 2,823,586 potentially dilutive shares, respectively, were not included in the computation of net loss per common share – diluted, as their effect would have been antidilutive due to the Company's net losses incurred in 2004 and 2003.

(6) Commitments and Contingencies

Litigation

In the normal course of business, the Company may become subject to lawsuits and other claims and proceedings. Such matters are subject to uncertainty and outcomes are often not predictable with assurance. Management is not aware of any pending or threatened lawsuit or proceeding that would have a material adverse effect on the Company's financial position, results of operations or cash flows.

ADVENTRX PHARMACEUTICALS, INC.
(A Development Stage Enterprise)
Notes to Condensed Financial Statements
Three months ended March 31, 2004 and 2003
(Unaudited)

(7) Subsequent Events

In April 2004, the Company sold 10,417,624 shares of common stock and issued warrants to purchase 3,125,272 shares of common stock at \$2.00 and warrants to purchase 2,083,518 shares of common stock at \$2.50 per share to accredited investors in a private placement for aggregate gross proceeds of \$15,626,450 in cash. In connection with the private placement, the Company paid cash commissions of \$900,452 and issued warrants to purchase 642,547 shares of common stock at \$2.00 per share to two placement agents. In April 2004, the Company engaged W.R. Hambrecht + Co., LLC for financial advisory and investment banking services and, in connection with that engagement, issued to it a warrant to purchase 175,000 shares of common stock at \$2.00 per share.

In April 2004, the Company granted an option to purchase 30,000 shares of common stock at a purchase price of \$1.50 per share to the Director of Anti-Viral Research. The option will vest in three installments over three years starting April 2004. The option will expire on April 1, 2007. The value of the option on the date of grant was \$56,412.

In May 2004, a warrant to purchase 20,082 shares of common stock at \$1.25 per share was exercised for gross proceeds of \$25,103.

Item 2. Plan of Operation.

This Plan of Operation should be read in conjunction with the accompanying condensed financial statements and notes included in this report. This Quarterly Report on Form 10-QSB contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, which include, without limitation, statements about the market for our products and technology, our strategy, competition, expected financial performance and other aspects of our business identified in this Quarterly Report, as well as other reports that we file from time to time with the Securities and Exchange Commission. Any statements about our business, financial results, financial condition and operations contained in this Annual Report that are not statements of historical fact may be deemed to be forward-looking statements. Without limiting the foregoing, the words “believes,” “anticipates,” “expects,” “intends,” “projects,” or similar expressions are intended to identify forward-looking statements. Our actual results could differ materially from those expressed or implied by these forward-looking statements as a result of various factors, including the risk factors described in Risk Factors and elsewhere in this report. We undertake no obligation to update publicly any forward-looking statements for any reason, except as required by law, even as new information becomes available or other events occur in the future

CoFactor™, BlockAide/CR™, BlockAide/VP™, Thiovir™, EradicAide™ and Selone™ are our trademarks. Product names, trade names and trademarks of other entities are also referred to in this report.

In this report, the terms “Company,” “we,” “us,” and “our” refer to ADVENTRX Pharmaceuticals, Inc. The term “Common Stock” refers to the Company’s Common Stock, par value \$0.001 per share.

Plan of Operation.

The Company is a development stage enterprise which conducts biomedical research and development focused on treatments for cancer and certain viral infections, including HIV. Our business is in the development stage; we have not generated any significant revenues and we have not yet marketed any product.

We have used the proceeds from private placements of our capital stock primarily to expand our preclinical and clinical efforts for CoFactor, BlockAide/CR and EradicAide as well as for general working capital. At this time we are beginning to commit additional resource to the development of Thiovir and are committing only minimal resources to the development of BlockAide/VP and Selone.

We began dosing metastatic colorectal cancer patients with 5-FU and our drug CoFactor in Q1 2004, based upon an approved IND Application in the United States to treat metastatic colorectal cancer patients in conjunction with 5-FU. We also intend to file for approval for a Phase II trial for CoFactor for metastatic colorectal cancer patients in the United Kingdom during QIII 2004 and also file in QIII 2004 for approvals to begin treatment of pancreatic cancer patients with 5-U and CoFactor in two separate Phase II trials in the United States and Europe. We also intend to file for approval during QIII 2004 and QIV 2004, to begin second-line therapy trials for CoFactor use with 5-FU for metastatic colorectal cancer for the United States and United Kingdom.

We received FDA clearance for the IND Application filed in Q1 2004 to treat HIV patients with BlockAide/CR during 2004. We also intend to file an IND application in QIII 2004 to treat HIV patients with Thiovir, beginning in QIV 2004 and file an IND application in QIII 2004 to treat HIV patients with the initial formulation of EradicAide vaccine later in 2004.

We currently expect the foregoing to require the expenditures set forth below during the next twelve months:

Expenditure	Estimated Cost
CoFactor trials	\$ 4,900,000
BlockAide/CR trials	900,000
First Thiovir Trial	400,000
First EradicAide trial	300,000
Total estimated research and development	6,500,000
Estimated general and administrative	1,581,000
Total estimated costs	\$ 8,081,000

The Company's cash position at April 30, 2004 of \$17,594,195 is sufficient to meet the Company's goals as set forth above. Accordingly, we do not presently anticipate having to raise money for our business operations in the next 12 months. Our cash requirements after that time, however, are not known with any degree of certainty at this time and will depend in large part on the results of the trials we have described above and our ongoing research. The continued development of our products may require additional significant funding as early as the middle of 2005, and in any event the additional clinical development necessary to bring some or all of our products to market will require significant additional capital. We have no assurance that we will be able to raise additional capital.

In February 2004, the Company purchased 18 Rhesus monkeys for use in future research at M.D. Anderson in Houston, Texas for \$118,000. We purchased laboratory equipment totaling approximately \$40,000 during the first quarter of 2004.

Our facility lease expires in June 2004. We are currently undergoing a search for new office and laboratory space that would meet our forecast research and administrative needs for several years to come. In conjunction with this anticipated move to a new location we expect to spend \$50,000 on telephone and computer equipment and increased rent on the newly leased space beginning in the third quarter of 2004.

In conjunction with the additional research and development activities we expect to conduct, we anticipate adding two administrative staff and four research and development support personnel in the next 12 months. In March 2004, we hired a Vice President of Clinical and Medical Affairs at an annual salary of \$160,000.

The proceeds from our April private placement have been placed in interest-bearing money market accounts. We do not intend to invest these funds in other investment vehicles, as we are aiming to obtain only as high a return as possible in relatively risk-free investments. The Company maintains cash and cash equivalents with financial institutions, which from time to time may exceed federally insured limits. The Company periodically assesses the financial condition of the institutions and believes that the risk of any loss is minimal. At April 30, 2004, cash and cash equivalents with banks exceeded federally insured limits by approximately \$17,494,000.

Risk Factors

If any of the following risks actually occur, our business, results of operations and financial condition could suffer significantly.

We have a substantial accumulated deficit and limited working capital.

The Company is a development stage enterprise and had an accumulated deficit of \$29,191,609 as of March 31, 2004. Since the Company presently has no source of revenues and is committed to continuing its product research and development program, significant expenditures and losses will continue until development of new products is completed and such products have been clinically tested, approved by the FDA and successfully marketed. In addition, the Company has funded its operations primarily through the sale of Company securities, and has had limited working capital for its product development and other activities.

We have no current product sales revenues or profits.

The Company has devoted its resources to developing a new generation of therapeutic drug products, but such products cannot be marketed until clinical testing is completed and governmental approvals have been obtained. Accordingly, there is no current source of revenues, much less profits, to sustain the Company's present activities, and no revenues will likely be available until, and unless the new products are clinically tested, approved by the FDA and successfully marketed, either by the Company or a marketing partner, an outcome which the Company is not able to guarantee.

It is uncertain that the Company will have access to future capital or government grants.

It is not expected that the Company will generate positive cash flow from operations for at least the next several years. As a result, substantial additional equity or debt financing or the receipt of one or more government grants for research and development and/or clinical development may be required to fund our activities. We cannot assure that we will be able to consummate any such financing on favorable terms, if at all, or receive any such government grants or that such financing or government grants will be adequate to meet our capital requirements. Any additional equity financing could result in substantial dilution to stockholders, and debt financing, if available, may involve restrictive covenants which preclude the Company from making distributions to stockholders and taking other actions beneficial to stockholders. If adequate funds are not available, the Company may be required to delay or reduce the scope of its drug development program or attempt to continue development by entering into arrangements with collaborative partners or others that may require the Company to relinquish some or all of its rights to proprietary drugs. The inability to fund its capital requirements would have a material adverse effect on the Company.

The Company is not certain that it will be successful in the development of its drug candidates.

The successful development of any new drug is highly uncertain and is subject to a number of significant risks. Our drug candidates, which are in a development stage, require significant, time-consuming and costly development, testing and regulatory clearance. This process typically takes several years and can require substantially more time. Risks include, among others, the possibility that a drug candidate will (i) be found to be ineffective or unacceptably toxic, (ii) have unacceptable side effects, (iii) fail to receive necessary regulatory clearances, (iv) not achieve broad market acceptance, (v) be subject to competition from third parties who may market equivalent or superior products, or (vi) be affected by third parties holding proprietary rights that will preclude the Company from marketing a drug product. There can be no assurance that the development of drug candidates will demonstrate the efficacy and safety of a drug candidate as a therapeutic drug, or, even if demonstrated, that there will be sufficient advantages to its use over other drugs or treatments so as to render the drug product commercially viable. In the event that the Company is not successful in developing and commercializing one or more drug candidates, investors are likely to realize a loss of their entire investment.

Positive results in preclinical and early clinical trials do not ensure that future clinical trials will be successful or that drug candidates will receive any necessary regulatory approvals for the marketing, distribution or sale of such drug candidates.

Success in preclinical and early clinical trials does not ensure that large-scale clinical trials will be successful. Clinical results are frequently susceptible to varying interpretations that may delay, limit or prevent regulatory approvals. The length of time necessary to complete clinical trials and to submit an application for marketing approval for a final decision by a regulatory authority varies significantly and may be difficult to predict.

The Company will face intense competition from other companies in the pharmaceutical industry.

The Company is engaged in a segment of the pharmaceutical industry that is highly competitive and rapidly changing. If successfully developed and approved, any of the Company's drug candidates will likely compete with several existing therapies. In addition, other companies are pursuing the development of pharmaceuticals that target the same diseases as are targeted by the drugs being developed by the Company. The Company anticipates that it will face intense and increasing competition in the future as new products enter the market and advanced technologies become available. We cannot assure that existing products or new products developed by competitors will not be more effective, or more effectively marketed and sold than those by the Company. Competitive products may render the Company's drugs obsolete or noncompetitive prior to the Company's recovery of development and commercialization expenses.

Many of the Company's competitors will also have significantly greater financial, technical and human resources and will likely be better equipped to develop, manufacture and market products. In addition, many of these competitors have extensive experience in preclinical testing and clinical trials, obtaining FDA and other regulatory approvals and manufacturing and marketing pharmaceutical products. A number of these competitors also have products that have been approved or are in late-stage development and operate large, well-funded research and development programs. Smaller companies may also prove to be significant competitors, particularly through collaborative arrangements with large pharmaceutical and biotechnology companies. Furthermore, academic institutions, government agencies and other public and private research organizations are becoming increasingly aware of the commercial value of their inventions and are actively seeking to commercialize the technology they have developed. Accordingly, competitors may succeed in commercializing products more rapidly or effectively than the Company, which would have a material adverse effect on the Company.

There is no assurance that the Company's products will have market acceptance.

The success of the Company will depend in substantial part on the extent to which a drug product achieves market acceptance. The degree of market acceptance will depend upon a number of factors, including (i) the receipt and scope of regulatory approvals, (ii) the establishment and demonstration in the medical community of the safety and efficacy of a drug product, (iii) the product's potential advantages over existing treatment methods and (iv) reimbursement policies of government and third party payors. We cannot predict or guarantee that physicians, patients, healthcare insurers or maintenance organizations, or the medical community in general, will accept or utilize any drug product of the Company.

The unavailability of health care reimbursement for any of our products will likely adversely impact our ability to effectively market such products and whether health care reimbursement will be available for any of our products is uncertain.

The Company's ability to commercialize its technology successfully will depend in part on the extent to which reimbursement for the costs of such products and related treatments will be available from government health administration authorities, private health insurers and other third-party payors. Significant uncertainty exists as to the reimbursement status of newly-approved medical products. The Company cannot guarantee that adequate third-party insurance coverage will be available for the Company to establish and maintain price levels sufficient for realization of an appropriate return on its investments in developing new therapies. Government, private health insurers, and other third-party payors are increasingly attempting to contain health care costs by limiting both coverage and the level of reimbursement for new therapeutic products approved for marketing by the FDA. Accordingly, even if coverage and reimbursement are provided by government, private health insurers, and third-party payors for uses of the Company's products, the market acceptance of these products would be adversely affected if the amount of reimbursement available for the use of the Company's therapies proved to be unprofitable for health care providers.

Uncertainties related to health care reform measures may affect the Company's success.

There have been a number of federal and state proposals during the last few years to subject the pricing of health care goods and services, including prescription drugs, to government control and to make other changes to U.S. health care system. It is uncertain which legislative proposals will be adopted or what actions federal, state, or private payors for health care treatment and services may take in response to any health care reform proposals or legislation. The Company cannot predict the effect health care reforms may have on its business, and there is no guarantee that any such reforms will not have a material adverse effect on the Company.

Further testing of our drug candidates will be required and there is no assurance of FDA approval.

The FDA and comparable agencies in foreign countries impose substantial requirements upon the introduction of medical products, through lengthy and detailed laboratory and clinical testing procedures, sampling activities and other costly and time-consuming procedures. Satisfaction of these requirements typically takes several years or more and varies substantially based upon the type, complexity, and novelty of the product.

The effect of government regulation and the need for FDA approval may be to delay marketing of new products for a considerable period of time, to impose costly procedures upon the Company's activities, and to provide an advantage to larger companies that compete with the Company. There can be no assurance that FDA or other regulatory approval for any products developed by the Company will be granted on a timely basis or at all. Any such delay in obtaining, or failure to obtain, such approvals would materially and adversely affect the marketing of any contemplated products and the ability to earn product revenue. Further, regulation of manufacturing facilities by state, local, and other authorities is subject to change. Any additional regulation could result in limitations or restrictions on the Company's ability to utilize any of its technologies, thereby adversely affecting the Company's operations.

Human pharmaceutical products are subject to rigorous preclinical testing and clinical trials and other approval procedures mandated by the FDA and foreign regulatory authorities. Various federal and foreign statutes and regulations also govern or influence the manufacturing, safety, labeling, storage, record keeping and marketing of pharmaceutical products. The process of obtaining these approvals and the subsequent compliance with appropriate U.S. and foreign statutes and regulations are time-consuming and require the expenditure of substantial resources. In addition, these requirements and processes vary widely from country to country.

Among the uncertainties and risks of the FDA approval process are the following: (i) the possibility that studies and clinical trials will fail to prove the safety and efficacy of the drug, or that any demonstrated efficacy will be so limited as to significantly reduce or altogether eliminate the acceptability of the drug in the marketplace, (ii) the possibility that the costs of development, which can far exceed the best of estimates, may render commercialization of the drug marginally profitable or altogether unprofitable, and (iii) the possibility that the amount of time required for FDA approval of a drug may extend for years beyond that which is originally estimated. In addition, the FDA or similar foreign regulatory authorities may require additional clinical trials, which could result in increased costs and significant development delays. Delays or rejections may also be encountered based upon changes in FDA policy and the establishment of additional regulations during the period of product development and FDA review. Similar delays or rejections may be encountered in other countries.

The Company's success will be dependent on licenses and proprietary rights it receives from other parties, and on any patents it may obtain.

Our success will depend in large part on the ability of the Company and its licensors to (i) maintain license and patent protection with respect to their drug products, (ii) defend patents and licenses once obtained, (iii) maintain trade secrets, (iv) operate without infringing upon the patents and proprietary rights of others and (v) obtain appropriate licenses to patents or proprietary rights held by third parties if infringement would otherwise occur, both in the U.S. and in foreign countries. The Company has obtained licenses to patents and other proprietary rights from M.D. Anderson, USC and the NIH.

The patent positions of pharmaceutical companies, including those of the Company, are uncertain and involve complex legal and factual questions. There is no guarantee that the Company or its licensors have or will develop or obtain the rights to products or processes that are patentable, that patents will issue from any of the pending applications or that claims allowed will be sufficient to protect the technology licensed to the Company. In addition, we cannot assure that any patents issued to or licensed by the Company will not be challenged, invalidated, infringed or circumvented, or that the rights granted thereunder will provide competitive disadvantages to the Company.

Litigation, which could result in substantial cost, may also be necessary to enforce any patents to which the Company has rights, or to determine the scope, validity and unenforceability of other parties' proprietary rights, which may affect the rights of the Company. U.S. patents carry a presumption of validity and generally can be invalidated only through clear and convincing evidence. There can be no assurance that the Company's licensed patents would be held valid by a court or administrative body or that an alleged infringer would be found to be infringing. The mere uncertainty resulting from the institution and continuation of any technology-related litigation or interference proceeding could have a material adverse effect on the Company pending resolution of the disputed matters.

The Company may also rely on unpatented trade secrets and know-how to maintain its competitive position, which it seeks to protect, in part, by confidentiality agreements with employees, consultants and others. There can be no assurance that these agreements will not be breached or terminated, that the Company will have adequate remedies for any breach, or that trade secrets will not otherwise become known or be independently discovered by competitors.

The Company's license agreements can be terminated in the event of a breach.

The license agreements pursuant to which the Company has licensed its core technologies for its potential drug products permit the licensors, respectively M.D. Anderson, NIH and USC, to terminate the agreement under certain circumstances, such as the failure by the licensee to use its reasonable best efforts to commercialize the subject drug or the occurrence of any other uncured material breach by the licensee. The license agreements also provide that the licensor is primarily responsible for obtaining patent protection for the technology licensed, and the licensee is required to reimburse it for the costs it incurs in performing these activities. The license agreements also require the payment of specified royalties. Any inability or failure to observe these terms or pay these costs or royalties could result in the termination of the applicable license agreement in certain cases. The termination of any license agreement would have a material adverse effect on the Company.

Protecting our proprietary rights is difficult and costly.

The patent positions of pharmaceutical and biotechnology companies can be highly uncertain and involve complex legal and factual questions. Accordingly, we cannot predict the breadth of claims allowed in these companies' patents or whether the Company may infringe or be infringing these claims. Patent disputes are common and could preclude the commercialization of our products. Patent litigation is costly in its own right and could subject us to significant liabilities to third parties. In addition, an adverse decision could force us to either obtain third-party licenses at a material cost or cease using the technology or product in dispute.

The Company's success is dependent on its key personnel.

The Company is dependent on a small management group and on independent researchers, some of whom are inventors of the patents licensed to the Company for core technologies and drugs developed at M.D. Anderson and USC. Scientific personnel may from time to time serve as consultants to the Company and may devote a portion of their time to the Company's business, as well as continue to devote substantial time to the furtherance of the Company's sponsored research at M.D. Anderson, USC and other affiliated institutions as may be agreed to in the future, but such personnel are not employees of the Company and are not bound under written employment agreements. The services of such persons are important to the Company, and the loss of any of these services may adversely affect the Company.

We may be unable to retain skilled personnel and maintain key relationships.

The success of our business depends, in large part, on our ability to attract and retain highly qualified management, scientific and other personnel, and on our ability to develop and maintain important relationships with leading research institutions and consultants and advisors. Competition for these types of personnel and relationships is intense from numerous pharmaceutical and biotechnology companies, universities and other research institutions. There can be no assurance that the Company will be able to attract and retain such individuals on commercially acceptable terms or at all, and the failure to do so would have a material adverse effect on the Company.

We currently have no sales or marketing capability.

The Company does not have marketing or sales personnel. The Company will have to develop a sales force, or rely on marketing partners or other arrangements with third parties for the marketing, distribution and sale of any drug product which is ready for distribution. There is no guarantee that the Company will be able to establish marketing, distribution or sales capabilities or make arrangements with third parties to perform those activities on terms satisfactory to the Company, or that any internal capabilities or third party arrangements will be cost-effective.

In addition, any third parties with which the Company may establish marketing, distribution or sales arrangements may have significant control over important aspects of the commercialization of a drug product, including market identification, marketing methods, pricing, composition of sales force and promotional activities. There can be no assurance that the Company will be able to control the amount and timing of resources that any third party may devote to the products of the Company or prevent any third party from pursuing alternative technologies or products that could result in the development of products that compete with, and/or the withdrawal of support for, the products of the Company.

The Company does not have manufacturing capabilities and may not be able to efficiently develop manufacturing capabilities or contract for such services from third parties on commercially acceptable terms.

The Company will not have any manufacturing capacity. When required, the Company will seek to establish relationships with third-party manufacturers for the manufacture of clinical trial material and the commercial production of a drug product just as it has with Merck Eprova AG, Multiple Peptide Systems, Inc., and Peptisyntha, Inc. There can be no assurance that the Company will be able to establish relationships with third-party manufacturers on commercially acceptable terms or that third-party manufacturers will be able to manufacture a drug product on a cost-effective basis in commercial quantities under good manufacturing practices mandated by the FDA.

The dependence upon third parties for the manufacture of products may adversely affect future costs and the ability to develop and commercialize a drug product on a timely and competitive basis. Further, there can be no assurance that manufacturing or quality control problems will not arise in connection with the manufacture of the drug product or that third party manufacturers will be able to maintain the necessary governmental licenses and approvals to continue manufacturing such products. Any failure to establish relationships with third parties for its manufacturing requirements on commercially acceptable terms would have a material adverse effect on the Company.

The Company does not have its own research facilities and will be dependent on third parties for drug development.

The Company does not have its own research and development facilities and engages consultants and independent contract research organizations to design and conduct clinical trials in connection with the development of a drug. As a result, these important aspects of a drug's development will be outside the direct control of the Company. In addition, there can be no assurance that such third parties will perform all of their obligations under arrangements with the Company or will perform those obligations satisfactorily.

In the future, we anticipate that we will need to obtain additional or increased product liability insurance coverage and it is uncertain that such increased or additional insurance coverage can be obtained on commercially reasonable terms.

The business of the Company will expose it to potential product liability risks that are inherent in the testing, manufacturing and marketing of pharmaceutical products. There can be no assurance that product liability claims will not be asserted against the Company. The Company intends to obtain additional limited product liability insurance for its clinical trials, directly or through its marketing development partners or contract research organization (CRO) partners, when they begin in the U.S. and to expand its insurance coverage if and when the Company begins marketing commercial products. However, there can be no assurance that the Company will be able to obtain product liability insurance on commercially acceptable terms or that the Company will be able to maintain such insurance at a reasonable cost or insufficient amounts to protect against potential losses. A successful product liability claim or series of claims brought against the Company could have a material adverse effect on the Company.

Insurance coverage is increasingly more difficult to obtain or maintain.

Obtaining insurance for our business, property and products is increasingly more costly and narrower in scope, and we may be required to assume more risk in the future. If we are subject to third-party claims or suffer a loss or damage in excess of our insurance coverage, we may be required to share that risk in excess of our insurance limits. Furthermore, any first- or third-party claims made on any of our insurance policies may impact our ability to obtain or maintain insurance coverage at reasonable costs or at all in the future.

The market price of our shares, like that of many biotechnology companies, is highly volatile.

Market prices for the Company's Common Stock and the securities of other medical and biomedical technology companies have been highly volatile and may continue to be highly volatile in the future. Factors such as announcements of technological innovations or new products by the Company or its competitors, government regulatory action, litigation, patent or proprietary rights developments, and market conditions for medical and high technology stocks in general can have a significant impact on any future market for the Common Stock.

We are not paying dividends on our Common Stock.

The Company has never paid cash dividends on Common Stock, and does not intend to do so in the foreseeable future.

The issuance of shares of our preferred stock may adversely affect our Common Stock.

The Board of Directors is authorized to designate one or more series and to fix the rights, preferences, privileges and restrictions thereof, without any action by the stockholders. The designation and issuance of such shares of our preferred stock may adversely affect the Common Stock, if the rights, preferences and privileges of such preferred stock (i) restrict the declaration or payment of dividends on Common Stock, (ii) dilute the voting power of Common Stock, (iii) impair the liquidation rights of the Common Stock or (iv) delay or prevent a change in control of the Company from occurring, among other possibilities.

Under provisions of the Company's certificate of incorporation, bylaws and Delaware law, the Company's management may be able to block or impede a change in control.

The Company's Certificate of Incorporation authorizes the Board of Directors (the "Board") to issue shares of undesignated preferred stock without stockholder approval on such terms as the Board may determine. The rights of the holders of Common Stock will be subject to, and may be adversely affected by, the rights of the holders of any such preferred stock that may be issued in the future. Moreover, the issuance of preferred stock may make it more difficult for a third party to acquire, or may discourage a third party from acquiring, a majority of the voting stock. These and other provisions of the Certificate of Incorporation and the by-laws, as well as certain provisions of Delaware law, could delay or impede the removal of incumbent directors and could make more difficult a merger, tender offer or proxy contest involving a change of control of the Company, even if such events could be beneficial to the interest of the stockholders as a whole. Such provisions could limit the price that certain investors might be willing to pay in the future for the Common Stock.

Officers' and directors' liabilities are limited under Delaware law.

Pursuant to the Company's Certificate of Incorporation and by-laws, as authorized under applicable Delaware law, directors are not liable for monetary damages for breach of fiduciary duty, except in connection with a breach of the duty of loyalty, for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, for dividend payments or stock repurchases illegal under Delaware law or for any transaction in which a director has derived an improper personal benefit. The Certificate of Incorporation and by-laws provide that the Company must indemnify its officers and directors to the fullest extent permitted by Delaware law for all expenses incurred in the settlement of any actions against such persons in connection with their having served as officers or directors.

Item 3. Controls and Procedures.

Evaluation of disclosure controls and procedures.

The Company's management, with the participation of the Company's Chief Executive Officer and Chief Financial Officer has evaluated the effectiveness of the Company's disclosure controls and procedures as of March 31, 2004. Based on this evaluation, the Company's Chief Executive Officer and Chief Financial Officer concluded that the Company's disclosure controls and procedures are effective for gathering, analyzing and disclosing the information the Company is required to disclose in the reports it files under the Securities Exchange Act of 1934, within the time periods specified in the SEC's rules and forms.

During the fiscal three months ended March 31, 2004, there was no change in the Company's internal control over financial reporting that materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings.

In December 2003, the Company filed a complaint in the Superior Court of California in and for the County of San Diego, alleging claims against Bengt G. Gustavsson and Biofol AB (collectively, the "Defendants"), who are former consultants of the Company, for misappropriation of trade secrets, breach of written contracts, breach of the implied covenant of good faith and fair dealing, breach of fiduciary duty, breach of duty of confidence, aiding and abetting breach of fiduciary duty and breach of duty of confidence, unfair competition, intentional interference with prospective economic relations, and seeking damages, declaratory and injunctive relief. In January 2004, the Defendants filed a Notice of Removal of Action in the U.S. District Court in and for the Southern District of California. In February 2004, the federal court adopted a stipulation of the Company and the Defendants pursuant to which the Defendants accepted service of the lawsuit effective as of January 14, 2004 and agreed to file their response to the Company's complaint by March 1, 2004. On March 1, 2004, the Defendants filed an answer denying the material allegations of the Company's complaint. The Company and Defendants are currently scheduled to participate in a court-sponsored case review and mediation known as an Early Neutral Evaluation, which is procedurally required by the federal court, on July 1, 2004. To the Company's knowledge, as of the date of this report, no other substantive filings have been made by the Company or the Defendants regarding this lawsuit. The outcome of and the amount of any damages that may be recovered in this lawsuit is uncertain.

On February 26, 2004, the Company received a letter from counsel to a stockholder in which the stockholder demanded to inspect certain books and records of the Company. One stated purpose for the stockholder's demand is to determine whether corporate wrongdoing occurred in connection with certain private placements of the Company's securities. On March 2, 2004, the Company timely responded to this stockholder's demand and agreed to make documents available for inspection on or after March 15, 2004. On April 16, 2004, the Company received a letter from counsel to the stockholder acknowledging receipt of the Company's letter dated March 2, 2004 and that the stockholder would shortly contact the Company to schedule the requested inspection. As of the date of this report, the inspection has neither taken place nor been scheduled by the stockholder. The Company believes that there is no reasonable basis for any claim by this stockholder. The Company will vigorously defend any such claim, if asserted.

From time to time we may be subject to additional legal proceedings and claims in the ordinary course of business. These claims, even if not meritorious, could result in the expenditure of significant financial and managerial resources. We are not aware of any legal proceedings or claims that we believe could harm our business or cause our stock price to fall.

Item 2. Changes In Securities.

In January and February 2004, three individuals became members of the Company's board of directors. Each new director was granted an option to purchase 50,000 shares of common stock at a purchase price of \$1.50 per share. The options begin vesting 90 days from the date of grant and vest in equal installments over the next four quarters. The options expire on December 30, 2008.

In February 2004, an individual became a member of the Company's Scientific Advisory Board. The new member was granted an option to purchase 30,000 shares of common stock at a purchase price of \$1.50 per share. The option will vest in equal installments over eight quarters, starting March 1, 2004. The option will expire on December 30, 2008.

In March 2004, the sole holder of shares of Series A 8% Convertible Preferred Stock of the Company agreed to exchange all of his 237 shares of Series A 8% Convertible Preferred Stock for 136,500 shares of common stock.

In March 2004, warrants to purchase a total of 53,750 shares of common stock at between \$0.50 and \$0.60 per share were exercised for aggregate gross proceeds of \$2,250. A warrant representing 3,750 shares of common stock was exercised for proceeds of \$2,250. In addition, the Company issued 38,372 shares of common stock upon the cashless exercise of a warrant to purchase 50,000 shares of common stock.

In March 2004, the Company granted an option to purchase 100,000 shares of common stock at a purchase price of \$1.50 per share to the Company's Vice President of Clinical and Medical Affairs. The option will vest in three installments over three years, starting March, 2004. The option will expire on March 1, 2007.

In April 2004, the Company sold 10,417,624 shares of common stock and issued warrants to purchase 3,125,272 shares of common stock at \$2.00 and warrants to purchase 2,083,518 shares of common stock at \$2.50 per share to accredited investors in a private placement for aggregate gross proceeds of \$15,626,450 in cash. In connection with the private placement, the Company paid cash commissions of \$900,452 and issued warrants to purchase 642,547 shares of common stock at \$2.00 per share to two placement agents.

In April 2004, the Company engaged W.R. Hambrecht + Co., LLC for financial advisory and investment banking services and, in connection with that engagement, issued to it a warrant to purchase 175,000 shares of common stock at \$2.00 per share.

In April 2004, the Company granted an option to purchase 30,000 shares of common stock at a purchase price of \$1.50 per share to the Director of Anti-Viral Research. The option will vest in three installments over three years starting April 2004. The option will expire on April 1, 2007.

In May 2004, a warrant to purchase 20,082 shares of common stock at \$1.25 per share was exercised for gross proceeds of \$25,103.

Except as otherwise noted above, no commission was paid or given, directly or indirectly, in connection with any of the above sales, issuances, or exchanges.

The issuances of the above securities were deemed to be exempt from registration under the Securities Act of 1933, as amended (the "Securities Act"), in reliance on Sections 3(a)(9) or 4(2) of the Securities Act or Regulation D promulgated under the Securities Act.

Item 3. Defaults Upon Senior Securities.

Not applicable.

Item 4. Submission Of Matters To A Vote Of Security Holders.

Not applicable.

Item 5. Other Information.

Not applicable.

Item 6. Exhibits And Reports On Form 8-K.

(a) The exhibits to this report are incorporated by reference to the documents set forth on the exhibit index which is attached hereto.

(b) On April 12, 2004, we filed a current report on Form 8-K to report, under Items 5 and 7 of such report, the sale of shares of common stock and issuance of warrants to purchase shares of common stock for aggregate gross proceeds of \$15,376,450. On April 13, 2004, we amended the current report on Form 8-K filed on April 12, 2004 to include a missing exhibit and implement a few clarifying revisions.

Signatures

In accordance with the requirements of the Securities Exchange Act of 1934, as amended, the Registrant caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

May 12, 2004

/s/ Steven M. Plumb
Steven M. Plumb, CPA
Chief Financial Officer

Exhibit Index

<u>Exhibit</u>	<u>Description</u>
2.1 ⁽¹⁾	Agreement and Plan of Merger dated May 19, 2000 among BioQuest, Inc.; BioQuest Acquisition Corp.; and Biokeys, Inc.
3.1 ⁽²⁾	Certificate of Incorporation of Victoria Enterprises, Inc.
3.2 ⁽²⁾	Certificate of Amendment of Certificate of Incorporation of Victoria Enterprises, Inc.
3.3 ⁽²⁾	Certificate of Amendment of Certificate of Incorporation of BioQuest, Inc.
3.4 ⁽²⁾	Certificate of Amendment of Certificate of Incorporation of BioQuest, Inc.
3.5 ⁽²⁾	Certificate of Ownership and Merger Merging Biokeys, Inc. with and into Biokeys Pharmaceuticals, Inc.
3.6 ⁽¹⁾	Amended and Restated Bylaws of Biokeys Pharmaceuticals, Inc.
3.7 ⁽²⁾	Certificate of Amendment to the Certificate of Incorporation of ADVENTRX Pharmaceuticals, Inc.
4.1 ⁽¹⁾	Certificate of Designation of BioQuest, Inc.
4.2 ⁽³⁾	Certificate of Designation of Series B Convertible Preferred Stock and Series C Convertible Preferred Stock of Biokeys Pharmaceuticals, Inc.
4.3	Common Stock and Warrant Purchase Agreement, dated as of April 5, 2004, among the Company and the Investors named therein
4.4 ⁽⁴⁾	Common Stock and Warrant Purchase Agreement, dated April 8, 2004, between the Company and CD Investment Partners, Ltd.
4.5 ⁽⁵⁾	A-1 Warrant to Purchase Common Stock issued to CD Investment Partners, Ltd.
4.6 ⁽⁵⁾	A-2 Warrant to Purchase Common Stock issued to CD Investment Partners, Ltd.
4.7 ⁽⁵⁾	Warrant to Purchase Common Stock issued on April 8, 2004 to Burnham Hill Partners
4.8 ⁽⁵⁾	Warrant to Purchase Common Stock issued on April 8, 2004 to Ernest Pernet
4.9 ⁽⁵⁾	Warrant to Purchase Common Stock issued on April 8, 2004 to W.R. Hambrecht + Co., LLC
4.10	Form of A-1 Warrant to Purchase Common Stock issued to Investors pursuant to the Common Stock and Warrant Purchase Agreement
4.11	Form of A-2 Warrant to Purchase Common Stock issued to Investors pursuant to the Common Stock and Warrant Purchase Agreement
4.12	Registration Rights Agreement, dated as of April 5, 2004, among the Company and the Investors named therein
4.13 ⁽⁶⁾	Registration Rights Agreement, dated as of April 8, 2004, between the Company and CD Investment Partners, Ltd.

4.14	Common Stock and Warrant Purchase Agreement, dated April 19, 2004, between the Company and Franklin Berger
4.15	A-1 Warrant to Purchase Common Stock issued to Franklin Berger
4.16	A-2 Warrant to Purchase Common Stock issued to Franklin Berger
4.17	Registration Rights Agreement, dated as of April 19, 2004, between the Company and Franklin Berger
10.1 (7)	Patent and Technology License Agreement with M.D. Anderson - June, 1996 (Request for confidential treatment of certain data)
10.2 (7)	Amendment to M.D. Anderson Licensing Agreement June 15, 2000 (Request for confidential treatment of certain data)
10.3 (7)	Option and License Agreement with USC - June 23, 1998 (Co Factor and Selone) (Request for confidential treatment of certain data)
10.4 (1)	Amendment to Option and License Agreement with USC dated August 16, 2000 (Co Factor and Selone) (Request for confidential treatment of certain data)
10.5 (7)	Option and License Agreement with USC dated August 17, 2000 (Thiovir) (Request for confidential treatment of certain data)
10.6	Not currently in use
10.7 (8)	Patent License Agreement, effective August 1, 2002, between Biokeys, Inc. and the National Institutes of Health
10.8 (9)	Letter Agreement, effective January 1, 2003, between Biokeys Pharmaceuticals, Inc. and Steven M. Plumb, P.C.
10.9 (9)	Offer Letter, dated March 5, 2003, from Biokeys Pharmaceuticals, Inc. to Joan M. Robbins, Ph.D.
31.1	Rule 13a-14(a)/15d-14(a) Certification
31.2	Rule 13a-14(a)/15d-14(a) Certification
32	Section 1350 Certifications

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- (1) Incorporated by reference to the same-numbered exhibit to the Company's Registration Statement on Form 10-SB, filed October 2, 2001.
 - (2) Incorporated by reference to the same-numbered exhibit to the Company's Form 8-A, filed April 27, 2004
 - (3) Incorporated by reference to the same-numbered exhibit to the Company's Quarterly Report on Form 10-QSB, filed November 26, 2002 (exhibit included in the body of the Form 10-QSB and not filed as a separate exhibit file).
 - (4) Incorporated by reference to exhibit 4.2 to the Company's Current Report on Form 8-K, filed April 13, 2004
 - (5) Incorporated by reference to the same-numbered exhibit to the Company's Current Report on Form 8-K, filed April 13, 2004.
 - (6) Incorporated by reference to exhibit 4.11 to the Company's Current Report on Form 8-K, filed April 13, 2004
 - (7) Incorporated by reference to the same-numbered exhibit to the Company's Registration Statement on Form 10-SB/A, filed January 11, 2002.
 - (8) Incorporated by reference to the same-numbered exhibit to the Company's Quarterly Report on Form 10-QSB, filed November 26, 2002.
 - (9) Incorporated by reference to the same-numbered exhibit to the Company's Annual Report on Form 10-KSB, filed April 16, 2003.

COMMON STOCK AND WARRANT PURCHASE AGREEMENT

This Common Stock and Warrant Purchase Agreement (this "AGREEMENT"), dated as of April 5, 2004 (the "AGREEMENT DATE"), is among ADVENTRX Pharmaceuticals, Inc., a Delaware corporation (the "COMPANY"), and each of the persons and entities listed on Schedule 1 hereto (each, an "INVESTOR").

1. SUBSCRIPTION.

(a) SHARES OF COMMON STOCK. On the terms and subject to the conditions set forth in this Agreement, at the Closing (as defined below), the Company will sell and each Investor will purchase the number of shares of Common Stock, par value \$0.001 per share, of the Company ("COMMON STOCK") set forth opposite such Investor's name on Schedule 1 hereto at a purchase price of \$1.50 per share (the "SHARE PRICE"). For purposes of this Agreement, the term "SHARES" refers to the shares of Common Stock purchased by the Investors pursuant to this Agreement.

(b) WARRANTS. In consideration of each Investor's purchase of shares of Common Stock pursuant to this Agreement, the Company shall also issue to each Investor (i) a warrant, in the form of Exhibit A-1 hereto, to purchase a number of shares of Common Stock equal to the product of (x) 30% and (y) the number of Shares purchased by such Investor (an "A-1 WARRANT") and (ii) a warrant, in the form of Exhibit A-2 hereto, to purchase a number of shares of Common Stock equal to the product of (x) 20% and (y) the number of Shares purchased by such Investor (an "A-2 WARRANT"). The A-1 Warrants and A-2 Warrants issuable to the Investors pursuant to this Agreement are collectively referred to herein as the "WARRANTS."

2. CLOSING; CONDITIONS TO CLOSING.

(a) CLOSING. The closing of the purchase and sale of the Shares and the issuance of the Warrants (the "CLOSING") will take place as promptly as practicable, but no later than five business days after satisfaction or waiver of all of the conditions set forth in Sections 2(c) and (d) (other than those conditions which by their terms are not to be satisfied or waived until the Closing), at the offices of Wiggin and Dana LLP ("WIGGIN"), 400 Atlantic Street, Stamford, Connecticut 06901. The date on which the Closing occurs is referred to herein as the "CLOSING DATE."

(b) DELIVERY OF PURCHASE PRICE. Each Investor shall deliver or cause to be delivered by wire transfer of immediately available funds an amount in cash equal to the aggregate Share Price payable by such Investor at the Closing to Wiggin, counsel to SDS Management, LLC, an affiliate of an Investor ("SDS"), to be held and distributed by Wiggin pursuant to terms of the Closing Escrow Agreement in the form of Exhibit B hereto (the "ESCROW AGREEMENT").

(c) CONDITIONS TO OBLIGATIONS OF INVESTORS TO EFFECT THE CLOSING. The obligations of an Investor to effect the Closing and the transactions contemplated by this Agreement shall be subject to the satisfaction at or prior to the Closing, of each of the following conditions, any of which may be waived, in writing, by an Investor:

(i) The Company shall deliver or cause to be delivered to each of the Investors the following:

(1) Evidence of delivery to the Company's transfer agent of irrevocable instructions to issue certificates evidencing the aggregate number of Shares to be purchased by such Investor registered in the name of such Investor, in such denominations as is indicated on Schedule 1 for such Investor;

(2) The Registration Rights Agreement in the form of Exhibit C hereto (the "REGISTRATION RIGHTS AGREEMENT") executed by the Company;

(3) One or more Warrants, each registered in the name of such Investor, in such denominations as is indicated on Schedule 1 for such Investor executed by the Company;

(4) A legal opinion of Bingham McCutchen LLP ("COMPANY'S COUNSEL"), counsel to the Company, in the form attached hereto as Exhibit D.

(5) A wire transfer representing SDS's reasonable, documented legal fees and other expenses as described in Section 10(1) hereof.

(6) A certificate signed by an officer of the Company either (i) evidencing that the Company has applied to each U.S. securities exchange, interdealer quotation system and other trading market where its Common Stock is currently listed or qualified for trading or quotation for the listing or qualification of the Shares and the Warrant Shares for trading or quotation thereon or (ii) certifying that no such application is necessary for the listing of such shares.

(7) The Escrow Agreement executed by the Company.

(d) CONDITIONS TO OBLIGATIONS OF THE COMPANY TO EFFECT THE CLOSING. The obligations of the Company to effect the Closing and the transactions contemplated by this Agreement shall be subject to the satisfaction at or prior to the Closing of each of the following conditions, any of which may be waived, in writing, by the Company:

(i) Each Investor shall have executed and delivered to the Company this Agreement;

(ii) Each Investor shall have executed and delivered to the Company the Registration Rights Agreement;

(iii) Each Investor shall have executed and delivered to the Company the Investor Suitability Questionnaire attached hereto as Exhibit E and the Company shall be reasonably satisfied, through the responses of each Investor, that the sale of the Shares and the Warrants shall not require registration thereof under the Securities Act of 1933, as amended (the

"SECURITIES ACT") or under the blue sky or securities laws of any jurisdiction;

(iv) Each Investor shall have deposited in escrow with Wiggin pursuant to the Escrow Agreement an amount equal to the aggregate Share Price for the Shares and Warrants purchased by such Investor by wire transfer or by such other form of payment as may be mutually agreed upon by the Company and such Investor;

(v) Wiggin shall have executed and delivered to the Company the Escrow Agreement; and

(vi) Burnham Hill Partners (a division of Pali Capital Inc.) (the "PLACEMENT AGENT") shall have delivered a certificate, executed by a managing director of the Placement Agent, dated as of the Closing, certifying the amounts deposited in escrow with Wiggin pursuant to the Escrow Agreement and the names of the Investors that have deposited such amounts in escrow with Wiggin.

3. REPRESENTATIONS AND WARRANTIES OF THE COMPANY. The Company represents and warrants as of the Agreement Date to the Investors that, except as set forth on the Disclosure Schedule attached as Schedule 3:

(a) CORPORATE EXISTENCE AND POWER; SUBSIDIARIES. The Company is a corporation duly incorporated, validly existing and in good standing under the laws of the state in which it is incorporated, and has all corporate powers required to carry on its business as now conducted. The Company is duly qualified to do business as a foreign corporation and is in good standing in each jurisdiction where the character of the property owned or leased by it or the nature of its activities makes such qualification necessary, except for those jurisdictions where the failure to be so qualified would not have a Material Adverse Effect. For purposes of this Agreement, the term "MATERIAL ADVERSE EFFECT" means, with respect to the Company, a material adverse effect on the Company's condition (financial or other), business, properties, assets, liabilities (including contingent liabilities), results of operations or current prospects, taken as a whole. True and complete copies of the Company's Certificate of Incorporation, as amended (the "CERTIFICATE"), and Bylaws, as amended (the "BYLAWS"), as currently in effect and as will be in effect on the Closing Date, have previously been made available to the Investors. For purposes of this Agreement, the term "SUBSIDIARY" or "SUBSIDIARIES" means, with respect to any entity, any corporation or other organization of which securities or other ownership interests having ordinary voting power to elect a majority of the board of directors or other persons performing similar functions are directly or indirectly owned by such entity or of which such entity is a partner or is, directly or indirectly, the beneficial owner of 50% or more of any class of equity securities or equivalent profit participation interests. The Company has no Subsidiaries.

(b) CORPORATE AUTHORIZATION. The execution, delivery and performance by the Company of this Agreement, the Registration Rights Agreement, the Warrants, the Escrow Agreement and each of the other documents executed by the Company pursuant to and in connection with this Agreement (collectively, the "TRANSACTION Agreements"), and the consummation of the transactions contemplated hereby and thereby (including, but not limited to, the sale and delivery of the

Shares and the Warrants and the subsequent issuance of the Warrant Shares upon exercise of the Warrants) (the "TRANSACTIONS") have been duly authorized, and no additional corporate or stockholder action is required for the approval thereof. The shares issuable upon exercise of the Warrants (the "WARRANT SHARES") have been duly reserved for issuance by the Company. The Transaction Agreements have been or, to the extent contemplated hereby or by the Transaction Agreements, will be duly executed and delivered and constitute the legal, valid and binding agreement of the Company, enforceable against the Company in accordance with their terms, except as may be limited by bankruptcy, reorganization, insolvency, moratorium and similar laws of general application relating to or affecting the enforcement of rights of creditors, and except as enforceability of its obligations hereunder are subject to general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity or at law).

(c) NON-CONTRAVENTION. The execution, delivery and performance by the Company of the Transaction Agreements, and the consummation by the Company of the Transactions do not and will not (a) violate any term of the Certificate and Bylaws or any material agreement to which the Company is a party or by which it is bound; (b) constitute a violation of any provision of any law, regulation, judgment, injunction, order or decree binding upon or applicable to the Company; (c) constitute a default (or would constitute a default with notice or lapse of time or both) or breach under or give rise to a right of termination, cancellation or acceleration or loss of any benefit under any material agreement, contract or other instrument binding upon the Company or under any material license, franchise, permit or other similar authorization held by the Company; or (d) result in the creation or imposition of any Lien (as defined below) on any asset of the Company. For purposes of this Agreement, the term "LIEN" means, with respect to any asset, any mortgage, lien, pledge, charge, security interest, claim or encumbrance of any kind in respect of such asset.

(d) SEC DOCUMENTS. The Company is obligated under the Securities Exchange Act of 1934, as amended (the "EXCHANGE ACT"), to file reports pursuant to Sections 13 or 15(d) thereof (all such reports filed or required to be filed by the Company with the Securities and Exchange Commission (the "COMMISSION"), including all exhibits thereto or incorporated therein by reference, and all documents filed by the Company under the Securities Act, hereinafter called the "SEC DOCUMENTS"). Since December 31, 2002, the Company has timely filed all SEC Documents required to be filed under the Exchange Act. All SEC Documents filed on or after October 31, 2000 (i) were prepared in all material respects in accordance with the requirements of the Exchange Act and (ii) did not at the time they were filed (or, if amended or superseded by a filing prior to the Agreement Date, then on the date of such filing) contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading. A correct and complete copy of each of the SEC Documents for any period ending on or after December 31, 2002 (the "RECENT REPORTS") are currently available to each Investor at the Commission's [main public website](http://www.sec.gov/cgi-bin/browse-edgar?company=adventrx+pharma&CIK=&filenum=&State=&SIC=&owner=include&action=getcompany) at <http://www.sec.gov/cgi-bin/browse-edgar?company=adventrx+pharma&CIK=&filenum=&State=&SIC=&owner=include&action=getcompany>. None of the information about the Company or any of its Subsidiaries which has been disclosed to the Investors herein or in the course of discussions and negotiations with respect hereto which is not disclosed in the Recent Reports is or was required to be so disclosed.

(e) FINANCIAL STATEMENTS. Each of the Company's audited consolidated balance sheet and related consolidated statements of income, cash flows and changes in stockholders' equity (including the related notes) as of and for the years ended December 31, 2003 and December 31, 2002, as contained in the Recent Reports (both of (i) and (ii), collectively, the "FINANCIAL STATEMENTS") (x) present fairly in all material respects the financial position of the Company and its Subsidiaries on a consolidated basis as of the dates thereof and the results of operations, cash flows and stockholders' equity as of and for each of the periods then ended and (y) were prepared in accordance with United States generally accepted accounting principals ("GAAP") applied on a consistent basis throughout the periods involved, in each case, except as otherwise indicated in the notes thereto.

(f) COMPLIANCE WITH LAW. The Company is in compliance and has conducted its business so as to comply with all laws, rules and regulations, judgments, decrees or orders of any court, administrative agency, commission, regulatory authority or other governmental authority or instrumentality, domestic or foreign, applicable to its operations, the violation of which would cause a Material Adverse Affect. There are no judgments or orders, injunctions, decrees, stipulations or awards (whether rendered by a court or administrative agency or by arbitration), including any such actions relating to affirmative action claims or claims of discrimination, against the Company or against any of its properties or businesses.

(g) ABSENCE OF CERTAIN CHANGES. Since December 31, 2003, the Company has conducted its business only in the ordinary course and there has not occurred, except as set forth in the Recent Reports or any exhibit thereto or incorporated by reference therein, any event the could reasonably be expected to have a Material Adverse Effect on the Company or any of its Subsidiaries.

(h) NO UNDISCLOSED LIABILITIES. Except as set forth in the Recent Reports, and except for liabilities and obligations incurred in the ordinary course of business since December 31, 2003, as of the Agreement Date, to the Company's knowledge, (i) the Company does not have any material liabilities or obligations (absolute, accrued, contingent or otherwise) which, and (ii) there has not been any aspect of the prior or current conduct of the business of the Company or its Subsidiaries which may form the basis for any material claim by any third party which, if asserted could result in any such material liabilities or obligations which, are not fully reflected, reserved against or disclosed in the balance sheet of the Company as at December 31, 2003.

(i) CAPITALIZATION. The authorized capital stock of the Company consists of 100,000,000 shares of Common Stock of which 42,833,830 shares are issued and 42,810,665 are outstanding as of the Agreement Date and 1,000,000 shares of preferred stock, par value \$0.01 per share, of which none are issued and outstanding as of the Agreement Date. All issued and outstanding shares of the Company's capital stock have been duly authorized and were validly issued, and are fully paid and nonassessable. No securities issued by the Company from October 31, 2000 to the date hereof were issued in violation of any statutory or common law preemptive rights. Upon issuance pursuant to the terms of this Agreement, all Shares and Warrant Shares shall be duly authorized, validly issued and outstanding, and fully paid and nonassessable and such shares shall not have been issued in violation of any statutory or contractual preemptive rights. There are no dividends which have accrued or been declared but are

unpaid on the capital stock of the Company. All taxes required to be paid by Company in connection with the issuance and any transfers of the Company's capital stock have been paid. All permits or authorizations required to be obtained from or registrations required to be effected with any person or entity in connection with any and all issuances of securities of the Company from October 31, 2000 to the Agreement Date have been obtained or effected, and all securities of the Company have been issued and are held in accordance with the provisions of all applicable securities or other laws. A true and complete capitalization table of the Company as of the Agreement Date is set forth in Schedule 3(i). No shares of capital stock of the Company are subject to preemptive rights or any other similar rights of the stockholders of the Company or any liens or encumbrances imposed through the actions or failure to act of the Company. Except as disclosed in Schedule 3(i), as of the effective date of this Agreement, (i) there are no outstanding options, warrants, scrip, rights to subscribe for, puts, calls, rights of first refusal, agreements, understandings, claims or other commitments or rights of any character whatsoever relating to, or securities or rights convertible into or exchangeable for any shares of capital stock of the Company, or arrangements by which the Company is or may become bound to issue additional shares of capital stock of the Company, (ii) there are no agreements or arrangements under which the Company is obligated to register the sale of any of its or their securities under the 1933 Act and (iii) there are no anti-dilution or price adjustment provisions contained in any security issued by the Company (or in any agreement providing rights to security holders) that will be triggered by the issuance of the Shares, Warrants or Warrant Shares (including the issuance of the Warrant Shares upon exercise of the Warrants).

(j) GOVERNMENT AUTHORIZATIONS. Except as disclosed in the Recent Reports, the Company holds all material authorizations, consents, approvals, franchises, licenses and permits required under applicable law or regulation for the operation of the business of the Company as presently operated (the "GOVERNMENTAL AUTHORIZATIONS"). All the Governmental Authorizations have been duly issued or obtained and are in full force and effect, and the Company is in material compliance with the terms of all the Governmental Authorizations. The Company has not engaged in any activity that, to its knowledge, would cause revocation or suspension of any such Governmental Authorizations. The Company has no knowledge of any facts which could reasonably be expected to cause the Company to believe that the Governmental Authorizations will not be renewed by the appropriate governmental authorities in the ordinary course. Neither the execution, delivery nor performance of this Agreement shall adversely affect the status of any of the Governmental Authorizations.

(k) BROKERS. No broker, finder or investment banker is entitled to any brokerage, finder's or other fee or commission in connection with the transactions contemplated by this Agreement, based upon any arrangement made by or on behalf of the Company, which would make the Company or any Investor liable for any fees or commissions.

(l) SECURITIES LAWS. Neither the Company nor any agent acting on behalf of the Company has taken any action which might cause this Agreement or the Shares or Warrants to violate the Securities Act or the Exchange Act or any rules or regulations promulgated thereunder, as in effect on the Closing Date. Assuming that all of the representations and warranties of the Investors set forth in Section 4 are true and correct, the offer, sale and issuance of the Shares and Warrants in conformity with the terms of this Agreement are exempt from the

registration requirements of Section 5 of the Securities Act and from the qualification or registration requirements of applicable "blue sky" laws.

(m) ISSUANCE OF SHARES. The Shares are duly authorized and, upon issuance in accordance with the terms of this Agreement will be validly issued, fully paid, and non-assessable and free from all taxes, liens, claims and encumbrances with respect to the issue thereof and shall not be subject to preemptive rights or other similar rights of stockholders of the Company and will not impose personal liability on the holder thereof. The Warrant Shares are duly authorized and reserved for issuance, and, when issued upon exercise of or otherwise pursuant to the Warrants, respectively, in accordance with the terms thereof, will be validly issued, fully paid and non-assessable, and free from all taxes, liens, claims and encumbrances and will not be subject to preemptive rights or other similar rights of stockholders of the Company and will not impose personal liability upon the holder thereof.

(n) INTERNAL ACCOUNTING CONTROLS. The Company maintains a system of internal accounting controls sufficient, in the judgment of the Company's board of directors, to provide reasonable assurance that (i) transactions are executed in accordance with management's general or specific authorizations, (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles and to maintain asset accountability, (iii) access to assets is permitted only in accordance with management's general or specific authorization and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences.

(o) NO INVESTMENT COMPANY. The Company is not, and upon the issuance and sale of the Shares and Warrants as contemplated by this Agreement will not be, an "investment company" required to be registered under the Investment Company Act of 1940 (an "INVESTMENT COMPANY"). The Company is not controlled by an Investment Company.

(p) SARBANES-OXLEY ACT. The Company is in substantial compliance with the applicable provisions of the Sarbanes-Oxley Act of 2002 (the "SARBANES-OXLEY ACT"), and the rules and regulations promulgated thereunder, that are effective and intends to comply substantially with other applicable provisions of the Sarbanes-Oxley Act, and the rules and regulations promulgated thereunder, upon the effectiveness of such provisions.

(q) BENEFICIAL HOLDINGS OF BURNHAM HILL PARTNERS. Burnham Hill Partners ("BHP"), a division of Pali Capital, Inc. and the Company's placement agent with respect to the purchase and sale of the Shares and the issuance of the Warrants, has advised the Company that certain employees of BHP and their family members (acting separately and not as a group) own approximately 12% of the outstanding shares of Common Stock as of the Agreement Date and without giving effect to the purchase and sale of the Shares.

4. REPRESENTATIONS AND WARRANTIES OF THE INVESTOR. Each Investor, for itself only, hereby severally and not jointly, represents and warrants to the Company as follows:

(a) EXEMPT TRANSACTION; UNREGISTERED SHARES AND WARRANTS. The Investor understands that the Shares and Warrants are being offered and sold in reliance on one or more exemptions from registration provided for under the Securities

Act, and that the Company's reliance upon such exemptions is predicated, in part, upon the Investor's representations and warranties set forth in this Agreement. The Investor acknowledges that it is purchasing the Shares and Warrants without being offered or furnished any offering literature or prospectus. The Investor understands that neither the Commission, nor any governmental agency charged with the administration of the securities laws of any jurisdiction nor any other governmental agency has passed upon or reviewed the merits or qualifications of, or recommended or approved the offer and sale of the Shares and Warrants pursuant to the terms of this Agreement.

(b) INVESTMENT INTENT; ACCREDITATION; AUTHORITY. The Investor is acquiring the Shares and Warrants for investment for the Investor's own account, not as nominee or agent, for investment and not with a view to, or for resale in connection with, any distribution or public offering thereof within the meaning of the Securities Act; provided, however, that by making the representations herein, the Investor reserves the right to dispose of the Shares, Warrants or Warrant Shares at any time in accordance with this Agreement or the Warrant, as applicable, and in accordance with or pursuant to a registration statement or an exemption under the Securities Act. The Investor is an "accredited investor" within the meaning of the Securities Act. The Investor has the full right, power, authority and capacity to enter into and perform this Agreement, the terms of this Agreement constitute valid and binding obligations of the Investor enforceable in accordance with their terms, except as the same may be limited by equitable principles and by bankruptcy, insolvency, moratorium, and other laws of general application affecting the enforcement of creditors' rights.

(c) KNOWLEDGE AND EXPERIENCE. The Investor (i) has such knowledge and experience in financial and business matters as to be capable of evaluating the merits and risks of the Investor's prospective investment in the Shares and Warrants; (ii) has the ability to bear the economic risks of the Investor's prospective investment; (iii) has been furnished with and has had access to such information as the Investor has considered necessary to make a determination as to the purchase of the Shares and Warrants together with such additional information as is necessary to verify the accuracy of the information supplied; and (iv) has had all questions which have been asked by the Investor satisfactorily answered by the Company.

(d) RESTRICTED SECURITIES. The Investor understands that the Shares and Warrants are "restricted securities" as such term is defined in Rule 144 of Regulation D promulgated under the Securities Act ("RULE 144") and must be held indefinitely unless they are subsequently registered or qualified under applicable state and federal securities laws or an exemption from such registration or qualification is available. The Investor understands that he, she or it may resell the Shares and Warrant Shares pursuant to Rule 144 only after the satisfaction of certain requirements, including the requirement that the Shares and Warrants Shares be held for at least one year prior to resale.

(e) NO OBLIGATION TO REGISTER. The Investor further acknowledges and understands that, except as provided in the Registration Rights Agreement, the Company is under no obligation to register the Shares, Warrants or Warrant Shares. The Investor understands that the certificate evidencing the Shares, Warrants and Warrant Shares will be imprinted with a legend which prohibits the

transfer of the Shares, Warrants and Warrant Shares unless they are registered or such registration is not required in the opinion of counsel in form and substance satisfactory to the Company.

(f) FOREIGN INVESTOR REPRESENTATION. If the Investor is not a "U.S. person" (as such term is defined in Rule 902(k) of Regulation S promulgated under the Securities Act), such Investor hereby represents that it has satisfied itself as to the full observance of the laws of its jurisdiction in connection with any invitation to subscribe for the Shares and Warrants or any use of this Agreement, including (i) the legal requirements within its jurisdiction for the purchase of the Shares and Warrants, (ii) any foreign exchange restrictions applicable to such purchase, (iii) any governmental or other consents that may need to be obtained, and (iv) the income tax and other tax consequences, if any, that may be relevant to the purchase, holding, redemption, sale or transfer of the Shares and Warrants. Such Investor's subscription and payment for, and its continued beneficial ownership of the Shares and Warrants, will not violate any applicable securities or other laws of its jurisdiction.

(g) DOMICILE. The Investor is a bona fide resident and domiciliary (not a temporary or transient resident) of the state indicated on Schedule 1 hereto and he, she or it has no present intention of becoming a resident of any other state or jurisdiction.

(h) NO NEED FOR LIQUIDITY. The Investor's aggregate holding of securities that are "restricted securities" or otherwise not readily marketable is not excessive in view of the Investor's net worth and financial circumstances and the purchase of the Shares and Warrants will not cause such commitment to become excessive.

(i) INDEPENDENT ADVICE. The Investor understands that the Company urges the Investor to seek independent advice from professional advisors relating to the suitability for the Investor of an investment in the Company in view of the Investor's overall financial needs and with respect to legal and tax implications of such an investment.

5. RELIANCE. The Investor understands that the Company may rely on the representations and warranties in Section 4 in determining whether to permit the Investor to purchase the Shares and Warrants. If for any reason any representations and warranties are no longer true and accurate prior to the Closing Date, the Investor will give the Company prompt written notice of the inaccuracy. By signing below, the Investor represents that the Investor has read and confirmed the truth and accuracy of each of the foregoing representations and warranties.

6. ADDITIONAL COVENANTS OF THE PARTIES.

(a) INDEMNIFICATION. Each party agrees to indemnify and hold harmless the other parties hereto and each of its directors, officers, agents and affiliates (as applicable) from and against any and all loss, damage or liability due to or arising out of a breach of any representation, warranty or covenant of contained in this Agreement and made by the indemnifying party, provided however, that this Section 6 shall not be construed to require any Investor (i) to so indemnify and hold harmless any other Investor or (ii) to so indemnify and hold harmless the Company for any such breach by any other Investor. The liability of any Investor to provide indemnification pursuant to this Section 6 shall be limited to the amount such Investor paid to the Company for the purchase of such Investor's Shares and Warrants.

(b) PLEDGE OF SECURITIES. The Company acknowledges and agrees that the Shares, Warrants and Warrant Shares may be pledged by an Investor in connection with a bona fide margin agreement or other loan or financing arrangement that is secured by the Shares Warrants or Warrant Shares. The pledge of the Shares, Warrants or Warrant Shares shall not be deemed to be a transfer, sale or assignment of the Shares, Warrants or Warrant Shares hereunder, and no Investor effecting a pledge of Shares, Warrants or Warrant Shares shall be required to provide the Company with any notice thereof or otherwise make any delivery to the Company pursuant to this Agreement or any other Transaction Agreement. The Company hereby agrees to execute and deliver such documentation as a pledgee of the Shares, Warrants or Warrant Shares may reasonably request in connection with a pledge of the thereof to such pledgee by an Investor.

(c) SECURITIES LAWS DISCLOSURE; PUBLICITY. The Company shall (i) on or promptly after the Closing Date, issue a press release acceptable to SDS disclosing the transactions contemplated hereby, and (ii) promptly after the Closing Date, file with the Commission a Report on Form 8-K disclosing the transactions contemplated hereby. Except as provided in the preceding sentence, neither the Company nor the Investors shall make any press release or other publicity about the terms of this Agreement or the transactions contemplated hereby without the prior approval of the other unless otherwise required by law, regulation or the rules of the Commission. In addition, the Company agrees that it shall not disclose, and shall not include in any public filing or other announcement, the name of any Investor, unless expressly agreed to in writing by such Investor or unless and until such disclosure is, in the reasonable opinion of counsel to the Company, required by law or applicable regulation, and then only to the extent of such requirement.

(d) LISTING. The Company shall promptly secure the listing of the Shares and Warrant Shares (and any Registrable Securities (as defined in the Registration Rights Agreement) that may from time to time be issued or issuable) upon each national securities exchange or automated quotation system or bulletin board, if any, upon which shares of Common Stock are then listed (subject to official notice of issuance) and, so long as any of the Investors owns any of the Registrable Securities (as defined in the Registration Rights Agreement), shall maintain, so long as any other shares of Common Stock shall be so listed, such listing of all Shares issued pursuant to this Agreement and Warrant Shares issuable upon exercise of or otherwise pursuant to the Warrants, and any Registrable Securities (as defined in the Registration Rights Agreement) that may from time to time be issued or issuable. To the extent that any Common Stock is so listed, the Company will obtain and, so long as the Investor owns any of the Registrable Securities (as defined in the Registration Rights Agreement), maintain the listing and trading of its Common Stock on the Nasdaq SmallCap, the Nasdaq National Market, the New York Stock Exchange, or the American Stock Exchange and will comply in all respects with the Company's reporting, filing and other obligations under the bylaws or rules of any exchanges or automated quotation systems on which the Common Stock is then listed.

7. RESTRICTIVE LEGENDS AND STOP-TRANSFER ORDERS.

(a) LEGEND. The instruments representing the Shares, Warrants and, if applicable, Warrant Shares shall bear the following legend or similar legend (as well as any legends required by applicable state and federal corporate and securities laws):

THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 (THE "ACT") AND MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED UNLESS AND UNTIL REGISTERED UNDER THE ACT OR, IN THE OPINION OF COUNSEL IN FORM AND SUBSTANCE SATISFACTORY TO THE ISSUER OF THESE SECURITIES, SUCH OFFER, SALE OR TRANSFER, PLEDGE OR HYPOTHECATION IS IN COMPLIANCE THEREWITH.

(b) REMOVAL OF LEGEND AND TRANSFER RESTRICTIONS. Any legend endorsed on a certificate pursuant to this Section 7 shall be removed, and the Company shall issue a certificate without such legend to the holder of such Shares or Warrant Shares if (i) such Shares or Warrant Shares are resold pursuant to a registration statement under the Securities Act, and a prospectus meeting the requirements of Section 11 of the Securities Act is delivered or deemed delivered to the purchaser of such Shares or Warrant Shares, (ii) if such holder satisfies the requirements of Rule 144(k) or (iii) if such holder provides the Company with an opinion of counsel for such holder of the Shares or Warrant Shares, reasonably satisfactory to the Company, to the effect that a sale, transfer or assignment of such Shares or Warrant Shares may be made without registration.

8. PRICE PROTECTION. If the Company issues or sells any shares of its Common Stock or Common Stock Equivalents, other than Excluded Shares (as that term is defined below) ("ADDITIONAL SHARES") at any time after the Closing Date and prior to June 30, 2004 (the "ADJUSTMENT PERIOD") for a consideration per share (the "DILUTIVE PRICE") (a) less than the Share Price (as adjusted for stock splits, stock dividends and the like) and (b) if Additional Shares have been previously issued during the Adjustment Period with respect to which the Company has fully complied with this Section 8, then also less than the lowest Dilutive Price (as adjusted for stock splits, stock dividends and the like) at which such Additional Shares have been previously issued during the Adjustment Period, then the Company will issue to each Investor a number of shares, if positive, of Common Stock to such Investor determined by the following formula:

$$X = (A * B / C) - (A + D)$$

Where: X = the number of shares of Common Stock to be issued to the Investor, rounded to the nearest whole number;

A = the number of Shares (as adjusted for stock splits, stock dividends and the like) then held by such Investor;

- B = the Share Price (as adjusted for stock splits, stock dividends and the like);
- C = the applicable Dilutive Price; and
- D = the aggregate number of shares of Common Stock (as adjusted for stock splits, stock dividends and the like) issued to the Investor pursuant to this Section 8 prior to the date of such determination.

For purposes of this Agreement, the term "EXCLUDED SHARES" means: (i) shares of Common Stock issuable or issued after the Closing Date to officers, employees, consultants or directors of the Company directly or pursuant to a stock purchase, stock option, restricted stock or other written compensation plan or agreement approved by the Board of Directors of the Company (the "BOARD"); (ii) shares of Common Stock issued or issuable after the Closing Date, primarily for non-equity financing purposes and as approved by the Board, to financial institutions or lessors in connection with commercial credit arrangements, equipment financings or similar transactions or to vendors of goods or services or customers; (iii) shares of Common Stock issuable upon (a) exercise of warrants, options, notes or other rights to acquire securities of the Company, in each case, outstanding on the date of this Agreement, (b) conversion of shares of the Company's Preferred Stock, par value \$0.01 per share outstanding on the date of this Agreement or (c) exchange of promissory notes issued by the Company outstanding on the date of this Agreement; (iv) capital stock or warrants or options to purchase capital stock issued in connection with bona fide acquisitions, mergers or similar transactions, the terms of which are approved by the Board; (v) shares of Common Stock issued or issuable to licensors of technology of the Company to pay expenses, royalties or milestone payments for which the Company is obligated under any licensing or related agreement; (vi) shares of Common Stock issuable or issued pursuant to stock splits, stock dividends and the like, or (vii) shares of Common Stock issued or issuable by way of dividend or other distribution on Excluded Shares.

If the Company shall issue or sell any warrants or other rights to subscribe for or purchase any additional shares of Common Stock or any securities convertible into shares of Common Stock (collectively, "COMMON STOCK EQUIVALENTS") during the Adjustment Period, whether or not the rights to exchange or convert thereunder are immediately exercisable, and the effective price per share for which Common Stock is issuable upon the exercise, exchange or conversion of such Common Stock Equivalents shall be less than (i) the Share Price (as adjusted for stock splits, stock dividends and the like) and (ii) if Additional Shares have been previously issued during the Adjustment Period with respect to which the Company has fully complied with this Section 8, then also less than the lowest Dilutive Price (as adjusted for stock splits, stock dividends and the like) at which such Additional Shares have been previously issued during the Adjustment Period, then the Company shall issue to the Investor that number of shares of Common Stock that would be issuable pursuant to this Section 8 on the basis that the maximum number of additional shares of Common Stock issuable pursuant to all such Common Stock Equivalents shall be deemed to have been issued and

outstanding and the Company shall have received all of the consideration payable therefor, if any, as of the date of the actual issuance of such Common Stock Equivalents. No further issuances shall be made under this Section 8 upon the actual issue of such Common Stock upon the exercise, conversion or exchange of such Common Stock Equivalents, unless such actual issue is at a per share consideration lower than the Dilutive Price used for purposes of the initial adjustment pursuant to this Section 8.

9. PARTICIPATION RIGHTS.

(a) Subject to the terms and conditions specified in this Section 9, the Company hereby grants to each Investor a right of first offer with respect to sales by the Company of Additional Shares, which in no event shall include Excluded Shares, on the same terms and conditions as offered by the Company to the other purchasers of such Additional Shares. If the Company proposes to offer any Additional Shares for sale at any time after June 30, 2004 and before the first anniversary of the Closing Date, the Company shall make an offering of such Additional Shares to each Investor in accordance with the following provisions:

(i) The Company shall deliver a notice (the "ISSUANCE NOTICE") to each Investor stating (A) its bona fide intention to offer such Additional Shares, (B) the number of such Additional Shares to be offered, (C) the price and terms, if any, upon which it proposes to offer such Additional Shares, and (D) the anticipated closing date of the sale of such Additional Shares.

(ii) By written notification received by the Company, within five trading days after giving of the Issuance Notice (the "RESPONSE PERIOD"), any Investor may elect to purchase or obtain, at the price and on the terms specified in the Issuance Notice, up to its Pro Rata Amount (as defined below) of such Additional Shares. The "PRO RATA AMOUNT" for any given Investor shall equal that portion of the Additional Securities the price of which is equal to 50% of the aggregate purchase price that such Investor paid to the Company upon the Closing under this Agreement, and in such event the Company shall be obligated to sell such number of Additional Securities to each such Investor, even if the aggregate Pro Rata Amount for all such Investors exceeds the aggregate amount of Additional Securities that the Company had initially proposed to offer. Any such purchase shall be completed at the same closing as that of any third party purchasers or at an additional closing thereunder.

(iii) The Company may, during the 75-day period following the expiration of the Response Period, offer the remaining unsubscribed portion of such Additional Shares to any person or persons on substantially similar terms to those specified in the Issuance Notice. If the Company does not consummate the sale of such Additional Shares within such period or if such Additional Shares are offered on terms not substantially similar to the terms of the offer specified in the Issuance Notice, the right provided hereunder shall be deemed to be revived and such Additional Shares shall not be offered or sold unless first reoffered to the Investors in accordance herewith.

(b) The participation right set forth in this Section 9 may not be assigned or transferred, except that such right is assignable by each Investor to any wholly-owned subsidiary or parent of, or to any corporation or entity that is, within the meaning of the Securities Act, controlling, controlled by or under common control with, any such Investor, provided in any event that such

assignee is an "accredited investor" as such term is defined in Rule 501(a) promulgated under the Securities Act.

10. MISCELLANEOUS.

(a) GOVERNING LAW. This Agreement, all acts and transactions pursuant hereto and the rights and obligations of the parties hereto shall be governed, construed and interpreted in accordance with the laws of the state of California, without giving effect to principles of choice of law.

(b) JURISDICTION AND VENUE. Any legal action or other legal proceeding relating to this Agreement or the enforcement of any provision of this Agreement shall be brought or otherwise commenced in any state or federal court located in the County of San Diego, California. Each party to this Agreement: (i) expressly and irrevocably consents and submits to the jurisdiction of each state and federal court located in the County of San Diego, California and each appellate court located in the state of California, in connection with any such legal proceeding; (ii) agrees that each state and federal court located in the County of San Diego, California shall be deemed to be a convenient forum; and (iii) agrees not to assert, by way of motion, as a defense or otherwise, in any such legal proceeding commenced in any state or federal court located in the County of San Diego, California any claim that such party is not subject personally to the jurisdiction of such court, that such legal proceeding has been brought in an inconvenient forum, that the venue of such proceeding is improper or that this Agreement or the subject matter of this Agreement may not be enforced in or by such court.

(c) ENTIRE AGREEMENT. This Agreement embodies the entire agreement and understanding between the parties hereto with respect to the subject matter hereof and supersedes all prior oral or written agreements and understandings relating to the subject matter hereof. No statement, representation, warranty, covenant or agreement of any kind not expressly set forth in this Agreement shall affect, or be used to interpret, change or restrict, the express terms and provisions of this Agreement.

(d) NOTICES. All notices and other communications hereunder shall be in writing and shall be given (and shall be deemed to have been duly given upon receipt) by delivery in person or facsimile transmission (received at the facsimile machine to which it is transmitted prior to 5:00 p.m., local time, on a business day in the State of California, for the party to which it is sent), by courier or express delivery service or by registered or certified mail (postage prepaid, return receipt requested) to the respective parties at the following addresses (or at such other address for a party as shall be specified in a notice given in accordance with this Section):

if to the Company:

ADVENTRX Pharmaceuticals, Inc.
9948 Hibert Street, Suite 100
San Diego, CA 92131
Attention: Nicholas J. Virca
Facsimile: (858) 271-9678

with a copy to (not to constitute notice):

Bingham McCutchen LLP
3 Embarcadero Center
San Francisco, CA 94111-4067
Attention: Henry D. Evans, Jr.
Facsimile: (415) 393-2286

if to the Investor:

To the address set forth in Schedule 1 hereto.

(e) AMENDMENTS AND WAIVERS. Any term of this Agreement may be amended, waived or departed from only with the written consent of the Company and the holders of a majority of the Shares then held by Investors. Any amendment or waiver effected in accordance with this Section 10(e) shall be binding upon each party to this Agreement, whether or not such party has signed such amendment or waiver. No such waiver or consent shall be deemed to be or shall constitute a waiver or consent with respect to any other terms or provisions of this Agreement, whether or not similar. Each such waiver or consent shall be effective only in the specific instance and for the purpose for which it was given, and shall not constitute a continuing waiver or consent. No such amendment shall be effective to the extent that it applies to less than all of the Investors or their Shares, Warrants and Warrant Shares then outstanding. No consideration shall be offered or paid to any person to amend or consent to a waiver or modification of any provision of this Agreement, the Registration Rights Agreement or the Warrants unless the same consideration also is offered to all the parties to this Agreement or the Registration Rights Agreement or holders of the Warrants, as the case may be. The Company shall give prompt written notice to an Investor of any amendment hereof or waiver hereunder that was effected without the Investor's written consent.

(f) SUCCESSORS AND ASSIGNS. This Agreement is personal to each of the parties and may not be assigned without the written consent of the other parties; provided, however, that any of the Investors shall be permitted to assign this Agreement to any person to whom it assigns or transfers securities issued or issuable pursuant to this Agreement in compliance with applicable securities laws and this Agreement. Any assignee must be an "accredited investor" as defined in Rule 501(a) promulgated under the Securities Act.

(g) SEVERABILITY. In the event that any court of competent jurisdiction shall determine that any provision, or any portion thereof, contained in this Agreement shall be unenforceable in any respect, then such provision shall be deemed limited to the extent that such court deems it enforceable, and as so limited shall remain in full force and effect. In the event that such court shall deem any such provision, or portion thereof, wholly unenforceable, the remaining provisions of this Agreement shall nevertheless remain in full force and effect.

(h) INTERPRETATION. The parties hereto acknowledge and agree that: (i) each party and such party's counsel has reviewed the terms and provisions of this Agreement; (ii) the rule of construction to the effect that any ambiguities are resolved against the drafting party shall not be employed in the interpretation of this Agreement; and (iii) the terms and provisions of this Agreement shall be construed fairly as to the parties hereto and not in favor of or against any party, regardless of which party was generally responsible for the preparation of this Agreement. Whenever used herein, the singular number

shall include the plural, the plural shall include the singular, the use of any gender shall include all persons.

(i) HEADINGS AND CAPTIONS. The headings and captions of the various subdivisions of this Agreement are for convenience of reference only and shall in no way modify, or affect the meaning or construction of any of the terms or provisions hereof.

(j) NO WAIVER OF RIGHTS, POWERS AND REMEDIES. No failure or delay by a party hereto in exercising any right, power or remedy under this Agreement, and no course of dealing between the parties hereto, shall operate as a waiver of any such right, power or remedy of the party. No single or partial exercise of any right, power or remedy under this Agreement by a party hereto, nor any abandonment or discontinuance of steps to enforce any such right, power or remedy, shall preclude such party from any other or further exercise thereof or the exercise of any other right, power or remedy hereunder. The election of any remedy by a party hereto shall not constitute a waiver of the right of such party to pursue other available remedies. No notice to or demand on a party not expressly required under this Agreement shall entitle the party receiving such notice or demand to any other or further notice or demand in similar or other circumstances or constitute a waiver of the rights of the party giving such notice or demand to any other or further action in any circumstances without such notice or demand.

(k) SURVIVAL OF REPRESENTATIONS AND WARRANTIES. All representations and warranties made by the parties hereto in this Agreement, shall survive (i) the execution and delivery hereof, (ii) any investigations made by or on behalf of the parties and (iii) the closing of the transaction contemplated hereby.

(l) EXPENSES. Except as otherwise provided in any other Transaction Agreement, the Company and each Investor shall each be responsible for the payment of and bear their own expenses and legal fees relating to the preparation and negotiation of the Transaction Agreements and the consummation of the Transactions, provided, however, that in the event of the successful consummation of the transactions contemplated by this Agreement, the Company shall pay the reasonable legal fees and other third-party expenses, up to \$45,000, of SDS incurred with respect to the preparation and negotiation of the Transaction Agreements and the consummation of the transactions hereunder.

(m) COUNTERPARTS AND FACSIMILE DELIVERY. This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Any signature page delivered by facsimile or other electronic image transmission shall be binding to the same extent as an original signature page, with regard to any agreement subject to the terms hereof or any amendment thereto. Any party who delivers such a signature page agrees to later deliver an original counterpart to any party who requests it.

(n) SECURITIES LAW COMPLIANCE.

(i) SECURITIES ACT. The Company shall timely prepare and file with the Commission the form of notice of the sale of securities pursuant to the

requirements of Regulation D regarding the sale of the Shares and Warrants under this Agreement.

(ii) STATE SECURITIES LAW COMPLIANCE -- SALE. The Company shall timely prepare and file such applications, consents to service of process (but not including a general consent to service of process) and similar documents and take such other steps and perform such further acts as shall be required by the state securities law requirements of each jurisdiction where an Investor resides, as indicated on Schedule 1, with respect to the sale of the Shares and Warrants under this Agreement.

(iii) STATE SECURITIES LAW COMPLIANCE --RESALE. Beginning no later than June 30, 2004 and continuing until (i) the purchasers have sold all of their Registrable Securities under a Registration Statement pursuant to Section 8 or (ii) the Common Stock becomes a "covered security" under Section 18(b)(1)(A) of the Securities Act, the Company shall maintain within either Moody's Industrial Manual or Standard and Poor's Standard Corporation Descriptions (or any successors to these manuals which are similarly qualified as "recognized securities manuals" under state Blue Sky laws) an updated listing containing (i) the names of the officers and directors of the Company, (ii) a balance sheet of the Company as of a date that is at no time older than eighteen months and (iii) a profit and loss statement of the Company for either the preceding fiscal year or the most recent year of operations. Capitalized terms used in this Section 10(n)(iii), but not otherwise defined in this Agreement, shall have the meanings assigned in the Registration Rights Agreement.

(o) INDEPENDENT NATURE OF INVESTORS' OBLIGATIONS AND RIGHTS. The obligations of each Investor under the Transaction Agreements are several and not joint with the obligations of any other Investor, and no Investor shall be responsible in any way for the performance of the obligations of any other Investor under any such agreement. Nothing contained in any Transaction Agreement, and no action taken by any Investor pursuant thereto, shall be deemed to constitute the Investors as a partnership, an association, a joint venture or any other kind of entity, or create a presumption that the Investors are in any way acting in concert or as a group with respect to such obligations or the Transactions. Each Investor shall be entitled to independently protect and enforce its rights, including without limitation, the rights arising out of the Transaction Agreements, and it shall not be necessary for any other Investor to be joined as an additional party in any proceeding for such purpose. Each Investor represents that it has been represented by its own separate legal counsel in its review and negotiation of the Transaction Agreements. For reasons of administrative convenience only, the Investors acknowledge and agree that they and their respective counsel have chosen to communicate with the Company and its counsel through Wiggin, but neither Wiggin nor the Company's counsel represent any of the Investors in this transaction, except that Wiggin represents SDS.

[Signature page follows.]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first above written.

ADVENTRX PHARMACEUTICALS, INC.

By: -----

Name: -----

Title: -----

[Investor signature pages follow.]

OMNIBUS SIGNATURE PAGE

ADVENTRX PHARMACEUTICALS, INC.

COMMON STOCK AND WARRANT PURCHASE AGREEMENT

The undersigned hereby executes and delivers the Common Stock and Warrant Purchase Agreement (the "AGREEMENT") to which this signature page is attached, which, together with all counterparts of the Agreement and signature pages of the other parties named in the Agreement, shall constitute one and the same document in accordance with the terms of the Agreement.

Print Name:

By:

Name:

Title:

Address:

Telephone:

Facsimile:

SSN/EIN#:

Number of Shares of Common Stock
Purchased

Number of A-1 Warrants Purchased

Number of A-2 Warrants Purchased

Aggregate Purchase Price

SCHEDULE 1

ADVENTRX Pharmaceuticals, Inc.

Common Stock and Warrant Purchase Agreement

Investors and Shares of Common Stock and Warrants

Name, Address and Fax		Shares of	Common Stock	Common Stock	
Number of Investor	Copies of	Common Stock	Underlying	Underlying	
	Notices to	Purchased	A-1 Warrants	A-2 Warrants	Purchase Price

\$

SCHEDULE 3
DISCLOSURE SCHEDULE

EXHIBIT A-1

Form of A-1 Common Stock Purchase Warrant

EXHIBIT A-2

Form of A-2 Common Stock Purchase Warrant

EXHIBIT B

Form of Closing Escrow Agreement

EXHIBIT C

Form of Registration Rights Agreement

EXHIBIT D

Form of Opinion of Company's Counsel

EXHIBIT E

INVESTOR SUITABILITY QUESTIONNAIRE

ADVENTRX PHARMACEUTICALS, INC. (THE "COMPANY")

I. INDIVIDUAL INVESTORS ONLY

(ALL INFORMATION WILL BE TREATED CONFIDENTIALLY)

A. PERSONAL INFORMATION

Name: -----
(Exact name as it should appear on stock certificate.)

Residence Address: -----

Home Telephone Number: -----

Fax Telephone Number: -----

Email Address: -----

Social Security Number: -----

B. DELIVERY INFORMATION (Applicable only if different than residence.)

Name of Institution or Destination: -----

Contact Name: -----

Delivery Address: -----

Account Reference (if applicable): -----

Contact Telephone Number: -----

Contact Fax Telephone Number: -----

Contact Email Address: -----

C. EMPLOYMENT INFORMATION

Occupation: -----

Number of Years: -----

Present Employer: -----

Position/Title: -----

Business Address: -----

Business Telephone: -----

D. RESIDENT INFORMATION

Set forth in the space provided below the state(s)/country(ies) in which you have maintained your principal residence during the past three years and the date during which you resided in each state/country.

Are you registered to vote in, or do you have a driver's license issued by, or do you maintain a residence in any other state? If yes, in which state(s)?

Yes _____

No _____

E. INCOME

Do you reasonably expect either your own income from all sources during the current year to exceed \$200,000 or the joint income of you and your spouse (if married) from all sources during the current year to exceed \$300,000?

Yes _____

No _____

If not, please specify the amount:

What percentage of your income as shown above is anticipated to be derived from sources other than salary?

Was either your yearly income from all sources during each of the last two years in excess of \$200,000 or was the joint income of you and your spouse (if married) from all sources during each of such years in excess of \$300,000?

Yes _____ No _____

If no, please specify the amount for:

Last Year: -----

Year Before Last: -----

F. NET WORTH

Will your net worth* as of the date you purchase securities of the Company, together with the net worth of your spouse, be in excess of \$1,000,000?

Yes _____ No _____

If not, please specify amount:

* As used in this questionnaire the term "net worth" means the amount by which total assets exceed total liabilities. In computing net worth for purposes of this Item 5, you should value your principal residence at cost, including cost of improvements, or at that value recently appraised by an institutional lender making a secured loan or otherwise by a certified appraiser, net of encumbrances.

G. EDUCATION

Please describe your educational background and degrees obtained, if any.

H. AFFILIATION

If you have any pre-existing personal or business relationship with the Company or any of its officers, directors or controlling persons, please describe the nature and duration of such relationship.

I. BUSINESS AND FINANCIAL EXPERIENCE

Please describe in reasonable detail the nature and extent of your business, financial and investment experience which you believe give you the capacity to evaluate the merits and risks of the proposed investment and the capacity to protect your interests.

Are you purchasing the securities offered for your own account and for investment purposes only?

Yes _____

No _____

If no, please state for whom you are investing and/or the reason for investing.

DATE: _____

INDIVIDUAL INVESTOR:

By: _____

(signature)

Name: _____

(please print)

II. ENTITY INVESTORS ONLY

A. ENTITY NAME AND CONTACT INFORMATION

Name: _____
(Exact name as it should appear on stock certificate.)

Name of Institution or Destination: _____
(Include if different from stock certificate.)

Address: _____

Account Reference (if applicable): _____

Tax Identification Number (if applicable): _____

Contact Name: _____

Contact Telephone Number: _____

Contact Fax Number: _____

Contact Email Address: _____

B. GENERAL INFORMATION

Under the laws of what jurisdiction was the Investor formed?

Was the Investor formed for the purpose of investing in the securities being offered?

Yes _____ No _____

Set forth in the space provided below the (i) state(s), if any, in the United States in which you maintained your principal office during the past two years and the dates during which you maintained your office in each state, (ii) the state(s), if any, in which you are incorporated or otherwise organized, and (iii) the state(s), if any, in which you still pay income taxes:

C. ACCREDITED INVESTOR INFORMATION

(i) Is the Investor a national bank or a banking institution organized under the laws of any state or any territory of the United States or the District of Columbia?

Yes _____ No _____

(ii) Is the Investor a savings and loan association, building and loan association, cooperative bank, homestead association, or similar institution, which is supervised and examined by any state or federal authority having supervision over such institution?

Yes _____ No _____

(iii) Is the Investor a broker or dealer registered pursuant to Section 15 of the Securities Exchange Act of 1934?

Yes _____ No _____

(iv) Is the Investor a company (i) whose primary and predominant business is underwriting insurance and subject to the supervision by a regulatory agency under the laws of any state or territory, or (ii) registered as an investment company under the Investment Company Act of 1940, or (iii) a Small Business Investment Company licensed by the U.S. Small Business Administration?

Yes _____ No _____

(v) Is the Investor a "business development company" within the meaning of the Investment Company Act of 1940 or the Investment Advisers Act of 1940?

Yes _____ No _____

(vi) Is the Investor an employee benefit plan under the Employee Retirement Income Security Act of 1974 (a "PLAN") with assets in excess of \$5,000,000?

Yes _____ No _____

(a) If the Investor is such a Plan, but if the Plan's total assets do not exceed \$5,000,000, are investment decisions for the Plan made by a bank, savings and loan association, insurance company or registered investment adviser acting as fiduciary? (If yes, please specify the name of the fiduciary.)

Yes _____ No _____

Name of Fiduciary:

(b) If the Investor is a self-directed Plan, but if the Plan's total assets do not exceed \$5,000,000, are investment decisions made solely by (1) a person or entity that can answer "yes" to one or more questions under paragraphs (i) - (ix) of this Item C; (2) persons whose net worth, or joint net worth with their spouses, exceeds \$1,000,000; (3) persons whose income without regard to that of their spouses exceeded \$200,000, or whose joint income with their spouses exceeded \$300,000, in each of the last two years and who reasonably expect such person income to exceed \$200,000 or such joint income to exceed \$300,000 this year; or (4) persons who are brokers or dealers registered pursuant to Section 15 of the Securities Exchange Act of 1934? (If yes, please specify the applicable subpart of this question or Item.)

Yes _____ No _____

Subpart or Item: _____

(vii) Is the Investor (A)(1) a tax exempt organization which is qualified under Section 501(c)(3) of the Internal Revenue Code of 1986 as amended, or (2) a corporation, or (3) a Massachusetts or similar business trust, or (4) a partnership, not formed for the specific purpose of acquiring the securities offered, and (B) which has assets in excess of \$5,000,000?

Yes _____ No _____

(viii) Is the Investor a trust, with total assets in excess of \$5,000,000, not formed for the specific purpose of acquiring the securities offered, whose purchase is directed by a person who has such knowledge and experience in financial and business matters that he is capable of evaluating the merits and risks of the prospective investment?

Yes _____ No _____

If yes, please attach a memorandum describing such person's educational background, professional memberships or licenses, current employment, principal business and professional activities during the last five years, and experience as an investor in securities. Include any additional information evidencing that such person has sufficient knowledge and experience in financial matters that such person would be capable of evaluating the merits and risks of investing in the securities being offered.

(ix) Is the Investor an entity in which all of the equity owners are persons who are either (1) entities described in paragraphs (i) through (viii) above; (2) persons whose net worth, or joint net worth with their spouses, exceeds \$1,000,000; (3) persons whose income without regard to that of their spouses exceeded \$200,000, or whose joint income with their spouses exceeded \$300,000, in each of the last two years and who reasonably expect such person income to exceed \$200,000 or such joint income to exceed \$300,000 this year; or (4) persons who are brokers or dealers registered pursuant to Section 15 of the Securities Exchange Act of 1934?

Yes _____ No _____

If an equity owner is an entity described in paragraph (vi) under this Item C, please provide the information required by such paragraph.

The above information has been requested by the Company and will be used solely to confirm that the Company is complying with certain securities regulations. In furnishing the above information, the undersigned acknowledges that the Company will be relying thereon in assessing the requirements of the Securities Act of 1933, as amended, and other applicable securities laws.

The information contained in this questionnaire is true and complete, and the undersigned understands that the Company and its counsel will rely on such information for the purpose of complying with all applicable securities laws, as discussed above. The undersigned agrees to notify the Company promptly of any change in the foregoing information which may occur prior to any purchase by the undersigned of stock from the Company.

Date: -----

ENTITY INVESTOR:

By: -----
(signature)

Name: -----
(please print)

Title: -----
(please print)

THIS WARRANT HAS BEEN, AND THE SHARES OF COMMON STOCK WHICH MAY BE RECEIVED PURSUANT TO THE EXERCISE OF THIS WARRANT WILL BE, ACQUIRED SOLELY FOR INVESTMENT AND NOT WITH A VIEW TO, OR FOR RESALE IN CONNECTION WITH, ANY DISTRIBUTION THEREOF. NEITHER THIS WARRANT NOR SUCH SHARES (TOGETHER, THE "SECURITIES") HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR ANY STATE SECURITIES LAWS. SUCH SECURITIES MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED OR HYPOTHECATED IN THE ABSENCE OF SUCH REGISTRATION OR AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE COMPANY THAT SUCH DISPOSITION IS EXEMPT FROM THE REGISTRATION AND PROSPECTUS DELIVERY REQUIREMENTS OF THE ACT AND OF ANY APPLICABLE STATE SECURITIES LAWS.

NO. WA1-

ISSUED: APRIL 8, 2004

A-1 WARRANT TO PURCHASE COMMON STOCK

THIS CERTIFIES THAT, for good and valuable consideration, _____ (the "HOLDER") is entitled to purchase from Adventrx Pharmaceuticals, Inc., a Delaware corporation (the "COMPANY"), [30% COVERAGE] _____ (_____) fully paid and nonassessable shares of Common Stock, par value \$0.001 per share ("COMMON STOCK"), of the Company (as adjusted pursuant to Section 3 hereof) (the "WARRANT SHARES") at a price per share equal to Two Dollars (\$2.00) (as adjusted pursuant to Section 3 hereof) (the "EXERCISE PRICE"), subject to the provisions and upon the terms and conditions hereinafter set forth.

1. METHOD OF EXERCISE; PAYMENT.

(a) Exercise Period. The purchase right represented by this Warrant may be exercised in whole or part by the Holder during the term of this Warrant (as set forth in Section 9 hereof) at any time after the Commencement Date, as defined below, by the surrender of this Warrant (with the notice of exercise form attached hereto as Exhibit A (the "NOTICE OF EXERCISE") duly executed) at the principal office of the Company. If this Warrant shall have been exercised in part, the Company shall, at the time of delivery of the certificate or certificates representing Warrant Shares, deliver to the Holder a new Warrant evidencing the rights of the Holder to purchase the unpurchased shares of Common Stock called for by this Warrant, which new Warrant shall in all other respects be identical with this Warrant, or at the request of the Holder, appropriate notation may be made on this Warrant and the same returned to the Holder.

(b) Exercise. Upon exercise of this Warrant, the Holder shall pay the Company an amount equal to the product of (x) the Exercise Price multiplied by (y) the total number of Warrant Shares purchased pursuant to this Warrant, by wire transfer or certified check payable to the order of the Company -- or, at any time following the first anniversary of the Warrant Date, if there is not an effective Registration Statement (as defined in the Registration Rights Agreement) with respect to all of the Warrant Shares, then at the option of the Holder, such amount may be paid by the surrender of a portion of shares of Common Stock then held by the Holder or issuable upon such exercise of this Warrant, which shall be valued and credited toward such amount due to the Company for the exercise of the Warrant based upon the Current Market Price of the Common Stock. The person or persons in whose name(s) any certificate(s) representing the Warrant Shares shall be issuable upon exercise of this Warrant shall be deemed to have become the holder(s) of record of, and shall be treated for all purposes as the record holder(s) of, the Warrant Shares represented thereby (and such Warrant Shares shall be deemed to have been issued) immediately prior to the close of business on the date upon which this Warrant is exercised.

"CURRENT MARKET PRICE" means, in respect of any share of Common Stock on any date herein specified,

(1) if there shall not then be a public market for the Common Stock, the higher of

(a) the book value per share of Common Stock at such date, and

(b) the value per share of Common Stock at such date as determined in good faith by the Board,

or

(2) if there shall then be a public market for the Common Stock, the higher of (x) the book value per share of Common Stock at such date, and (y) the average of the daily market prices for the 10 consecutive trading days immediately before such date. The daily market price (the "DAILY MARKET PRICE") for each such trading day shall be (i) the closing price on such day on the principal stock exchange (including Nasdaq) on which such Common Stock is then listed or admitted to trading, or quoted, as applicable, (ii) if no sale takes place on such day on any such exchange, the last reported closing price on such day as officially quoted on any such exchange (including Nasdaq), (iii) if the Common Stock is not then listed or admitted to trading on any stock exchange, the last reported closing bid price on such day in the over-the-counter market, as furnished

by the National Association of Securities Dealers Automatic Quotation System or the National Quotation Bureau, Inc., (iv) if neither such corporation at the time is engaged in the business of reporting such prices, as furnished by any similar firm then engaged in such business, or (v) if there is no such firm, as furnished by any member of the National Association of Securities Dealers, Inc. (the "NASD") selected mutually by the holder of this Warrant and the Company or, if they cannot agree upon such selection, as selected by two such members of the NASD, one of which shall be selected by holder of this Warrant and one of which shall be selected by the Company.

(c) Stock Certificates. In the event of the exercise of this Warrant, certificates for the Warrant Shares so purchased shall be delivered to the Holder within a reasonable time after exercise, but in no case later than the date that is three business days following receipt by the Company of a Notice of Exercise duly completed and executed.

2. STOCK FULLY PAID; RESERVATION OF SHARES. All of the Warrant Shares issuable upon the exercise of the rights represented by this Warrant will, upon issuance and receipt of the Exercise Price therefor, be fully paid and nonassessable, and free from all preemptive rights, rights of first refusal or first offer, taxes, liens and charges with respect to the issuance thereof. During the period within which the rights represented by this Warrant may be exercised, the Company shall at all times have authorized and reserved for issuance a sufficient number of shares of its Common Stock to provide for the exercise of the rights represented by this Warrant.

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3. ADJUSTMENT OF EXERCISE PRICE AND NUMBER OF SHARES. The number and kind of Warrant Shares purchasable upon the exercise of this Warrant and the Exercise Price therefor shall be subject to adjustment from time to time upon the occurrence of certain events, as follows:

(a) Reclassification, Consolidation or Reorganization. In case of any reclassification of the Common Stock (other than a change in par value, or as a result of a subdivision or combination), or in case of any consolidation or merger of the Company with or into another corporation (other than a Change of Control, as defined below) (any of which is a "REORGANIZATION TRANSACTION"), the Company, or such successor corporation as the case may be, shall execute a new warrant, providing that the Holder shall have the right to exercise such new warrant, and procure upon such exercise and payment of the same aggregate Exercise Price, in lieu of the Warrant Shares theretofore issuable upon exercise of this Warrant, the kind and amount of shares of stock, other securities, money and property as would be payable for the Warrant Shares issuable upon exercise of this Warrant as if such Warrant Shares were outstanding on the consummation of the Reorganization Transaction. For purposes of this Warrant, the term "CHANGE OF CONTROL" shall mean (i) any acquisition of the Company by means of merger, acquisition, or other form of corporate reorganization in which outstanding shares of the Company are exchanged for securities or other consideration issued, or caused to be issued, by the acquiring corporation or its subsidiary or parent (other than a reincorporation transaction or change of domicile) and pursuant to which the holders of the outstanding voting securities of the Company immediately prior to such consolidation, merger or other transaction fail to hold equity securities representing a majority of the voting power of the Company or surviving entity immediately following such consolidation, merger or other transaction (excluding voting securities of the acquiring corporation held by such holders prior to such transaction) or (ii) a sale of all or substantially all of the assets of the Company.

(b) Stock Splits, Dividends and Combinations. In the event that the Company shall at any time subdivide the outstanding shares of Common Stock, or shall issue a stock dividend on its outstanding shares of Common Stock, the number of Warrant Shares issuable upon exercise of this Warrant immediately prior to such subdivision or to the issuance of such stock dividend shall be proportionately increased, and the Exercise Price shall be proportionately decreased, and in the event that the Company shall at any time combine the outstanding shares of Common Stock, the number of Warrant Shares issuable upon exercise of this Warrant immediately prior to such combination shall be proportionately decreased, and the Exercise Price shall be proportionately increased, effective at the close of business on the date of such subdivision, stock dividend or combination, as the case may be.

-3-

(c) Issuance of Additional Shares.

(i) If at any time while this Warrant is outstanding and after June 30, 2004, the Company shall issue or sell any shares of its Common Stock (other than Excluded Shares (as that term is defined below), "ADDITIONAL SHARES") in exchange for consideration in an amount per Additional Share less than the Exercise Price at the time the Additional Shares are issued or sold, then the Exercise Price immediately prior to such issue or sale shall be reduced to a price determined by dividing:

(1) an amount equal to the sum of (a) the number of shares of Common Stock outstanding immediately prior to such issue or sale multiplied by the then existing Exercise Price, plus (b) the consideration, if any, received by the Company upon such issue or sale, by

(2) the total number of shares of Common Stock outstanding immediately after such issue or sale.

(ii) The provisions of Section 3(c)(i) shall not apply to any deemed issuance of Additional Shares for which an adjustment is provided under Section 3(a) or 3(b). No adjustment of the number of shares of Common Stock acquirable upon exercise of this Warrant shall be made under Section 3(c) upon the issuance of any shares of Common Stock which are issued pursuant to the exercise of any warrants or other subscription or purchase rights or pursuant to the exercise of any conversion or exchange rights in any convertible securities, if any such adjustment shall previously have been made upon the issuance of such warrants or other rights or upon the issuance of such convertible securities (or upon the issuance of any warrant or other rights therefor) pursuant to Section 3(d).

For purposes of this Warrant the term "EXCLUDED SHARES" means: (i) shares of Common Stock issuable or issued after the Closing Date to officers, employees, consultants or directors of the Company directly or pursuant to a stock purchase, stock option, restricted stock or other written compensation plan or agreement approved by the Board of Directors of the Company (the "BOARD"); (ii) shares of Common Stock issued or issuable after the Closing Date, primarily for non-equity financing purposes and as approved by the Board, to financial institutions or lessors in connection with commercial credit arrangements, equipment financings or similar transactions or to vendors of goods or services or customers; (iii) shares of Common Stock issuable upon (a) exercise of warrants, options, notes or other rights to acquire securities of the Company, in each case, outstanding on the issuance date of this Warrant (the "WARRANT DATE"), (b) conversion of shares of the Company's Preferred Stock, par value \$0.01 per share, outstanding on the Warrant Date, (c) exchange of promissory notes issued by the Company outstanding on the Warrant Date, (iv) the Shares (as such term is defined Common Stock and Warrant Purchase Agreement, dated as of the Warrant Date, among the Company and the persons and entities listed on Schedule 1 thereto (the "PURCHASE AGREEMENT")); (v) the Warrants (as such term is defined in the Purchase Agreement); (vi) capital stock or warrants or options to purchase capital stock issued in connection with bona fide acquisitions, mergers or similar transactions, the terms of which are approved by the Board;

(vii) shares of Common Stock issued or issuable to licensors of technology of the Company to pay expenses, royalties or milestone payments for which the Company is obligated under any licensing or related agreement; (viii) shares of Common Stock issuable or issued pursuant to stock splits, stock dividends and the like, or (ix) shares of Common Stock issued or issuable by way of dividend or other distribution on Excluded Shares.

(d) Issuance of Common Stock Equivalents.

(i) If at any time while this Warrant is outstanding the Company shall issue or sell any warrants or other rights to subscribe for or purchase any additional shares of Common Stock or any securities convertible into shares of Common Stock (other than the Additional Shares) (collectively, "COMMON STOCK EQUIVALENTS"), whether or not the rights to exchange or convert thereunder are immediately exercisable, and the effective price per share for which Common Stock is issuable upon the exercise, exchange or conversion of such Common Stock Equivalents shall be less than the Exercise Price in effect immediately prior to the time of such issue or sale, then the Exercise Price shall be adjusted as provided in Section 3(c) on the basis that the maximum number of additional shares of Common Stock issuable pursuant to all such Common Stock Equivalents shall be deemed to have been issued and outstanding and the Company shall have received all of the consideration payable therefor, if any, as of the date of the actual issuance of such Common Stock Equivalents. No further adjustments to the current Warrant Price shall be made under this Section 3(d) upon the actual issue of such Common Stock upon the exercise, conversion or exchange of such Common Stock Equivalents.

(ii) Upon the expiration or termination of any such Common Stock Equivalents, the Exercise Price, to the extent in any way affected by or computed using such Common Stock Equivalents, shall be recomputed to reflect the issuance of the total number of shares of Common Stock (and convertible or exchangeable securities which remain in effect) actually issued upon the exercise, exchange or conversion of such Common Stock Equivalents to the extent that this Warrant is then outstanding.

(e) Other Action Affecting Common Stock. In case at any time or from time to time the Company shall take any action in respect of its Common Stock, other than the payment of dividends permitted by Section 3 or any other action described in Section 3, then, unless such action will not have a materially adverse effect upon the rights of the Holder, the number of shares of Common Stock or other stock into which this Warrant is exercisable and/or the purchase price thereof shall be adjusted in such manner as may be equitable in the circumstances.

(f) Certificate as to Adjustments. Upon the occurrence of each adjustment or readjustment of the Exercise Price, the Company, at its expense, shall promptly compute such adjustment or readjustment in accordance with the terms hereof and prepare and furnish to the Holder of this Warrant a certificate setting forth such adjustment or readjustment and showing in detail the facts upon which such

adjustment or readjustment is based. The Company shall, upon the written request at any time of the Holder of this Warrant, furnish or cause to be furnished to such Holder a like certificate setting forth (i) such adjustments and readjustments, (ii) the Exercise Price at the time in effect and (iii) the number of shares of Common Stock and the amount, if any, or other property which at the time would be received upon the exercise of Warrants owned by such Holder.

(g) Notice of Corporate Action. If at any time:

(i) the Company shall take a record of the holders of its Common Stock for the purpose of entitling them to receive a dividend (other than a cash dividend payable out of earnings or earned surplus legally available for the payment of dividends under the laws of the jurisdiction of incorporation of the Company) or other distribution, or any right to subscribe for or purchase any evidences of its indebtedness, any shares of stock of any class or any other securities or property, or to receive any other right, or

(ii) there shall be any capital reorganization of the Company, any reclassification or recapitalization of the capital stock of the Company or any consolidation or merger of the Company with, or any sale, transfer or other disposition of all or substantially all the property, assets or business of the Company to, another corporation, or

(iii) there shall be a voluntary or involuntary dissolution, liquidation or winding up of the Company;

then, in any one or more of such cases, the Company shall give to the Holder (i) at least 10-days' prior written notice of the date on which a record date shall be selected for such dividend, distribution or right or for determining rights to vote in respect of any such reorganization, reclassification, merger, consolidation, sale, transfer, disposition, dissolution, liquidation or winding up, and (ii) in the case of any such reorganization, reclassification, merger, consolidation, sale, transfer, disposition, dissolution, liquidation or winding up, at least 10-days' prior written notice of the date when the same shall take place. Such notice in accordance with the foregoing clause also shall specify (i) the date on which any such record is to be taken for the purpose of such dividend, distribution or right, the date on which the holders of Common Stock shall be entitled to any such dividend, distribution or right, and the amount and character thereof, and (ii) the date on which any such reorganization, reclassification, merger, consolidation, sale, transfer, disposition, dissolution, liquidation or winding up is to take place and the time, if any such time is to be fixed, as of which the holders of Common Stock shall be entitled to exchange their shares of Common Stock for securities or other property deliverable upon such reorganization, reclassification, merger, consolidation, sale, transfer, disposition, dissolution, liquidation or winding up. Each such written notice shall be sufficiently given if addressed to the Holder at the last address of the Holder appearing on the books of the Company and delivered in accordance with Section 11(d).

(h) Adjustment if Registration Statement Not Effective. If a Registration Statement (as defined in the Registration Rights Agreement, dated as of the Warrant Date, among the Company and the persons and entities listed on Schedule 1 thereto (the "REGISTRATION RIGHTS AGREEMENT")) is not effective

with respect to all the Registrable Securities (as defined in the Registration Rights Agreement), other than Registrable Securities held by holders (i) which have not complied with the Registration Rights Agreement, including, without limitation, Section 4 thereof, or (ii) have otherwise not permitted the Company to include such Registrable Securities on the Registration Statement, on or prior to November 12, 2004, then the Exercise Price shall be adjusted to equal \$1.50 (subject to adjustment for stock splits, reverse splits, stock dividends and the like, and subject to adjustment in proportion to any adjustment pursuant to Section 3(c)).

4. TRANSFER OF WARRANT. This Warrant may only be transferred in compliance with federal and state securities laws; provided, however, that the Company may withhold its consent to transfer or assignment of this Warrant to any person or entity who is deemed to be a competitor or prospective competitor of the Company, such determination to be made in the reasonable judgment of the Board. If, at the time of the surrender of this Warrant in connection with any transfer of this Warrant or the resale of the Warrant Stock, this Warrant or the Warrant Stock, as applicable, shall not be registered under the Securities Act, the Company may require, as a condition of allowing such transfer (i) that the Holder or transferee of this Warrant or the Warrant Stock as the case may be, furnish to the Company a written opinion of counsel that is reasonably acceptable to the Company to the effect that such transfer may be made without registration under the Securities Act, (ii) that the Holder or transferee execute and deliver to the Company an investment letter in form and substance acceptable to the Company and substantially in the form attached as Exhibit B hereto and (iii) that the transferee be an "accredited investor" as defined in Rule 501(a) promulgated under the Securities Act. Transfer of this Warrant and all rights hereunder, in whole or in part, in accordance with the foregoing provisions, shall be registered on the books of the Company to be maintained for such purpose, upon surrender of this Warrant at the principal office of the Company or the office or agency designated by the Company, together with a written assignment of this Warrant substantially in the form of Exhibit C hereto duly executed by the Holder or its attorney-in-fact and funds sufficient to pay any transfer taxes payable upon the making of such transfer. Upon such surrender and, if required, such payment, the Company shall execute and deliver a new Warrant or Warrants in the name of the assignee or assignees and in the denomination specified in such instrument of assignment, and shall issue to the assignor a new Warrant evidencing the portion of this Warrant not so assigned, and this Warrant shall promptly be cancelled. Following a transfer that complies with the requirements of this Section 4, the Warrant may be exercised by a new Holder for the purchase of shares of Common Stock regardless of whether the Company issued or registered a new Warrant on the books of the Company. This Section 4 shall survive the exercise or expiration of the Warrant.

5. CONDITIONS TO EXERCISE OF WARRANT.

(a) Each certificate evidencing the Warrant Shares issued upon exercise of this Warrant shall be stamped or imprinted with a legend substantially in the following form:

THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 (THE "ACT") AND MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED UNLESS AND UNTIL REGISTERED UNDER THE ACT OR, IN THE OPINION OF COUNSEL IN FORM AND

SUBSTANCE SATISFACTORY TO THE ISSUER OF THESE SECURITIES, SUCH OFFER, SALE OR TRANSFER, PLEDGE OR HYPOTHECATION IS IN COMPLIANCE THEREWITH.

(b) REMOVAL OF LEGEND AND TRANSFER RESTRICTIONS. Any legend endorsed on a certificate pursuant to this Section 5 shall be removed, and the Company shall issue a certificate without such legend to the holder of such Warrant Shares if (i) such Warrant Shares are resold pursuant to a registration statement under the Securities Act of 1933, as amended, and a prospectus meeting the requirements of Section 10 of the Securities Act is delivered or deemed delivered to the purchaser of such Warrant Shares, (ii) if such holder satisfies the requirements of Rule 144(k) or (iii) if such holder provides the Company with an opinion of counsel for such holder of the Warrant Shares, reasonably satisfactory to the Company, to the effect that a sale, transfer or assignment of such Warrant Shares may be made without registration. This paragraph shall survive any exercise of this Warrant.

(c) RESTRICTIONS ON EXERCISE AMOUNT. Unless a Holder delivers to the Company irrevocable written notice (x) prior to the date of issuance hereof or 61 days prior to the effective date of such notice that this Section 5(c) shall not apply to such Holder or (y) prior to a Change of Control, the Holder may not acquire a number of Warrant Shares to the extent that, upon such exercise, the number of shares of Common Stock then beneficially owned by such Holder and its affiliates and any other persons or entities whose beneficial ownership of Common Stock would be aggregated with the Holder's for purposes of Section 13(d) of the Securities Exchange Act of 1934, as amended (the "EXCHANGE ACT"), (including shares held by any "group" of which the Holder is a member, but excluding shares beneficially owned by virtue of the ownership of securities or rights to acquire securities that have limitations on the right to convert, exercise or purchase similar to the limitation set forth herein) exceeds 9.99% of the total number of shares of Common Stock of the Company then issued and outstanding. For purposes hereof, "group" has the meaning set forth in Section 13(d) of the Exchange Act and applicable regulations of the Securities Exchange Commission (the "COMMISSION"), and the percentage held by the holder shall be determined in a manner consistent with the provisions of Section 13(d) of the Exchange Act. Each delivery of a notice of exercise by a Holder will constitute a representation by such Holder that it has evaluated the limitation set forth in this paragraph and determined, based on the most recent public filings by the Company with the Commission, that the issuance of the full number of Warrant Shares requested in such notice of exercise is permitted under this paragraph.

6. FRACTIONAL SHARES. No fractional Warrant Shares will be issued in connection with any exercise hereunder, but in lieu of such fractional shares the Company shall make a cash payment therefor upon the basis of the Exercise Price then in effect.

7. REGISTRATION RIGHTS. The Holder shall have the registration rights described in the Registration Rights Agreement.

8. RIGHTS OF STOCKHOLDERS. No Holder shall be entitled, as a Warrant holder, to vote or receive dividends or be deemed the holder of Warrant Shares or any other securities of the Company which may at any time be issuable on the exercise hereof for any purpose, nor shall anything

contained herein be construed to confer upon the Holder any of the rights of a stockholder of the Company or any right to vote for the election of directors or upon any matter submitted to stockholders at any meeting thereof, or to give or withhold consent to any corporate action (whether upon any recapitalization, issuance of stock, reclassification of stock, change of par value, consolidation, merger, conveyance, or otherwise) or to receive dividends or subscription rights or otherwise with respect to the Warrant Shares until this Warrant shall have been exercised and the Warrant Shares purchasable upon the exercise hereof shall have become deliverable, as provided herein.

9. TERM OF WARRANT. This Warrant shall become exercisable on the Warrant Date and shall no longer be exercisable as of the earlier of (i) 5:00 p.m., San Diego, California local time, on the date that is the five-year anniversary of the Warrant Date; and (ii) upon consummation of a Change of Control.

10. REDEMPTION AT COMPANY'S ELECTION. The Company may at the option of the Board, by at least seven-days' prior written notice to the Holder (the "REDEMPTION NOTICE"), redeem this Warrant, in whole or in part, at any time after June 30, 2004, provided that (i) the Daily Market Price for twenty consecutive trading days is equal to or greater than the product of (x) 2 multiplied by (y) the Exercise Price, (ii) either (A) all of the Warrant Shares underlying this Warrant to be redeemed are then registered under an effective registration statement or (B) may be sold pursuant to Rule 144 during a three-month period without registration under the Securities Act, (iii) sufficient shares of Common Stock of the Company are authorized and reserved for issuance upon the full exercise of this Warrant, (iv) all of the Warrant Shares issuable upon exercise of this Warrant are then listed on every stock exchange, market or bulletin board on which any Common Stock of the Company is then listed and (v) the Company is not in default of any material provision of any Transaction Agreement (as defined in the Purchase Agreement). The Redemption Notice shall set forth a date, not less than seven days after the date of the Redemption Notice, on which the redemption of this Warrant shall occur (the "REDEMPTION DATE"). On the Redemption Date, (i) the Company shall pay the Holder by certified check an amount equal to the product of (x) \$0.01 (as adjusted in proportion to any adjustment to the Exercise Price pursuant to Section 3 hereof) multiplied by (y) the number of Warrant Shares so redeemed; and (ii) the Holder shall deliver the original copy of this Warrant marked "REDEEMED" to the Company. If the Company shall redeem this Warrant in part, the Company shall, at the Redemption Date, provided that the Holder shall have delivered the original copy of this Warrant marked "REDEEMED" to the Company, deliver to the Holder a new Warrant evidencing the rights of the Holder to purchase the unredeemed shares of Common Stock called for by this Warrant, which new Warrant shall in all other respects be identical with this Warrant. Nothing in this Section 10 shall prevent the exercise of the Warrants at any time prior to the Redemption Date.

11. MISCELLANEOUS.

(a) This Warrant is being delivered in the State of California and shall be construed and enforced in accordance with and governed by the laws of the State of California, without giving effect to principles of conflicts of laws.

(b) The headings in this Warrant are for purposes of reference only, and shall not limit or otherwise affect any of the terms hereof.

(c) The terms of this Warrant shall be binding upon and shall inure to the benefit of any successors or assigns of the Company and of the Holder and of the Warrant Shares issued or issuable upon the exercise hereof.

(d) Any notice provided for or permitted under this Warrant shall be treated as having been given (a) upon receipt, when delivered personally or sent by confirmed facsimile or telecopy, (b) one day after sending, when sent by commercial overnight courier with written verification of receipt, or (c) three business days after deposit with the United States Postal Service, when mailed postage prepaid by certified or registered mail, return receipt requested, addressed (a) if to the Company, at 9948 Hibert Street, Suite 100, San Diego, CA 92131, facsimile: (858) 271-9678, Attention: Nicholas J. Virca, or, if to the Holder, at such address or facsimile number as the Holder shall have furnished to the Company in writing, or at such other place of which the other party has been notified in accordance with the provisions of this Section 11(d).

(e) This Warrant constitutes the full and entire understanding and agreement between the parties with regard to the subjects hereof.

(f) Upon receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and, in the case of any such loss, theft or destruction, upon delivery of an indemnity agreement reasonably satisfactory in form and amount to the Company or, in the case of any such mutilation, upon surrender and cancellation of such Warrant, the Company at the Holder's expense will execute and deliver to the holder of record, in lieu thereof, a new Warrant of like date and tenor.

(g) This Warrant and any provision hereof may be amended, waived or terminated only by an instrument in writing signed by the Company and the Holder.

(h) Receipt of this Warrant by the Holder shall constitute acceptance of and agreement to the foregoing terms and conditions.

[Signature page follows.]

SIGNATURE PAGE TO THE A-1 WARRANT TO PURCHASE COMMON STOCK

IN WITNESS WHEREOF, the Company has caused this Warrant to be signed by its duly authorized officer.

Issued: April __, 2004

ADVENTRX PHARMACEUTICALS, INC.

By: _____
Nicholas J. Virca
President & CEO

EXHIBIT A

NOTICE OF EXERCISE

TO: Adventrx Pharmaceuticals, Inc.
9948 Hibert Street, Suite 100
San Diego, CA 92131

1. The undersigned hereby elects to purchase _____ shares of Common Stock, par value \$0.001 per share, of the Company ("COMMON STOCK") pursuant to the terms of Section 1(b) of the A-1 Warrant to Purchase Common Stock dated _____ 2004 (the "WARRANT"), and tenders herewith payment of the purchase price of such shares in full.

2. The undersigned hereby elects to convert the attached Warrant into Common Stock of Adventrx Pharmaceuticals, Inc. through "cashless exercise" in the manner specified in the Warrant. This conversion is exercised with respect to _____ of the Shares covered by the Warrant.

Please issue a certificate or certificates representing said _____ shares of Common Stock in the name of the undersigned or in such other name as is specified below:

Name: -----

Address: -----

The undersigned hereby represents and warrants that the aforesaid shares of Common Stock are being acquired for the account of the undersigned for investment and not with a view to, or for resale, in connection with the distribution thereof, and that the undersigned has no present intention of distributing or reselling such shares, and that all representations and warranties of the undersigned with respect to the Warrant and Warrant Shares (as defined in the Warrant) set forth in Section 4 of the Purchase Agreement (as defined in the Warrant) were true and correct as of the Warrant Date (as defined in the Warrant) and are true and correct as of the date hereof.

By: -----

Name: -----

Title: -----

Date: -----

EXHIBIT B

FORM OF INVESTMENT REPRESENTATION LETTER

In connection with the acquisition of [warrants (the "Warrants") to purchase shares of Common Stock of Adventrx Pharmaceuticals, Inc. (the "Company"), par value \$0.001 per share (the "Common Stock")][_____ shares of Common Stock of Adventrx Pharmaceuticals, Inc. (the "Company"), par value \$0.001 per share (the "Common Stock")], by

represents and warrants to the Company as follows:

The Holder (i) is an "Accredited Investor" as that term is defined in Rule 501 of Regulation D promulgated under the Securities Act of 1933, as amended (the "Act"); and (ii) has the ability to bear the economic risks of such Holder's prospective investment, including a complete loss of Holder's investment in the Warrants and the shares of Common Stock issuable upon the exercise thereof (collectively, the "Securities").

The Holder, by acceptance of the Warrants, represents and warrants to the Company that the Warrants and all securities acquired upon any and all exercises of the Warrants are purchased for the Holder's own account, and not with view to distribution of either the Warrants or any securities purchasable upon exercise thereof in violation of applicable securities laws.

The Holder acknowledges that (i) the Securities have not been registered under the Act, (ii) the Securities are "restricted securities" and the certificate(s) representing the Securities shall bear the following legend, or a similar legend to the same effect, until (i) in the case of the shares of Common Stock underlying the Warrants, such shares shall have been registered for resale by the Holder under the Act and effectively been disposed of in accordance with a registration statement that has been declared effective; or (ii) in the opinion of counsel for the Company such Securities may be sold without registration under the Act:

"[NEITHER] THE SECURITIES REPRESENTED BY THIS CERTIFICATE [NOR THE SECURITIES INTO WHICH THEY ARE EXERCISABLE] HAVE [NOT] BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), AND ALL SUCH SECURITIES ARE SUBJECT TO RESTRICTIONS ON TRANSFERABILITY AS SET FORTH IN THIS CERTIFICATE. [NEITHER] THE SECURITIES REPRESENTED HEREBY [NOR THE SECURITIES INTO WHICH THEY ARE EXERCISABLE] MAY [NOT] BE SOLD, TRANSFERRED, OR OTHERWISE DISPOSED OF IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT UNDER THE ACT OR AN OPINION OF COUNSEL, REASONABLY ACCEPTABLE TO COUNSEL FOR THE COMPANY, TO THE EFFECT THAT THE PROPOSED SALE, TRANSFER, OR DISPOSITION MAY BE EFFECTUATED WITHOUT REGISTRATION UNDER THE ACT."

IN WITNESS WHEREOF, the Holder has caused this Investment Representation Letter to be executed in its corporate name by its duly authorized officer this __ day of _____ 200__.

[Name]

By: _____

Name:

Title:

EXHIBIT C

ASSIGNMENT FORM

FOR VALUE RECEIVED the undersigned registered owner of this Warrant for the purchase of shares of Common Stock of Adventrx Pharmaceuticals, Inc. hereby sells, assigns and transfers unto the Assignee named below all of the rights of the undersigned under this Warrant, with respect to the number of shares of common stock set forth below:

- - - - -
- - - - -
- - - - -
(Name and Address of Assignee)
- - - - -
(Number of Shares of Common Stock)

and does hereby irrevocably constitute and appoint _____ attorney-in-fact to register such transfer on the books of the Company, maintained for the purpose, with full power of substitution in the premises.

Dated: _____
- - - - -
(Print Name and Title)
- - - - -
(Signature)
- - - - -
(Witness)

NOTICE: The signature on this assignment must correspond with the name as written upon the face of the Warrant in every particular, without alteration or enlargement or any change whatsoever.

THIS WARRANT HAS BEEN, AND THE SHARES OF COMMON STOCK WHICH MAY BE RECEIVED PURSUANT TO THE EXERCISE OF THIS WARRANT WILL BE, ACQUIRED SOLELY FOR INVESTMENT AND NOT WITH A VIEW TO, OR FOR RESALE IN CONNECTION WITH, ANY DISTRIBUTION THEREOF. NEITHER THIS WARRANT NOR SUCH SHARES (TOGETHER, THE "SECURITIES") HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR ANY STATE SECURITIES LAWS. SUCH SECURITIES MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED OR HYPOTHECATED IN THE ABSENCE OF SUCH REGISTRATION OR AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE COMPANY THAT SUCH DISPOSITION IS EXEMPT FROM THE REGISTRATION AND PROSPECTUS DELIVERY REQUIREMENTS OF THE ACT AND OF ANY APPLICABLE STATE SECURITIES LAWS.

NO. WA2-

ISSUED: APRIL 8, 2004

A-2 WARRANT TO PURCHASE COMMON STOCK

THIS CERTIFIES THAT, for good and valuable consideration, _____ (the "HOLDER") is entitled to purchase from Adventrx Pharmaceuticals, Inc., a Delaware corporation (the "COMPANY"), [20% COVERAGE] (_____) fully paid and nonassessable shares of Common Stock, par value \$0.001 per share ("COMMON STOCK"), of the Company (as adjusted pursuant to Section 3 hereof) (the "WARRANT SHARES") at a price per share equal to Two Dollars and Fifty Cents (\$2.50) (as adjusted pursuant to Section 3 hereof) (the "EXERCISE PRICE"), subject to the provisions and upon the terms and conditions hereinafter set forth.

1. METHOD OF EXERCISE; PAYMENT.

(A) Exercise Period. The purchase right represented by this Warrant may be exercised in whole or part by the Holder during the term of this Warrant (as set forth in Section 9 hereof) at any time after the Commencement Date, as defined below, by the surrender of this Warrant (with the notice of exercise form attached hereto as Exhibit A (the "NOTICE OF EXERCISE") duly executed) at the principal office of the Company. If this Warrant shall have been exercised in part, the Company shall, at the time of delivery of the certificate or certificates representing Warrant Shares, deliver to the Holder a new Warrant evidencing the rights of the Holder to purchase the unpurchased shares of Common Stock called for by this Warrant, which new Warrant shall in all other respects be identical with this Warrant, or at the request of the Holder, appropriate notation may be made on this Warrant and the same returned to the Holder.

(B) Exercise. Upon exercise of this Warrant, the Holder shall pay the Company an amount equal to the product of (x) the Exercise Price multiplied by (y) the total number of Warrant Shares purchased pursuant to this Warrant, by wire transfer or certified check payable to the order of the Company or, at any time following the first anniversary of the Warrant Date, if there is not an effective Registration Statement (as defined in the

Registration Rights Agreement, dated as of the Warrant Date, among the Company and the persons and entities listed on Schedule 1 thereto (the "REGISTRATION RIGHTS AGREEMENT") with respect to all of the Warrant Shares, then at the option of the Holder, such amount may be paid by the surrender of a portion of shares of Common Stock then held by the Holder or issuable upon such exercise of this Warrant, which shall be valued and credited toward such amount due to the Company for the exercise of the Warrant based upon the Current Market Price of the Common Stock. The person or persons in whose name(s) any certificate(s) representing the Warrant Shares shall be issuable upon exercise of this Warrant shall be deemed to have become the holder(s) of record of, and shall be treated for all purposes as the record holder(s) of, the Warrant Shares represented thereby (and such Warrant Shares shall be deemed to have been issued) immediately prior to the close of business on the date upon which this Warrant is exercised.

"CURRENT MARKET PRICE" means, in respect of any share of Common Stock on any date herein specified,

(1) _____ if there shall not then be a public market for the Common Stock, the higher of

(a) the book value per share of Common Stock at such date, and

(b) the value per share of Common Stock at such date as determined in good faith by the Board,

or

(2) _____ if there shall then be a public market for the Common Stock, the higher of (x) the book value per share of Common Stock at such date, and (y) the average of the daily market prices for the 10 consecutive trading days immediately before such date. The daily market price (the "DAILY MARKET PRICE") for each such trading day shall be (i) the closing price on such day on the principal stock exchange (including Nasdaq) on which such Common Stock is then

listed or admitted to trading, or quoted, as applicable, (ii) if no sale takes place on such day on any such exchange, the last reported closing price on such day as officially quoted on any such exchange (including Nasdaq), (iii) if the Common Stock is not then listed or admitted to trading on any stock exchange, the last reported closing bid price on such day in the over-the-counter market, as furnished by the National Association of Securities Dealers Automatic Quotation System or the National Quotation Bureau, Inc., (iv) if neither such corporation at the time is engaged in the business of reporting such prices, as furnished by any similar firm then engaged in such business, or (v) if there is no such firm, as furnished by any member of the National Association of Securities Dealers, Inc. (the "NASD") selected mutually by the holder of this Warrant and the Company or, if they cannot agree upon such selection, as selected by two such members of the NASD, one of which shall be selected by holder of this Warrant and one of which shall be selected by the Company.

(C) Stock Certificates. In the event of the exercise of this Warrant, certificates for the Warrant Shares so purchased shall be delivered to the Holder within a reasonable time after

exercise, but in no case later than the date that is three business days following receipt by the Company of a Notice of Exercise duly completed and executed.

2. STOCK FULLY PAID; RESERVATION OF SHARES. All of the Warrant Shares issuable upon the exercise of the rights represented by this Warrant will, upon issuance and receipt of the Exercise Price therefor, be fully paid and nonassessable, and free from all preemptive rights, rights of first refusal or first offer, taxes, liens and charges with respect to the issuance thereof. During the period within which the rights represented by this Warrant may be exercised, the Company shall at all times have authorized and reserved for issuance a sufficient number of shares of its Common Stock to provide for the exercise of the rights represented by this Warrant.

3. ADJUSTMENT OF EXERCISE PRICE AND NUMBER OF SHARES. The number and kind of Warrant Shares purchasable upon the exercise of this Warrant and the Exercise Price therefor shall be subject to adjustment from time to time upon the occurrence of certain events, as follows:

(A)Reclassification, Consolidation or Reorganization. In case of any reclassification of the Common Stock (other than a change in par value, or as a result of a subdivision or combination), or in case of any consolidation or merger of the Company with or into another corporation (other than a Change of Control, as defined below) (any of which is a "REORGANIZATION TRANSACTION"), the Company, or such successor corporation as the case may be, shall execute a new warrant, providing that the Holder shall have the right to exercise such new warrant, and procure upon such exercise and payment of the same aggregate Exercise Price, in lieu of the Warrant Shares theretofore issuable upon exercise of this Warrant, the kind and amount of shares of stock, other securities, money and property as would be payable for the Warrant Shares issuable upon exercise of this Warrant as if such Warrant Shares were outstanding on the consummation of the Reorganization Transaction. For purposes of this Warrant, the term "CHANGE OF CONTROL" shall mean (i) any acquisition of the Company by means of merger, acquisition, or other form of corporate reorganization in which outstanding shares of the Company are exchanged for securities or other consideration issued, or caused to be issued, by the acquiring corporation or its subsidiary or parent (other than a reincorporation transaction or change of domicile) and pursuant to which the holders of the outstanding voting securities of the Company immediately prior to such consolidation, merger or other transaction fail to hold equity securities representing a majority of the voting power of the Company or surviving entity immediately following such consolidation, merger or other transaction (excluding voting securities of the acquiring corporation held by such holders prior to such transaction) or (ii) a sale of all or substantially all of the assets of the Company.

(B)Stock Splits, Dividends and Combinations. In the event that the Company shall at any time subdivide the outstanding shares of Common Stock, or shall issue a stock dividend on its outstanding shares of Common Stock, the number of Warrant Shares issuable upon exercise of this Warrant immediately prior to such subdivision or to the issuance of such stock dividend shall be proportionately increased, and the Exercise Price shall be proportionately decreased,

and in the event that the Company shall at any time combine the outstanding shares of Common Stock, the number of Warrant Shares issuable upon exercise of this Warrant immediately prior to such combination shall be proportionately decreased, and the Exercise Price shall be proportionately increased, effective at the close of business on the date of such subdivision, stock dividend or combination, as the case may be.

(C) Issuance of Additional Shares.

(I) If at any time while this Warrant is outstanding and after June 30, 2004, the Company shall issue or sell any shares of its Common Stock, other than Excluded Shares (as that term is defined below) ("ADDITIONAL SHARES"), in exchange for consideration in an amount per Additional Share less than the Exercise Price at the time the Additional Shares are issued or sold, then the Exercise Price immediately prior to such issue or sale shall be reduced to a price determined by dividing:

(1) an amount equal to the sum of (a) the number of shares of Common Stock outstanding immediately prior to such issue or sale multiplied by the then existing Exercise Price, plus (b) the consideration, if any, received by the Company upon such issue or sale, by

(2) the total number of shares of Common Stock outstanding immediately after such issue or sale.

(II) The provisions of Section 3(c)(i) shall not apply to any deemed issuance of Additional Shares for which an adjustment is provided under Section 3(a) or 3(b). No adjustment of the number of shares of Common Stock acquirable upon exercise of this Warrant shall be made under Section 3(c) upon the issuance of any shares of Common Stock which are issued pursuant to the exercise of any warrants or other subscription or purchase rights or pursuant to the exercise of any conversion or exchange rights in any convertible securities, if any such adjustment shall previously have been made upon the issuance of such warrants or other rights or upon the issuance of such convertible securities (or upon the issuance of any warrant or other rights therefor) pursuant to Section 3(d).

For purposes of this Warrant the term "EXCLUDED SHARES" means: (i) shares of Common Stock issuable or issued after the Closing Date to officers, employees, consultants or directors of the Company directly or pursuant to a stock purchase, stock option, restricted stock or other written compensation plan or agreement approved by the Board of Directors of the Company (the "BOARD"); (ii) shares of Common Stock issued or issuable after the Closing Date, primarily for non-equity financing purposes and as approved by the Board, to financial institutions or lessors in connection with commercial credit arrangements, equipment financings or similar transactions or to vendors of goods or services or customers; (iii) shares of Common Stock issuable upon (a) exercise of warrants, options, notes or other rights to acquire securities of the Company, in each case, outstanding on the issuance date of this Warrant (the "WARRANT DATE"), (b) conversion of shares of the Company's Preferred Stock, par value \$0.01 per share, outstanding on the Warrant Date, (c) exchange of promissory notes issued by the Company outstanding on the Warrant Date, (iv) the Shares (as such term is defined in the Common Stock and Warrant Purchase Agreement, dated as of the Warrant Date, among the Company and the persons and entities listed on Schedule 1

thereto (the "PURCHASE AGREEMENT")); (v) the Warrants (as such term is defined in the Purchase Agreement); (vi) capital stock or warrants or options to purchase capital stock issued in connection with bona fide acquisitions, mergers or similar transactions, the terms of which are approved by the Board; (vii) shares of Common Stock issued or issuable to licensors of technology of the Company to pay expenses, royalties or milestone payments for which the Company is obligated under any licensing or related agreement; (viii) shares of Common Stock issuable or issued pursuant to stock splits, stock dividends and the like, or (ix) shares of Common Stock issued or issuable by way of dividend or other distribution on Excluded Shares.

(D) Issuance of Common Stock Equivalents.

(I) If at any time while this Warrant is outstanding the Company shall issue or sell any warrants or other rights to subscribe for or purchase any additional shares of Common Stock or any securities convertible into shares of Common Stock (other than the Additional Shares) (collectively, "COMMON STOCK EQUIVALENTS"), whether or not the rights to exchange or convert thereunder are immediately exercisable, and the effective price per share for which Common Stock is issuable upon the exercise, exchange or conversion of such Common Stock Equivalents shall be less than the Exercise Price in effect immediately prior to the time of such issue or sale, then the Exercise Price shall be adjusted as provided in Section 3(c) on the basis that the maximum number of additional shares of Common Stock issuable pursuant to all such Common Stock Equivalents shall be deemed to have been issued and outstanding and the Company shall have received all of the consideration payable therefor, if any, as of the date of the actual issuance of such Common Stock Equivalents. No further adjustments to the current Warrant Price shall be made under this Section 3(d) upon the actual issue of such Common Stock upon the exercise, conversion or exchange of such Common Stock Equivalents.

(II) Upon the expiration or termination of any such Common Stock Equivalents, the Exercise Price, to the extent in any way affected by or computed using such Common Stock Equivalents, shall be recomputed to reflect the issuance of the total number of shares of Common Stock (and convertible or exchangeable securities which remain in effect) actually issued upon the exercise, exchange or conversion of such Common Stock Equivalents to the extent that this Warrant is then outstanding.

(E) Other Action Affecting Common Stock. In case at any time or from time to time the Company shall take any action in respect of its Common Stock, other than the payment of dividends permitted by Section 3 or any other action described in Section 3, then, unless such action will not have a materially adverse effect upon the rights of the Holder, the number of shares of Common Stock or other stock into which this Warrant is exercisable and/or the purchase price thereof shall be adjusted in such manner as may be equitable in the circumstances.

(F) Certificate as to Adjustments. Upon the occurrence of each adjustment or readjustment of the Exercise Price, the Company, at its expense, shall promptly compute such adjustment or readjustment in accordance with the terms hereof and prepare and furnish to the Holder of this Warrant a certificate setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment or readjustment is based. The Company shall, upon the written request at any time of the Holder of this Warrant, furnish or cause to be furnished to such Holder a like certificate setting forth (i) such adjustments and readjustments, (ii) the Exercise Price at the time in effect and (iii) the number of shares of Common Stock and the amount, if any, or other property which at the time would be received upon the exercise of Warrants owned by such Holder.

(G) Notice of Corporate Action. If at any time:

(i) the Company shall take a record of the holders of its Common Stock for the purpose of entitling them to receive a dividend (other than a cash dividend payable out of earnings or earned surplus legally available for the payment of dividends under the laws of the jurisdiction of incorporation of the Company) or other distribution, or any right to subscribe for or purchase any evidences of its indebtedness, any shares of stock of any class or any other securities or property, or to receive any other right, or

(ii) there shall be any capital reorganization of the Company, any reclassification or recapitalization of the capital stock of the Company or any consolidation or merger of the Company with, or any sale, transfer or other disposition of all or substantially all the property, assets or business of the Company to, another corporation, or

(iii) there shall be a voluntary or involuntary dissolution, liquidation or winding up of the Company;

then, in any one or more of such cases, the Company shall give to the Holder (i) at least 10-days' prior written notice of the date on which a record date shall be selected for such dividend, distribution or right or for determining rights to vote in respect of any such reorganization, reclassification, merger, consolidation, sale, transfer, disposition, dissolution, liquidation or winding up, and (ii) in the case of any such reorganization, reclassification, merger, consolidation, sale, transfer, disposition, dissolution, liquidation or winding up, at least 10-days' prior written notice of the date when the same shall take place. Such notice in accordance with the foregoing clause also shall specify (i) the date on which any such record is to be taken for the purpose of such dividend, distribution or right, the date on which the holders of Common Stock shall be entitled to any such dividend, distribution or right, and the amount and character thereof, and (ii) the date on which any such reorganization, reclassification, merger, consolidation, sale, transfer, disposition, dissolution, liquidation or winding up is to take place and the time, if any such time is to be fixed, as of which the holders of Common Stock shall be entitled to exchange their shares of Common Stock for securities or other property deliverable upon such reorganization, reclassification, merger, consolidation, sale, transfer, disposition, dissolution, liquidation or winding up. Each such written notice shall be sufficiently given if addressed to the Holder at the last address of the Holder appearing on the books of the Company and delivered in accordance with Section 11(d).

4. TRANSFER OF WARRANT. This Warrant may only be transferred in compliance with federal and state securities laws; provided, however, that the Company may withhold its consent to transfer or assignment of this Warrant to any person or entity who is deemed to be a competitor or prospective competitor of the Company, such determination to be made in the reasonable judgment of the Board. If, at the time of the surrender of this Warrant in connection with any transfer of this Warrant or the resale of the Warrant Stock, this Warrant or the Warrant Stock, as applicable, shall not be registered under the Securities Act, the Company may require, as a condition of allowing such transfer (i) that the Holder or transferee of this Warrant or the Warrant Stock as the case may be, furnish to the Company a written opinion of counsel that is reasonably acceptable to the Company to the effect that such transfer may be made without registration under the Securities Act, (ii) that the Holder or transferee execute and deliver to the Company an investment letter in form and substance acceptable to the Company and substantially in the form attached as Exhibit B hereto and (iii) that the transferee be an "accredited investor" as defined in Rule 501(a) promulgated under the Securities Act. Transfer of this Warrant and all rights hereunder, in whole or in part, in accordance with the foregoing provisions, shall be registered on the books of the Company to be maintained for such purpose, upon surrender of this Warrant at the principal office of the Company or the office or agency designated by the Company, together with a written assignment of this Warrant substantially in the form of Exhibit C hereto duly executed by the Holder or its attorney-in-fact and funds sufficient to pay any transfer taxes payable upon the making of such transfer. Upon such surrender and, if required, such payment, the Company shall execute and deliver a new Warrant or Warrants in the name of the assignee or assignees and in the denomination specified in such instrument of assignment, and shall issue to the assignor a new Warrant evidencing the portion of this Warrant not so assigned, and this Warrant shall promptly be cancelled. Following a transfer that complies with the requirements of this Section 4, the Warrant may be exercised by a new Holder for the purchase of shares of Common Stock regardless of whether the Company issued or registered a new Warrant on the books of the Company. This Section 4 shall survive the exercise or expiration of the Warrant.

5. CONDITIONS TO EXERCISE OF WARRANT.

(A) Each certificate evidencing the Warrant Shares issued upon exercise of this Warrant shall be stamped or imprinted with a legend substantially in the following form:

THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 (THE "ACT") AND MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED UNLESS AND UNTIL REGISTERED UNDER THE ACT OR, IN THE OPINION OF COUNSEL IN FORM AND SUBSTANCE SATISFACTORY TO THE ISSUER OF THESE SECURITIES, SUCH OFFER, SALE OR TRANSFER, PLEDGE OR HYPOTHECATION IS IN COMPLIANCE THEREWITH.

(B) REMOVAL OF LEGEND AND TRANSFER RESTRICTIONS. Any legend endorsed on a certificate pursuant to this Section 5 shall be removed, and the Company shall issue a certificate without such legend to the holder of such Warrant Shares if (i) such Warrant Shares are resold pursuant to a registration statement under the Securities Act of 1933, as amended, and a prospectus meeting the requirements of Section 10 of the Securities Act is delivered or deemed delivered to the purchaser of such Warrant Shares, (ii) if such holder satisfies the requirements of Rule 144(k) or (iii) if such holder provides the Company with an opinion of counsel for such holder of the Warrant Shares, reasonably satisfactory to the Company, to the effect that a sale, transfer or assignment of such Warrant Shares may be made without registration. This paragraph shall survive any exercise of this Warrant.

(C) RESTRICTIONS ON EXERCISE AMOUNT. Unless a Holder delivers to the Company irrevocable written notice (x) prior to the date of issuance hereof or 61 days prior to the effective date of such notice that this Section 5(c) shall not apply to such Holder or (y) prior to a Change of Control, the Holder may not acquire a number of Warrant Shares to the extent that, upon such exercise, the number of shares of Common Stock then beneficially owned by such Holder and its affiliates and any other persons or entities whose beneficial ownership of Common Stock would be aggregated with the Holder's for purposes of Section 13(d) of the Securities Exchange Act of 1934, as amended (the "EXCHANGE ACT"), (including shares held by any "group" of which the Holder is a member, but excluding shares beneficially owned by virtue of the ownership of securities or rights to acquire securities that have limitations on the right to convert, exercise or purchase similar to the limitation set forth herein) exceeds 9.99% of the total number of shares of Common Stock of the Company then issued and outstanding. For purposes hereof, "group" has the meaning set forth in Section 13(d) of the Exchange Act and applicable regulations of the Commission, and the percentage held by the holder shall be determined in a manner consistent with the provisions of Section 13(d) of the Exchange Act. Each delivery of a notice of exercise by a Holder will constitute a representation by such Holder that it has evaluated the limitation set forth in this paragraph and determined, based on the most recent public filings by the Company with the Commission, that the issuance of the full number of Warrant Shares requested in such notice of exercise is permitted under this paragraph.

6. FRACTIONAL SHARES. No fractional Warrant Shares will be issued in connection with any exercise hereunder, but in lieu of such fractional shares the Company shall make a cash payment therefor upon the basis of the Exercise Price then in effect.

7. REGISTRATION RIGHTS. The Holder shall have the registration rights described in the Registration Rights Agreement.

8. RIGHTS OF STOCKHOLDERS. No Holder shall be entitled, as a Warrant holder, to vote or receive dividends or be deemed the holder of Warrant Shares or any other securities of the Company which may at any time be issuable on the exercise hereof for any purpose, nor shall anything contained herein be construed to confer upon the Holder any of the rights of a stockholder of the Company or any right to vote for the election of directors or upon any matter submitted to stockholders at any meeting thereof, or to give or withhold consent to any corporate action (whether upon any recapitalization, issuance of stock, reclassification of stock, change of par value, consolidation, merger, conveyance, or otherwise) or to receive dividends or

subscription rights or otherwise with respect to the Warrant Shares until this Warrant shall have been exercised and the Warrant Shares purchasable upon the exercise hereof shall have become deliverable, as provided herein.

9. TERM OF WARRANT. This Warrant shall become exercisable on the Warrant Date and shall no longer be exercisable as of the earlier of (i) 5:00 p.m., San Diego, California local time, on the date that is the five-year anniversary of the Warrant Date; and (ii) upon consummation of a Change of Control.

10. REDEMPTION AT COMPANY'S ELECTION. The Company may at the option of the Board, by at least seven-days' prior written notice to the Holder (the "REDEMPTION NOTICE"), redeem this Warrant, in whole or in part, at any time, provided that (i) the Daily Market Price for twenty consecutive trading days is equal to or greater than the product of (x) 2 multiplied by (y) the Exercise Price, (ii) either (A) all of the Warrant Shares underlying this Warrant to be redeemed are then registered under an effective registration statement or (B) may be sold pursuant to Rule 144 during a three-month period without registration under the Securities Act, (iii) sufficient shares of Common Stock of the Company are authorized and reserved for issuance upon the full exercise of this Warrant, (iv) all of the Warrant Shares issuable upon exercise of this Warrant are then listed on every stock exchange, market or bulletin board on which any Common Stock of the Company is then listed and (v) the Company is not in default of any material provision of any Transaction Agreement (as defined in the Purchase Agreement). The Redemption Notice shall set forth a date, not less than seven days after the date of the Redemption Notice, on which the redemption of this Warrant shall occur (the "REDEMPTION DATE"). On the Redemption Date, (i) the Company shall pay the Holder by certified check an amount equal to the product of (x) \$0.001 (as adjusted in proportion to any adjustment to the Exercise Price pursuant to Section 3 hereof) multiplied by (y) the number of Warrant Shares so redeemed; and (ii) the Holder shall deliver the original copy of this Warrant marked "REDEEMED" to the Company. If the Company shall redeem this Warrant in part, the Company shall, at the Redemption Date, provided that the Holder shall have delivered the original copy of this Warrant marked "REDEEMED" to the Company, deliver to the Holder a new Warrant evidencing the rights of the Holder to purchase the unredeemed shares of Common Stock called for by this Warrant, which new Warrant shall in all other respects be identical with this Warrant. Nothing in this Section 10 shall prevent the exercise of the Warrants at any time prior to the Redemption Date.

11. MISCELLANEOUS.

(A) This Warrant is being delivered in the State of California and shall be construed and enforced in accordance with and governed by the laws of the State of California, without giving effect to principles of conflicts of laws.

(B) The headings in this Warrant are for purposes of reference only, and shall not limit or otherwise affect any of the terms hereof.

(C) The terms of this Warrant shall be binding upon and shall inure to the benefit of any successors or assigns of the Company and of the Holder and of the Warrant Shares issued or issuable upon the exercise hereof. -9-

(D)Any notice provided for or permitted under this Warrant shall be treated as having been given (a) upon receipt, when delivered personally or sent by confirmed facsimile or telecopy, (b) one day after sending, when sent by commercial overnight courier with written verification of receipt, or (c) three business days after deposit with the United States Postal Service, when mailed postage prepaid by certified or registered mail, return receipt requested, addressed (a) if to the Company, at 9948 Hibert Street, Suite 100, San Diego, CA 92131, facsimile: (858) 271-9678, Attention: Nicholas J. Virca, or, if to the Holder, at such address or facsimile number as the Holder shall have furnished to the Company in writing, or at such other place of which the other party has been notified in accordance with the provisions of this Section 11(d).

(E)This Warrant constitutes the full and entire understanding and agreement between the parties with regard to the subjects hereof.

(F)Upon receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and, in the case of any such loss, theft or destruction, upon delivery of an indemnity agreement reasonably satisfactory in form and amount to the Company or, in the case of any such mutilation, upon surrender and cancellation of such Warrant, the Company at the Holder's expense will execute and deliver to the holder of record, in lieu thereof, a new Warrant of like date and tenor.

(G)This Warrant and any provision hereof may be amended, waived or terminated only by an instrument in writing signed by the Company and the Holder.

(H)Receipt of this Warrant by the Holder shall constitute acceptance of and agreement to the foregoing terms and conditions.

[Signature page follows.]

IN WITNESS WHEREOF, the Company has caused this Warrant to be signed by its duly authorized officer.

Issued: April __, 2004

ADVENTRX PHARMACEUTICALS, INC.

By: _____

Nicholas J. Virca
President & CEO

SIGNATURE PAGE TO THE A-2 WARRANT TO PURCHASE COMMON STOCK

EXHIBIT A

NOTICE OF EXERCISE

TO: Adventrx Pharmaceuticals, Inc.
9948 Hibert Street, Suite 100
San Diego, CA 92131

1. The undersigned hereby elects to purchase _____ shares of Common Stock, par value \$0.001 per share, of the Company ("COMMON STOCK") pursuant to the terms of Section 1(b) of the A-2 Warrant to Purchase Common Stock dated _____ 2004 (the "WARRANT"), and tenders herewith payment of the purchase price of such shares in full.

2. The undersigned hereby elects to convert the attached Warrant into Common Stock of Adventrx Pharmaceuticals, Inc. through "cashless exercise" in the manner specified in the Warrant. This conversion is exercised with respect to _____ of the Shares covered by the Warrant.

Please issue a certificate or certificates representing said _____ shares of Common Stock in the name of the undersigned or in such other name as is specified below:

Name: _____

Address: _____

The undersigned hereby represents and warrants that the aforesaid shares of Common Stock are being acquired for the account of the undersigned for investment and not with a view to, or for resale, in connection with the distribution thereof, and that the undersigned has no present intention of distributing or reselling such shares, and that all representations and warranties of the undersigned with respect to the Warrants and Warrant Shares (as defined in the Warrant) set forth in Section 4 of the Purchase Agreement (as defined in the Warrant) were true and correct as of the Warrant Date (as defined in the Warrant) and are true and correct as of the date hereof.

By: _____

Name: _____

Title: _____

Date: _____

EXHIBIT B

FORM OF INVESTMENT REPRESENTATION LETTER

In connection with the acquisition of [warrants (the "Warrants") to purchase _____ shares of Common Stock of Adventrx Pharmaceuticals, Inc. (the "Company"), par value \$0.001 per share (the "Common Stock")][_____ shares of Common Stock of Adventrx Pharmaceuticals, Inc. (the "Company"), par value \$0.001 per share (the "Common Stock")], by _____ (the "Holder") from _____, the Holder hereby represents and warrants to the Company as follows:

The Holder (i) is an "Accredited Investor" as that term is defined in Rule 501 of Regulation D promulgated under the Securities Act of 1933, as amended (the "Act"); and (ii) has the ability to bear the economic risks of such Holder's prospective investment, including a complete loss of Holder's investment in the Warrants and the shares of Common Stock issuable upon the exercise thereof (collectively, the "Securities").

The Holder, by acceptance of the Warrants, represents and warrants to the Company that the Warrants and all securities acquired upon any and all exercises of the Warrants are purchased for the Holder's own account, and not with view to distribution of either the Warrants or any securities purchasable upon exercise thereof in violation of applicable securities laws.

The Holder acknowledges that (i) the Securities have not been registered under the Act, (ii) the Securities are "restricted securities" and the certificate(s) representing the Securities shall bear the following legend, or a similar legend to the same effect, until (i) in the case of the shares of Common Stock underlying the Warrants, such shares shall have been registered for resale by the Holder under the Act and effectively been disposed of in accordance with a registration statement that has been declared effective; or (ii) in the opinion of counsel for the Company such Securities may be sold without registration under the Act:

"[NEITHER] THE SECURITIES REPRESENTED BY THIS CERTIFICATE [NOR THE SECURITIES INTO WHICH THEY ARE EXERCISABLE] HAVE [NOT] BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), AND ALL SUCH SECURITIES ARE SUBJECT TO RESTRICTIONS ON TRANSFERABILITY AS SET FORTH IN THIS CERTIFICATE. [NEITHER] THE SECURITIES REPRESENTED HEREBY [NOR THE SECURITIES INTO WHICH THEY ARE EXERCISABLE] MAY [NOT] BE SOLD, TRANSFERRED, OR OTHERWISE DISPOSED OF IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT UNDER THE ACT OR AN OPINION OF COUNSEL, REASONABLY ACCEPTABLE TO COUNSEL FOR THE COMPANY, TO THE EFFECT THAT THE PROPOSED SALE, TRANSFER, OR DISPOSITION MAY BE EFFECTUATED WITHOUT REGISTRATION UNDER THE ACT."

IN WITNESS WHEREOF, the Holder has caused this Investment Representation Letter to be executed in its corporate name by its duly authorized officer this ___ day of _____ 200_.

[Name]

By: _____
Name:
Title:

EXHIBIT C

ASSIGNMENT FORM

FOR VALUE RECEIVED the undersigned registered owner of this Warrant for the purchase of shares of Common Stock of Adventrx Pharmaceuticals, Inc. hereby sells, assigns and transfers unto the Assignee named below all of the rights of the undersigned under this Warrant, with respect to the number of shares of common stock set forth below:

- - - - -
- - - - -
- - - - -
(Name and Address of Assignee)
- - - - -
(Number of Shares of Common Stock)

and does hereby irrevocably constitute and appoint _____ attorney-in-fact to register such transfer on the books of the Company, maintained for the purpose, with full power of substitution in the premises.

Dated: _____
- - - - -
(Print Name and Title)
- - - - -
(Signature)
- - - - -
(Witness)

NOTICE: The signature on this assignment must correspond with the name as written upon the face of the Warrant in every particular, without alteration or enlargement or any change whatsoever.

REGISTRATION RIGHTS AGREEMENT

This Registration Rights Agreement (this "AGREEMENT"), dated as of April 5, 2004 (the "AGREEMENT DATE"), is among ADVENTRX Pharmaceuticals, Inc., a Delaware corporation (the "COMPANY"), each of the persons and entities listed on Schedule 1 hereto (each, an "INVESTOR").

BACKGROUND

A. The Company and the Investors (other than Burnham Hill Partners) have entered into a Common Stock and Warrant Purchase Agreement (the "PURCHASE AGREEMENT") as of the Agreement Date pursuant to which the Company desires to sell to the Investors and the Investors desire to purchase from the Company shares of Common Stock, par value \$0.001 per share ("COMMON STOCK"), of the Company (the "SHARES").

B. As additional consideration for the purchase of the Shares, pursuant to the Purchase Agreement, the Company shall issue to the Investors certain warrants to purchase shares of Common Stock, and, in consideration of services as placement agent, the Company shall issue to Burnham Hill Partners certain warrants to purchase shares of Common Stock (collectively, the "WARRANTS").

C. A condition to the obligations under the Purchase Agreement is that the Company and the Investors enter into this Agreement in order to provide the Investors with certain rights to register the resale of the Shares.

AGREEMENT

In consideration of the mutual promises, representations, warranties, covenants and conditions set forth in this Agreement, the parties agree as follows:

1. DEFINITIONS. For purposes of this Agreement, the term:

(A) "REGISTRABLE SECURITIES" means (a) the Shares and the Warrant Shares or other securities issued or issuable to each Investor or its transferee or designee (i) upon exercise of the Warrants, or (ii) upon any dividend or distribution with respect to, any exchange for or any replacement of the Shares, Warrants or Warrant Shares or (iii) upon any conversion, exercise or exchange of any securities issued in connection with any such distribution, exchange or replacement; (b) securities issued or issuable upon any stock split, stock dividend, recapitalization or similar event with respect to the foregoing; (c) securities issued pursuant to Section 8 or Section 9 of the Purchase Agreement, Section 9 or Section 10 of this Agreement or Section 3 of the Warrants and (d) any other security issued as a dividend or other distribution with respect to, in exchange for, in replacement or redemption of, or in reduction of the liquidation value of, any of the securities referred to in the preceding clauses.

(B) "COMMISSION" means the Securities and Exchange Commission.

(C) "WARRANT SHARES" means the shares of Common Stock issuable upon exercise of the Warrants.

(D) "SECURITIES ACT" means the Securities Act of 1933, as amended.

2. FILING OF REGISTRATION STATEMENT.

(A) The Company shall prepare and file with the Commission a "shelf" registration statement (a "REGISTRATION STATEMENT") on Form S-3 (or if such form is not available to the Company on another form appropriate for such registration in accordance herewith) covering all Registrable Securities for a secondary or resale offering to be made on a continuous basis pursuant to Rule 415, such Registration Statement to be filed by no later than June 30, 2004 (the "TARGET FILING DATE"). The Company shall use its best efforts to cause the Registration Statement to be declared effective under the Securities Act not later than 90 days after the Target Filing Date (including filing with the Commission a request for acceleration of effectiveness in accordance with Rule 461 promulgated under the Securities Act within five business days of the date that the Company is notified (orally or in writing, whichever is earlier) by the Commission that a Registration Statement will not be "reviewed," or not be subject to further review) and to keep such Registration Statement continuously effective under the Securities Act until such date as is the earlier of (x) the date when all Registrable Securities covered by such Registration Statement have been sold or (y) the second anniversary of the Agreement Date (the "EFFECTIVENESS PERIOD"). Upon the initial filing thereof, the Registration Statement shall cover at least 100% of the Shares and 100% of the Warrant Shares. Such Registration Statement also shall cover, to the extent allowable under the Securities Act and the Rules promulgated thereunder (including Securities Act Rule 416), such indeterminate number of additional shares of Common Stock resulting from stock splits, stock dividends or similar transactions with respect to the Registrable Securities. Not less than three business days prior to the filing of the Registration Statement or any related prospectus or any amendment or supplement thereto, the Company shall (i) furnish to counsel

to SDS Management, LLC ("SDS"), copies of all such documents proposed to be filed, which documents (other than those incorporated by reference) will be subject to the review of such counsel, and (ii) at the request of any holder of Registrable Securities cause its officers and directors, counsel and independent certified public accountants to respond to such inquiries as shall be necessary, in the reasonable opinion of counsel to such holders, to conduct a reasonable investigation within the meaning of the Securities Act. The Company shall not file the Registration Statement or any such prospectus or any amendments or supplements thereto to which the holders of a majority of the Registrable Securities or counsel to SDS shall reasonably object in writing within three business days after their receipt thereof.

(B)The Company shall (i) prepare and file with the Commission such amendments, including post-effective amendments, to the Registration Statement as may be necessary to keep the Registration Statement continuously effective as to all Registrable Securities for the Effectiveness Period and to the extent any Registrable Securities are not included in such Registration Statement for reasons other than the failure of the Holder to comply with Section 4 hereof, shall prepare and file with the Commission such additional Registration Statements in order to register for resale under the Securities Act all Registrable Securities; (ii) cause the related prospectus to be amended or supplemented by any required prospectus supplement, and as so supplemented or amended to be filed pursuant to Rule 424 (or any similar provisions then in force) promulgated under the Securities Act; (iii) respond as

promptly as possible, and in no event later than 10 business days, to any comments received from the Commission with respect to the Registration Statement or any amendment thereto and as promptly as possible, upon request, provide counsel for SDS true and complete copies of all correspondence from and to the Commission relating to the Registration Statement; and (iv) comply in all material respects with the provisions of the Securities Act and the Exchange Act with respect to the disposition of all Registrable Securities covered by the Registration Statement during the applicable period in accordance with the intended methods of disposition by the Investors thereof set forth in the Registration Statement as so amended or in such prospectus as so supplemented.

(C)The Company shall notify the holders of Registrable Securities to be sold and counsel to SDS as promptly as possible (i) when a prospectus or any prospectus supplement or post-effective amendment to the Registration Statement is proposed to be filed (but in no event in the case of this subparagraph (i), less than three business days prior to the date of such filing); (ii) when the Commission notifies the Company whether there will be a "review" of such Registration Statement; and (iii) with respect to the Registration Statement or any post-effective amendment, when the same has become effective, and after the effectiveness thereof: (A) of any request by the Commission or any other Federal or state governmental authority for amendments or supplements to the Registration Statement or prospectus or for additional information; (B) of the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement covering any or all of the Registrable Securities or the initiation of any proceedings for that purpose; (C) of the receipt by the Company of any notification with respect to the suspension of the qualification or exemption from qualification of any of the Registrable Securities for sale in any jurisdiction, or the initiation or threatening of any proceeding for such purpose; and (D) if the financial statements included in the Registration Statement become ineligible for inclusion therein or of the occurrence of any event that makes any statement made in the Registration Statement or prospectus or any document incorporated or deemed to be incorporated therein by reference untrue in any material respect or that requires any revisions to the Registration Statement, prospectus or other documents so that, in the case of the Registration Statement or the prospectus, as the case may be, it will not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading. Without limitation to any remedies to which the Investors may be entitled under this Agreement, if any of the events described in Section 2(c)(iii) occur, the Company shall use its best efforts to respond to and correct the event.

(D)Each Investor acknowledges that the Registration Statement shall also register a significant amount of shares of Common Stock owned by other stockholders which have "piggy-back" registration rights under various agreements with the Company.

3. PIGGY-BACK REGISTRATION.

(A)RIGHT TO PIGGY-BACK. If (but without any obligation to do so other than as provided above) the Company proposes to register any of shares of Common Stock in connection with any offering of shares of Common Stock pursuant to a registration statement under the Securities Act (other than a registration relating solely to the sale of securities to participants in a Company stock plan or a transaction covered by Rule 145 under the Securities Act, or a registration in which the only stock being registered is Common Stock issuable upon conversion of debt securities which are also being registered) (a "PUBLIC OFFERING"), the Company shall promptly give each Investor written notice of such registration, at least 10 business days prior to the filing of any registration statement under the Securities Act. Upon the written request of the Investor given within 5 business days after delivery of such written notice by the Company, the Company shall, subject to the provisions of Section 3(b) below, use its best efforts to cause to be registered under the Securities Act on such registration statement all of the Registrable Securities that the Investor has requested to be registered.

(B)UNDERWRITING. If the registration statement under which the Company gives notice under Section 3(a) is for an underwritten Public Offering, the Company shall so advise the Investor. The right of the Investor to registration pursuant to Section 3(a) above shall be conditioned upon the Investor's participation in such underwriting and the inclusion of the Registrable Securities in the underwriting to the extent provided herein. The Investor shall (together with the Company and any other holders of Company securities distributing their securities through such underwriting) enter into an underwriting agreement in customary form with the underwriter or underwriters selected for underwriting by the Company. Notwithstanding any other provision of Sections 3(a), if the underwriter determines that marketing factors require a limitation of the number of shares to be underwritten, the underwriter may exclude some or all of the Registrable Securities from such registration and underwriting.

4. FURNISH INFORMATION. It shall be a condition to the Company's obligations to take any action under this Agreement with respect to the Registrable Securities of any Investor that the Investor shall promptly furnish to the Company, upon request, such information regarding itself, the Registrable Securities, and the intended method of disposition of such securities as shall be necessary to effect the registration of their Registrable Securities. In that connection, each selling Investor shall be required to represent to the Company that all such information which is given is both complete and accurate in all material respects when made.

5. DELAY OF REGISTRATION. The Investor shall have no right to obtain or seek an injunction restraining or otherwise delaying any such registration as the result of any controversy that might arise with respect to the interpretation or implementation of the terms of this Agreement.

6. TERMINATION OF REGISTRATION RIGHTS. The Company shall have no obligation to register the Registrable Securities pursuant to this Agreement or otherwise following the end of the Effectiveness Period.

7. INDEMNIFICATION.

(A) To the extent permitted by law, the Company shall, notwithstanding any termination of this Agreement, indemnify and hold harmless each Investor, the officers, directors, agents and employees of each of them, each Person who controls any such Investor (within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act) and the officers, directors, agents and employees of each such controlling Person, to the fullest extent permitted by applicable law, from and against any and all losses, claims, damages, liabilities, costs (including, without limitation, costs of preparation and reasonable attorneys' fees) and expenses (collectively, "LOSSES"), as incurred, arising out of or relating to any untrue or alleged untrue statement of a material fact contained or incorporated by reference in the Registration Statement, any prospectus or any form of prospectus or in any amendment or supplement thereto or in any preliminary prospectus, or arising out of or relating to any omission or alleged omission of a material fact required to be stated therein or necessary to make the statements therein (in the case of any prospectus or form of prospectus or amendment or supplement thereto, in the light of the circumstances under which they were made) not misleading (collectively a "VIOLATION"), provided, however, that the indemnity agreement contained in this Section 7(a) shall not apply to amounts paid in settlement of any such Loss if such settlement is effected without the prior written consent of the Company (which consent shall not be unreasonably withheld), nor shall the Company be liable to any Investor or officer, director, agent or controlling person thereof to the extent that any Loss arises out of or is based upon untrue statements, omissions or violations which occur in reliance upon and in conformity with information furnished expressly for use in connection with such registration by any such Investor or officer, director or agent thereof or any controlling person.

(B) To the extent permitted by law, each Investor shall, notwithstanding any termination of this Agreement, indemnify and hold harmless the Company, each of its directors, each of its officers who has signed the registration statement, each person, if any, who controls the Company (within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act), any underwriter, any other stockholder of the Company selling securities in such Registration Statement and any controlling person of any such underwriter or other stockholder, against any Losses, as incurred, arising out of or relating to any Violation in each case to the extent that such Violation occurs in reliance upon and in conformity with written information furnished expressly for use in connection with such registration by any such Investor or officer, director, agent or controlling person thereof; provided, however, that the indemnity agreement contained in this Section 7(b) shall not apply to amounts paid in settlement of any such Loss if such settlement is effected without the consent of the Investor, which consent shall not be unreasonably withheld. Notwithstanding anything to the contrary contained herein, the Investor shall be liable under this Section 7(b) for only that amount as does not exceed the net proceeds to such Investor as a result of the sale of Registrable Securities pursuant to such Registration Statement.

8. LISTING. The Company shall cause all Registrable Securities to be listed on any United States securities exchange, quotation system, market or over-the-counter bulletin board on which similar securities issued by the Company are then listed and use its best efforts to maintain such listing.

9. FAILURE TO FILE REGISTRATION STATEMENT. The Company and the Investors agree that the Investors will suffer damages if the Registration Statement is not filed on or prior to the Target Filing Date and maintained in the manner contemplated herein during the Effectiveness Period. The Company and the Investors further agree that it would not be feasible to ascertain the extent of such damages with precision. Accordingly, if the Registration Statement is not filed on or prior to the Target Filing Date, the Company shall pay in cash or in shares of Common Stock (at the Company's option) as liquidated damages for such failure and not as a penalty to each Investor an amount equal to two percent (2%) of the total purchase price such Investor paid for the Shares and Warrants purchased pursuant to the Purchase Agreement (the "TOTAL PURCHASE PRICE") for each 30-day period until the Registration Statement has been filed with the Commission, which shall be pro rated for such periods less than 30 days (the "LATE FILING DAMAGES"). Payments to be made to an Investor pursuant to this Section 9 shall be due and payable within 5 business days of any demand therefor by such Investor, but in no event more than once during any 30-day period. The parties agree that the Late Filing Damages represent a reasonable estimate on the part of the parties, as of the date of this Agreement, of the amount of damages that may be incurred by the Investors if the Registration Statement is not filed on or prior to the Target Filing Date. If the Company elects to pay the Late Filing Damages in shares of Common Stock, such shares of Common Stock shall be valued at the average closing price of a share of Common Stock on the applicable trading market for the Common Stock for the 5-trading-day period immediately preceding the date of demand of such Late Filing Damages.

10. FAILURE OF REGISTRATION STATEMENT TO BECOME EFFECTIVE. The Company and the Investors agree that the Investors will suffer damages if the Registration Statement is not declared effective by the Commission on or prior to the ninetieth (90th) day following the Target Filing Date (the "EFFECTIVENESS DEADLINE"). The Company and the Investors further agree that it would not be feasible to ascertain the extent of such damages with precision. Accordingly, if the Registration Statement is not declared effective by the Commission prior to the Effectiveness Deadline, the Company shall pay in cash or in shares of Common Stock (at the Company's option) as liquidated damages for such failure and not as a penalty to each Investor an amount equal to (a) two percent (2%) of such Investor's Total Purchase Price for the first 30-day period following the Effectiveness Deadline (which shall be pro rated for such periods less than 30 days) and (b) one percent (1%) of such Investor's Total Purchase Price for each subsequent 30-day period (which shall be pro rated for such periods less than 30 days) (the "NON-EFFECTIVENESS DAMAGES") until either (x) the Registration Statement is declared effective by the Commission or (y) the first anniversary of the Agreement Date. Payments to be made to an Investor pursuant to this Section 10 shall be due and payable within 5 business days of any demand therefor by such Investor, but in no event more than once during any 30-day period. The parties agree that the Non-Effectiveness Damages represent a reasonable estimate on the part of the parties, as of the date of this Agreement, of the amount of damages that may be incurred by the Investors if the Registration Statement is not declared effective on or prior to the ninetieth (90th) day following the Target Filing Date. If the Company elects to pay the Non-Effectiveness Damages in shares of Common Stock, such shares of Common Stock shall be valued at the average closing price of a share of Common Stock on the applicable trading market for the Common Stock for the 5-trading-day period immediately preceding the date of demand of such Non-Effectiveness Damages.

11. LISTING; EXCHANGE ACT REPORTS.

(A) The Company shall use commercially reasonable best efforts to list its Common Stock on the American Stock Exchange.

(B) With a view to making available to the Investors the benefits of Rule 144 promulgated under the Securities Act or any other similar rule or regulation of the Commission that may at any time permit the investors to sell securities of the Company to the public without registration ("RULE 144"), the Company agrees to:

(I) make and keep public information available, as those terms are understood and defined in Rule 144;

(II) file with the Commission in a timely manner all reports and other documents required of the Company under the Securities Act and the Securities Exchange Act of 1934, as amended (the "EXCHANGE Act") so long as the Company remains subject to such requirements and the filing of such reports and other documents is required for the applicable provisions of Rule 144; and

(III) furnish to each Investor so long as such Investor owns Registrable Securities, promptly upon request, (i) a written statement by the Company that it has complied with the reporting requirements of Rule 144, the Securities Act and the Exchange Act, (ii) a copy of the most recent annual or quarterly report of the Company and such other reports and documents so filed by the Company to the extent any such report is not available on the Commission's website, and (iii) such other information as may be reasonably requested to permit the Investors to sell such securities pursuant to Rule 144 without registration.

12. MISCELLANEOUS.

(A) GOVERNING LAW. This Agreement, all acts and transactions pursuant hereto and the rights and obligations of the parties hereto shall be governed, construed and interpreted in accordance with the laws of the state of California, without giving effect to principles of choice of law.

(B) JURISDICTION AND VENUE. Any legal action or other legal proceeding relating to this Agreement or the enforcement of any provision of this Agreement shall be brought or otherwise commenced in any state or federal court located in the county of San Diego, California. Each party to this Agreement: (i) expressly and irrevocably consents and submits to the jurisdiction of each state and federal court located in the county of San Diego, California and each appellate court located in the state of California, in connection with any such legal proceeding; (ii) agrees that each state and federal court located in the county of San Diego, California shall be deemed to be a convenient forum; and (iii) agrees not to assert, by way of motion, as a defense or otherwise, in any such legal proceeding commenced in any state or federal court located in the county of San Diego, California any claim that such party is not subject personally to the jurisdiction of such court, that such legal proceeding has been brought in an inconvenient forum, that the venue of such proceeding 7

is improper or that this Agreement or the subject matter of this Agreement may not be enforced in or by such court.

(C) ENTIRE AGREEMENT. This Agreement embodies the entire agreement and understanding between the parties hereto with respect to the subject matter hereof and supersedes all prior oral or written agreements and understandings relating to the subject matter hereof. No statement, representation, warranty, covenant or agreement of any kind not expressly set forth in this Agreement shall affect, or be used to interpret, change or restrict, the express terms and provisions of this Agreement.

(D) NOTICES. All notices and other communications hereunder shall be in writing and shall be given (and shall be deemed to have been duly given upon receipt) by delivery in person or facsimile transmission (received at the facsimile machine to which it is transmitted prior to 5:00 p.m., local time, on a business day in the state of California, for the party to which it is sent), by courier or express delivery service or by registered or certified mail (postage prepaid, return receipt requested) to the respective parties at the following addresses (or at such other address for a party as shall be specified in a notice given in accordance with this Section):

if to the Company:	ADVENTRX Pharmaceuticals, Inc. 9948 Hibert Street, Suite 100 San Diego, CA 92131 Attention: Nicholas J. Virca Facsimile: (858) 271-9678
with a copy to (not to constitute notice):	Bingham McCutchen LLP 3 Embarcadero Center San Francisco, CA 94111-4067 Attention: Henry D. Evans, Jr. Facsimile: (415) 393-2286
if to the Investor:	To the address set forth in Schedule 1 hereto.

(E) AMENDMENTS AND WAIVERS. Any term of this Agreement may be amended, waived or departed from only with the written consent of the Company and the holders of a majority of the Registrable Securities then outstanding. Any amendment or waiver effected in accordance with this Section 12(e) shall be binding upon each party to this Agreement, whether or not such party has signed such amendment or waiver and the Company. No such waiver or consent shall be deemed to be or shall constitute a waiver or consent with respect to any other terms or provisions of this Agreement, whether or not similar. Each such waiver or consent shall be effective only in the specific instance and for the purpose for which it was given, and shall not constitute a continuing waiver or consent.

(F) SUCCESSORS AND ASSIGNS. This Agreement is personal to each of the parties and may not be assigned without the written consent of the other parties; provided, however, that any of the Investors shall be permitted to assign this Agreement to any person to whom it assigns or transfers the Warrants or Registrable Securities, other than in a public resale, in

compliance with applicable securities laws. Any assignee must be an "accredited investor" as defined in Rule 501(a) promulgated under the Securities Act.

(G) SEVERABILITY. In the event that any court of competent jurisdiction shall determine that any provision, or any portion thereof, contained in this Agreement shall be unenforceable in any respect, then such provision shall be deemed limited to the extent that such court deems it enforceable, and as so limited shall remain in full force and effect. In the event that such court shall deem any such provision, or portion thereof, wholly unenforceable, the remaining provisions of this Agreement shall nevertheless remain in full force and effect.

(H) INTERPRETATION. The parties hereto acknowledge and agree that: (i) each party and such party's counsel has reviewed the terms and provisions of this Agreement; (ii) the rule of construction to the effect that any ambiguities are resolved against the drafting party shall not be employed in the interpretation of this Agreement; and (iii) the terms and provisions of this Agreement shall be construed fairly as to the parties hereto and not in favor of or against any party, regardless of which party was generally responsible for the preparation of this Agreement. Whenever used herein, the singular number shall include the plural, the plural shall include the singular, the use of any gender shall include all persons.

(I) HEADINGS AND CAPTIONS. The headings and captions of the various subdivisions of this Agreement are for convenience of reference only and shall in no way modify, or affect the meaning or construction of any of the terms or provisions hereof.

(J) NO WAIVER OF RIGHTS, POWERS AND REMEDIES. No failure or delay by a party hereto in exercising any right, power or remedy under this Agreement, and no course of dealing between the parties hereto, shall operate as a waiver of any such right, power or remedy of the party. No single or partial exercise of any right, power or remedy under this Agreement by a party hereto, nor any abandonment or discontinuance of steps to enforce any such right, power or remedy, shall preclude such party from any other or further exercise thereof or the exercise of any other right, power or remedy hereunder. The election of any remedy by a party hereto shall not constitute a waiver of the right of such party to pursue other available remedies. No notice to or demand on a party not expressly required under this Agreement shall entitle the party receiving such notice or demand to any other or further notice or demand in similar or other circumstances or constitute a waiver of the rights of the party giving such notice or demand to any other or further action in any circumstances without such notice or demand.

(K) REGISTRATION EXPENSES. All fees and expenses incident to the performance of or compliance with this Agreement by the Company shall be borne by the Company whether or not the Registration Statement is filed or becomes effective and whether or not any Registrable Securities are sold pursuant to the Registration Statement. The fees and expenses referred to in the foregoing sentence shall include, without limitation, (i) all registration and filing fees (including, without limitation, fees and expenses (A) with respect to filings required to be made with the American Stock Exchange and each other securities exchange, quotation system, market or over-the-counter bulletin board on which Registrable Securities are required hereunder to be listed, (B) with respect to filings required to be made with the

Commission, and (C) in compliance with state securities or Blue Sky laws, (ii) printing expenses (including, without limitation, expenses of printing certificates for Registrable Securities and of printing or photocopying prospectuses), (iii) messenger, telephone and delivery expenses, (iv) Securities Act liability insurance, if the Company so desires such insurance, (v) fees and expenses of all other persons retained by the Company in connection with the consummation of the transactions contemplated by this Agreement, including, without limitation, the Company's independent public accountants (including, in the case of an underwritten offering, the expenses of any comfort letters or costs associated with the delivery by independent public accountants of a comfort letter or comfort letters) and legal counsel, and (vi) fees and expenses of the counsel to SDS, up to \$5,000, in connection with any Registration Statement hereunder. In addition, the Company shall be responsible for all of its internal expenses incurred in connection with the consummation of the transactions contemplated by this Agreement (including, without limitation, all salaries and expenses of its officers and employees performing legal or accounting duties), the expense of any annual audit, the fees and expenses incurred in connection with the listing of the Registrable Securities on any securities exchange as required hereunder.

(L) COUNTERPARTS AND FACSIMILE DELIVERY. This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Any signature page delivered by facsimile or other electronic image transmission shall be binding to the same extent as an original signature page, with regard to any agreement subject to the terms hereof or any amendment thereto. Any party who delivers such a signature page agrees to later deliver an original counterpart to any party who requests it.

(M) INDEPENDENT NATURE OF INVESTORS' OBLIGATIONS AND RIGHTS. The obligations of each Investor under this Agreement are several and not joint with the obligations of any other Investor, and no Investor shall be responsible in any way for the performance of the obligations of any other Investor under any such agreement. Nothing contained herein, and no action taken by any Investor pursuant thereto, shall be deemed to constitute the Investors as a partnership, an association, a joint venture or any other kind of entity, or create a presumption that the Investors are in any way acting in concert or as a group with respect to such obligations or the transactions contemplated by such agreement. Each Investor shall be entitled to independently protect and enforce its rights, including without limitation, the rights arising out of this Agreement, and it shall not be necessary for any other Investor to be joined as an additional party in any proceeding for such purpose. Each Investor represents that it has been represented by its own separate legal counsel in its review and negotiation of this Agreement. For reasons of administrative convenience only, the Investors acknowledge and agree that they and their respective counsel have chosen to communicate with the Company through Wiggin and Dana LLP, but Wiggin and Dana LLP does not represent any of the Investors in this transaction other than SDS (an affiliate of an Investor).

[Signature page follows.]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first above written.

ADVENTRX PHARMACEUTICALS, INC.

By: -----

Name: -----

Title: -----

[Investor signature pages follow.]

COMPANY SIGNATURE PAGE TO THE REGISTRATION RIGHTS AGREEMENT

INVESTORS:

Print Exact Name: _____

By: _____

Name:

Title:

[ADVENTRX Registration Rights Agreement]

SCHEDULE 1

INVESTORS

COMMON STOCK AND WARRANT PURCHASE AGREEMENT

This Common Stock and Warrant Purchase Agreement (this "AGREEMENT"), dated April 19, 2004 (the "AGREEMENT DATE"), is between ADVENTRX Pharmaceuticals, Inc., a Delaware corporation (the "COMPANY"), and Franklin M. Berger (the "INVESTOR").

1. SUBSCRIPTION.

(A) SHARES OF COMMON STOCK. On the terms and subject to the conditions set forth in this Agreement, at the Closing (as defined below), the Company will sell and the Investor will purchase One Hundred Sixty-six Thousand Six Hundred Sixty-six (166,666) shares of Common Stock, par value \$0.001 per share, of the Company ("COMMON STOCK") at a purchase price of \$1.50 per share (the "SHARE PRICE"). For purposes of this Agreement, the term "SHARES" refers to the shares of Common Stock purchased by the Investor pursuant to this Agreement.

(B) WARRANTS In consideration of the Investor's purchase of the Shares, the Company shall also issue to the Investor (i) a warrant, in the form of Exhibit A-1 hereto, to purchase Forty-nine Thousand Nine Hundred Ninety-nine (49,999) shares of Common Stock (an "A-1 WARRANT") and (ii) a warrant, in the form of Exhibit A-2 hereto, to purchase Thirty-three Thousand Three Hundred Thirty-three (33,333) shares of Common Stock (an "A-2 WARRANT"). The A-1 Warrants and A-2 Warrants issuable to the Investor pursuant to this Agreement are collectively referred to herein as the "WARRANTS."

2. CLOSING; CONDITIONS TO CLOSING.

(A) CLOSING. The closing of the purchase and sale of the Shares and the issuance of the Warrants (the "CLOSING") will take place as promptly as practicable, but no later than five business days after satisfaction or waiver of all of the conditions set forth in Sections 2(c) and (d) (other than those conditions which by their terms are not to be satisfied or waived until the Closing), at the offices of the Company's Counsel (as defined herein), located at 3 Embarcadero Center, San Francisco, CA 94111-4067. The date on which the Closing occurs is referred to herein as the "CLOSING DATE" (it is understood and agreed that the Closing Date shall be the Agreement Date).

(B) DELIVERY OF PURCHASE PRICE. The Investor shall deliver or cause to be delivered to the Company by wire transfer of immediately available funds an amount in cash equal to \$250,000 (the "PURCHASE PRICE").

(C) CONDITIONS TO OBLIGATIONS OF THE INVESTOR TO EFFECT THE CLOSING. The obligations of the Investor to effect the Closing and the transactions contemplated by this Agreement shall be subject to the satisfaction at or prior to the Closing, of each of the following conditions, any of which may be waived, in writing, by the Investor:

(I) The Company shall deliver or cause to be delivered to the Investor the following:

-1-

(1) A copy of the letter to be delivered to the Company's transfer agent containing irrevocable instructions to issue a certificate evidencing the Shares, registered in the name of the Investor (it being understood and agreed that the original of such letter shall be delivered to the transfer agent upon the Company's receipt of the Purchase Price);

(2) The Registration Rights Agreement in the form of Exhibit B hereto (the "REGISTRATION RIGHTS AGREEMENT") executed by the Company; and

(3) The Warrants, each registered in the name of the Investor and executed by the Company.

(D) CONDITIONS TO OBLIGATIONS OF THE COMPANY TO EFFECT THE CLOSING. The obligations of the Company to effect the Closing and the transactions contemplated by this Agreement shall be subject to the satisfaction at or prior to the Closing of each of the following conditions, any of which may be waived, in writing, by the Company:

(I) The Investor shall have executed and delivered to the Company this Agreement;

(II) The Investor shall have executed and delivered to the Company the Registration Rights Agreement;

(III) The Investor shall have executed and delivered to the Company the Investor Suitability Questionnaire attached hereto as Exhibit C and the Company shall be reasonably satisfied, through the responses of the Investor, that the sale of the Shares and the Warrants shall not require registration thereof

under the Securities Act of 1933, as amended (the "SECURITIES ACT") or under the blue sky or securities laws of any jurisdiction; and

(IV) The Investor shall have delivered the Purchase Price to the Company.

3. REPRESENTATIONS AND WARRANTIES OF THE COMPANY. The Company represents and warrants as of the Agreement Date to the Investor that, except as set forth on the Disclosure Schedule attached as Schedule 3:

(A) CORPORATE EXISTENCE AND POWER; SUBSIDIARIES. The Company is a corporation duly incorporated, validly existing and in good standing under the laws of the state in which it is incorporated, and has all corporate powers required to carry on its business as now conducted. The Company is duly qualified to do business as a foreign corporation and is in good standing in each jurisdiction where the character of the property owned or leased by it or the nature of its activities makes such qualification necessary, except for those jurisdictions where the failure to be so qualified would not have a Material Adverse Effect. For purposes of this Agreement, the term "MATERIAL ADVERSE EFFECT" means, with respect to the Company, a material adverse effect on the Company's condition (financial or other), business, properties, assets, liabilities (including contingent liabilities), results of operations or current prospects, taken as a whole. True and complete copies of the Company's Certificate of Incorporation, as amended (the "CERTIFICATE"), and Bylaws, as amended (the "BYLAWS"), as currently in effect and as will be in effect on the Closing Date, have previously been made available to the Investor. For purposes of this Agreement, the term "SUBSIDIARY" or "SUBSIDIARIES" means, with respect to any entity, any corporation or other organization of which securities or other ownership interests having ordinary voting power to elect a majority of the board of directors or other persons performing similar functions are directly or indirectly owned by such entity or of which such entity is a partner or is, directly or indirectly, the beneficial owner of 50% or more of any class of equity securities or equivalent profit participation interests. The Company has no Subsidiaries.

(B) CORPORATE AUTHORIZATION. The execution, delivery and performance by the Company of this Agreement, the Registration Rights Agreement, the Warrants and each of the other documents executed by the Company pursuant to and in connection with this Agreement (collectively, the "TRANSACTION AGREEMENTS"), and the consummation of the transactions contemplated hereby and thereby (including, but not limited to, the sale and delivery of the Shares and the Warrants to the Investor and the subsequent issuance of the Warrant Shares to the Investor upon exercise of the Warrants) (the "TRANSACTIONS") have been (and will be, in the case of the issuance of the Warrant Shares) duly authorized, and no additional corporate or stockholder action is required for the approval thereof. The shares issuable upon exercise of the Warrants (the "WARRANT SHARES") have been duly reserved for issuance by the Company. The Transaction Agreements have been or, to the extent contemplated hereby or by the Transaction Agreements, will be duly executed and delivered and constitute the legal, valid and binding agreement of the Company, enforceable against the Company in accordance with their terms, except as may be limited by bankruptcy, reorganization, insolvency, moratorium and similar laws of general application relating to or affecting the enforcement of rights of creditors, and except as enforceability of its obligations hereunder are subject to general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity or at law).

(C) NON-CONTRAVENTION The execution, delivery and performance by the Company of the Transaction Agreements, and the consummation by the Company of the Transactions do not and will not (a) violate any term of the Certificate, the Bylaws or any material agreement to which the Company is a party or by which it is bound; (b) constitute a violation of any provision of any law, regulation, judgment, injunction, order or decree binding upon or applicable to the Company; (c) constitute a default (or would constitute a default with notice or lapse of time or both) or breach under or give rise to a right of termination, cancellation or acceleration or loss of any benefit under any material agreement, contract or other instrument binding upon the Company or under any material license, franchise, permit or other similar authorization held by the Company; or (d) result in the creation or imposition of any Lien (as defined below) on any asset of the Company. For purposes of this Agreement, the term "LIEN" means, with respect to any asset, any mortgage, lien, pledge, charge, security interest, claim or encumbrance of any kind in respect of such asset.

(D) SEC DOCUMENTS. The Company is obligated under the Securities Exchange Act of 1934, as amended (the "EXCHANGE ACT"), to file reports pursuant to Sections 13 or 15(d) thereof (all such reports filed or required to be filed by the Company with the Securities and Exchange Commission (the "COMMISSION"), including all exhibits thereto or incorporated therein by reference, and all documents filed by the Company under the Securities Act, hereinafter called the "SEC DOCUMENTS"). Since December 31, 2002, the Company has timely filed all SEC Documents required to be filed under the Exchange Act. All SEC Documents filed on or after October 31, 2000 (i) were prepared in all material respects in accordance with the requirements of the Exchange Act and (ii) did not at the time they were filed (or, if amended or superseded by a filing prior to the Agreement Date, then on the date of such filing) contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading. A correct and complete copy of each of the SEC Documents for any period ending on or after December 31, 2002 (the "RECENT REPORTS") is currently available to the Investor at the Commission's main _____ public website _____ at <http://www.sec.gov/cgi-bin/browse-edgar?company=adventrx+pharma&CIK=&filenum=&State=&SIC=&owner=include&action=getcompany>. None of the information about the Company or any of its Subsidiaries which has been disclosed to the Investor herein or in the course of discussions and negotiations with respect hereto which is not disclosed in the Recent Reports is or was required to be so disclosed.

(E) FINANCIAL STATEMENTS. Each of the Company's audited consolidated balance sheet and related consolidated statements of income, cash flows and changes in stockholders' equity (including the related notes) as of and for the years ended December 31, 2003 and December 31, 2002, as contained in the Recent Reports (both of (i) and (ii), collectively, the "FINANCIAL STATEMENTS") (x) present fairly in all material respects the financial position of the Company and its Subsidiaries on a consolidated basis as of the dates thereof and the results of operations, cash flows and stockholders' equity as of and for each of the periods then ended and (y) were prepared in accordance with United States generally accepted accounting principals ("GAAP") applied on a consistent basis throughout the periods involved, in each case, except as otherwise indicated in the notes thereto.

(F) COMPLIANCE WITH LAW. The Company is in compliance and has conducted its business so as to comply with all laws, rules and regulations, judgments, decrees or orders of any court, administrative agency, commission, regulatory authority or other governmental authority or instrumentality, domestic or foreign, applicable to its operations, the violation of which would cause a Material Adverse Affect. There are no judgments or orders, injunctions, decrees, stipulations or awards (whether rendered by a court or administrative agency or by arbitration), including any such actions relating to affirmative action claims or claims of discrimination, against the Company or against any of its properties or businesses.

(G) ABSENCE OF CERTAIN CHANGES. Since December 31, 2003, the Company has conducted its business only in the ordinary course and there has not occurred, except as set forth in the Recent Reports or any exhibit thereto or incorporated by reference therein, any event that could reasonably be expected to have a Material Adverse Effect on the Company or any of its Subsidiaries.

(H) NO UNDISCLOSED LIABILITIES. Except as set forth in the Recent Reports, and except for liabilities and obligations incurred in the ordinary course of business since December 31, 2003, as of the Agreement Date, to the Company's knowledge, (i) the Company does not have any material liabilities or obligations (absolute, accrued, contingent or otherwise) which, and (ii) there has not been any aspect of the prior or current conduct of the business of the Company or its Subsidiaries which may form the basis for any material claim by any third party which, in each case, if asserted could result in any such material liabilities or obligations which are not fully reflected, reserved against or disclosed in the balance sheet of the Company as at December 31, 2003.

(I) CAPITALIZATION. The authorized capital stock of the Company consists of 100,000,000 shares of Common Stock of which 53,221,288 shares are issued and 53,198,123 are outstanding as of the Agreement Date and 1,000,000 shares of preferred stock, par value \$0.01 per share, of which none are issued and outstanding as of the Agreement Date. All issued and outstanding shares of the Company's capital stock have been duly authorized and were validly issued, and are fully paid and nonassessable. No securities issued by the Company from October 31, 2000 to the Agreement Date were issued in violation of any statutory or common law preemptive rights. Upon issuance pursuant to the terms of this Agreement or the Warrants, as the case may be, all Shares and Warrant Shares shall be duly authorized, validly issued and outstanding, and fully paid and nonassessable and such shares shall not have been issued in violation of any statutory or contractual preemptive rights. There are no dividends which have accrued or been declared but are unpaid on the capital stock of the Company. All taxes required to be paid by Company in connection with the issuance and any transfers of the Company's capital stock have been paid. All permits or authorizations required to be obtained from or registrations required to be effected with any person or entity in connection with any and all issuances of securities of the Company from October 31, 2000 through the Agreement Date have been obtained or effected, and all securities of the Company have been issued and are held in accordance with the provisions of all applicable securities or other laws. A true and complete capitalization table of the Company as of the Agreement Date is set forth in Schedule 3(i). No shares of capital stock of the Company are subject to preemptive rights or any other similar rights of the stockholders of the Company or any liens or encumbrances imposed through the actions or failure to act of the Company. Except as disclosed in Schedule 3(i), as of the Agreement Date, (i) there are no outstanding options, warrants, scrip, rights to subscribe for, puts, calls, rights of first refusal, agreements, understandings, claims or other commitments or rights of any character whatsoever relating to, or securities or rights convertible into or exchangeable for any shares of capital stock of the Company, or arrangements by which the Company is or may become bound to issue additional shares of capital stock of the Company, (ii) there are no agreements or arrangements under which the Company is obligated to register the sale of any of its securities under the Securities Act and (iii) there are no anti-dilution or price adjustment provisions contained in any security issued by the Company (or in any agreement providing rights to security holders) that will be triggered by the issuance of the Shares, Warrants or Warrant Shares (including the issuance of the Warrant Shares upon exercise of the Warrants).

(J) GOVERNMENT AUTHORIZATIONS. Except as disclosed in the Recent Reports, the Company holds all material authorizations, consents, approvals, franchises, licenses and permits required under applicable law or regulation for the operation of the business of the Company as presently operated (the "GOVERNMENTAL AUTHORIZATIONS"). All the Governmental Authorizations have been duly issued or obtained and are in full force and effect, and the Company is in material compliance with the terms of all the Governmental Authorizations. The Company has not engaged in any activity that, to its knowledge, would cause revocation or suspension of any such Governmental Authorizations. The Company has no knowledge of any facts which could reasonably be expected to cause the Company to believe that the Governmental Authorizations will not be renewed by the appropriate governmental authorities in the ordinary course. Neither the execution, delivery nor performance of this Agreement shall adversely affect the status of any of the Governmental Authorizations.

(K) BROKERS. No broker, finder or investment banker is entitled to any brokerage, finder's or other fee or commission in connection with the transactions contemplated by this Agreement, based upon any arrangement made by or on behalf of the Company, which would make the Company or the Investor liable for any fees or commissions.

(L) SECURITIES LAWS. Neither the Company nor any agent acting on behalf of the Company has taken any action which might cause this Agreement or the Shares or Warrants to violate the Securities Act or the Exchange Act or any rules or regulations promulgated thereunder, as in effect on the Closing Date. Assuming that all of the representations and warranties of the Investor set forth in Section 4 are true and correct, the offer, sale and issuance of the Shares and Warrants in conformity with the terms of this Agreement are exempt from the registration requirements of Section 5 of the Securities Act and from the qualification or registration requirements of applicable "blue sky" laws.

(M) ISSUANCE OF SHARES. The Shares are duly authorized and, upon issuance in accordance with the terms of this Agreement will be validly issued, fully paid, and non-assessable and free from all taxes, liens, claims and encumbrances with respect to the issue thereof and shall not be subject to preemptive rights or other similar rights of stockholders of the Company and will not impose personal liability on the holder thereof. The Warrant Shares are duly authorized and reserved for issuance, and, when issued upon exercise of or otherwise pursuant to the Warrants, respectively, in accordance with the terms thereof, will be validly issued, fully paid and non-assessable, and free from all taxes, liens, claims and encumbrances and will not be subject to preemptive rights or other similar rights of stockholders of the Company and will not impose personal liability upon the holder thereof.

(N) INTERNAL ACCOUNTING CONTROLS. The Company maintains a system of internal accounting controls sufficient, in the judgment of the Company's board of directors, to provide reasonable assurance that (i) transactions are executed in accordance with management's general or specific authorizations, (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles and to maintain asset accountability, (iii) access to assets is permitted only in accordance with management's general or specific authorization and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences.

(O) NO INVESTMENT COMPANY. The Company is not, and upon the issuance and sale of the Shares and Warrants as contemplated by this Agreement will not be, an "investment company" required to be registered under the Investment Company Act of 1940 (an "INVESTMENT COMPANY"). The Company is not controlled by an Investment Company.

(P) SARBANES-OXLEY ACT. The Company is in substantial compliance with the applicable provisions of the Sarbanes-Oxley Act of 2002 (the "SARBANES-OXLEY ACT"), and the rules and regulations promulgated thereunder, that are effective and intends to comply substantially with other applicable provisions of the Sarbanes-Oxley Act, and the rules and regulations promulgated thereunder, upon the effectiveness of such provisions.

(Q) BENEFICIAL HOLDINGS OF BURNHAM HILL PARTNERS. Burnham Hill Partners ("BHP"), a division of Pali Capital, Inc. and the Company's placement agent with respect to the purchase and sale of the Shares and the issuance of the Warrants, has advised the Company that certain employees of BHP and their family members (acting separately and not as a group) owned approximately 12% of the outstanding shares of Common Stock as of April 4, 2004.

4. REPRESENTATIONS AND WARRANTIES OF THE INVESTOR. The Investor hereby represents and warrants to the Company as follows:

(A) EXEMPT TRANSACTION; UNREGISTERED SHARES AND WARRANTS. The Investor understands that the Shares and Warrants are being offered and sold in reliance on one or more exemptions from registration provided for under the Securities Act, and that the Company's reliance upon such exemptions is predicated, in part, upon the Investor's representations and warranties set forth in this Agreement. The Investor acknowledges that it is purchasing the Shares and Warrants without being offered or furnished any offering literature or prospectus. The Investor understands that neither the Commission, nor any governmental agency charged with the administration of the securities laws of any jurisdiction nor any other governmental agency has passed upon or reviewed the merits or qualifications of, or recommended or approved the offer and sale of the Shares and Warrants pursuant to the terms of this Agreement.

(B) INVESTMENT INTENT; ACCREDITATION; AUTHORITY. The Investor is acquiring the Shares and Warrants for investment for the Investor's own account, not as nominee or agent, for investment and not with a view to, or for resale in connection with, any distribution or public offering thereof within the meaning of the Securities Act; provided, however, that by making the representations herein, the Investor reserves the right to dispose of the Shares, Warrants or Warrant Shares at any time in accordance with this Agreement or the Warrant, as applicable, and in accordance with or pursuant to a registration statement or an exemption from registration under the Securities Act. The Investor is an "accredited investor" within the meaning of the Securities Act. The Investor has the full right, power, authority and capacity to enter into and perform this Agreement, the terms of this Agreement constitute valid and binding obligations of the Investor enforceable in accordance with their terms, except as the same may be limited by equitable principles and by bankruptcy, insolvency, moratorium, and other laws of general application affecting the enforcement of creditors' rights.

(C) KNOWLEDGE AND EXPERIENCE. The Investor (i) has such knowledge and experience in financial and business matters as to be capable of evaluating the merits and risks of the Investor's prospective investment in the Shares and Warrants; (ii) has the ability to bear the economic risks of the Investor's prospective investment; (iii) has been furnished with and has had access to such information as the Investor has considered necessary to make a determination as to the purchase of the Shares and Warrants together with such additional information as is necessary to verify the accuracy of the information supplied; and (iv) has had all questions which have been asked by the Investor satisfactorily answered by the Company.

(D) RESTRICTED SECURITIES. The Investor understands that the Shares and Warrants are "restricted securities" as such term is defined in Rule 144 of Regulation D promulgated under the Securities Act ("RULE 144") and must be held indefinitely unless they are subsequently registered or qualified under applicable state and federal securities laws or an exemption from such registration or qualification is available. Except as contemplated by the Registration Rights Agreement, the Investor understands that it may resell the Shares and Warrant Shares pursuant to Rule 144 only after the satisfaction of certain requirements, including the requirement that the Shares and Warrants Shares be held for at least one year prior to resale.

(E) NO OBLIGATION TO REGISTER. The Investor further acknowledges and understands that, except as provided in the Registration Rights Agreement, the Company is under no obligation to register the Shares, Warrants or Warrant Shares. The Investor understands that the certificate evidencing the Shares, Warrants and Warrant Shares will be imprinted with a legend which prohibits the transfer of the Shares, Warrants and Warrant Shares unless they are registered or such registration is not required in the opinion of counsel in form and substance satisfactory to the Company.

(F) DOMICILE. The Investor is a resident of the State of New York.

(G) NO NEED FOR LIQUIDITY. The Investor's aggregate holding of securities that are "restricted securities" or otherwise not readily marketable is not excessive in view of the Investor's net worth and financial circumstances and the purchase of the Shares and Warrants will not cause such commitment to become excessive.

(H) INDEPENDENT ADVICE. The Investor understands that the Company urges the Investor to seek independent advice from professional advisors relating to the suitability for the Investor of an investment in the Company in view of the Investor's overall financial needs and with respect to legal and tax implications of such an investment.

5. RELIANCE. The Investor understands that the Company may rely on the representations and warranties in Section 4 in determining whether to permit the Investor to purchase the Shares and Warrants. If for any reason any representations and warranties are no longer true and accurate prior to the Closing Date, the Investor will give the Company prompt written notice of the inaccuracy. By signing below, the Investor represents that the Investor has read and confirmed the truth and accuracy of each of the foregoing representations and warranties.

6. ADDITIONAL COVENANTS OF THE PARTIES.

(A) INDEMNIFICATION. Each party (an "INDEMNIFYING PARTY") agrees to indemnify and hold harmless the other party hereto and each of its directors, officers, members, managers, agents and affiliates (as applicable) from and against any and all loss, damage or liability due to or arising out of a breach by such indemnifying party of any representation, warranty or covenant contained in this Agreement and made by such indemnifying party. The liability of the Investor to provide indemnification pursuant to this Section 6 shall be limited in the aggregate to \$250,000.

(B) PLEDGE OF SECURITIES. The Company acknowledges and agrees that the Shares, Warrants and Warrant Shares may be pledged by the Investor in connection with a bona fide margin agreement or other loan or financing arrangement that is secured by the Shares Warrants or Warrant Shares. The pledge of the Shares, Warrants or Warrant Shares shall not be deemed to be a transfer, sale or assignment of the Shares, Warrants or Warrant Shares hereunder, and the Investor shall not be required to provide the Company with any notice thereof or otherwise make any delivery to the Company pursuant to this Agreement or any other Transaction Agreement. The Company hereby agrees to execute and deliver such documentation as a pledgee of the Shares, Warrants or Warrant Shares may reasonably request in connection with a pledge of the thereof to such pledgee by the Investor.

(C) SECURITIES LAWS DISCLOSURE; PUBLICITY. Neither the Company nor the Investor shall make any press release or other publicity about the terms of this Agreement or the transactions contemplated hereby without the prior approval of the other unless otherwise required by law, regulation or the rules of the Commission. In addition, the Company agrees that it shall not disclose, and shall not include in any public filing or other announcement, the name of the Investor, unless expressly agreed to in writing by the Investor or unless and until such disclosure is, in the reasonable opinion of counsel to the Company, required by law or applicable regulation, and then only to the extent of such requirement.

(D) LISTING. The Company shall promptly secure the listing of the Shares and Warrant Shares (and any Registrable Securities (as defined in the Registration Rights Agreement) that may from time to time be issued or issuable) upon each national securities exchange or automated quotation system or bulletin board, if any, upon which shares of Common Stock are then listed (subject to official notice of issuance) and, so long as the Investor owns any of the Registrable Securities (as defined in the Registration Rights Agreement), shall maintain, so long as any other shares of Common Stock shall be so listed, such listing of all Shares issued pursuant to this Agreement and Warrant Shares issuable upon exercise of or otherwise pursuant to the Warrants, and any Registrable Securities (as defined in the Registration Rights Agreement) that may from time to time be issued or issuable. To the extent that any Common Stock is so listed, the Company will obtain and, so long as the Investor owns any of the Registrable Securities (as defined in the Registration Rights Agreement), maintain the listing and trading of its Common Stock on the Nasdaq SmallCap, the Nasdaq National Market, the New York Stock Exchange, or the American Stock Exchange and will comply in all respects with the Company's reporting, filing and other obligations under the bylaws or rules of any exchanges or automated quotation systems on which the Common Stock is then listed.

7. RESTRICTIVE LEGENDS AND STOP-TRANSFER ORDERS.

(A) LEGEND. The instruments representing the Shares, Warrants and, if applicable, Warrant Shares shall bear the following legend or similar legend (as well as any legends required by applicable corporate law and state and federal securities laws):

THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 (THE "ACT") AND MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED UNLESS AND UNTIL REGISTERED UNDER THE ACT OR, IN THE OPINION OF COUNSEL IN FORM AND SUBSTANCE SATISFACTORY TO THE ISSUER OF THESE SECURITIES, SUCH OFFER, SALE OR TRANSFER, PLEDGE OR HYPOTHECATION IS IN COMPLIANCE THEREWITH.

(B) REMOVAL OF LEGEND AND TRANSFER RESTRICTIONS. Any legend endorsed on a certificate pursuant to this Section 7 shall be removed, and the Company shall issue a certificate without such legend to the holder of such Shares, Warrants or Warrant Shares, as applicable, if (i) such Shares or Warrant Shares are resold pursuant to a registration statement under the Securities Act, and a prospectus meeting the requirements of Section 11 of the Securities Act is delivered or deemed delivered to the purchaser of such Shares or Warrant Shares, (ii) if such holder satisfies the requirements of Rule 144(k) or (iii) if such holder provides the Company with an opinion of counsel for such holder of the Shares, Warrants or Warrant Shares, reasonably satisfactory to the Company, to the effect that a sale, transfer or assignment of such Shares, Warrants or Warrant Shares may be made without registration.

8. PRICE PROTECTION. If the Company issues or sells any shares of its Common Stock or Common Stock Equivalents, other than Excluded Shares (as that term is defined below) ("ADDITIONAL SHARES") at any time after the Closing Date and prior to June 30, 2004 (the "ADJUSTMENT PERIOD") for a consideration per share (as to any such issuance, the "DILUTIVE PRICE") (a) less than the Share Price (as adjusted for stock splits, stock dividends and the like) and (b) if Additional Shares have been previously issued during the Adjustment Period with respect to which the Company has fully complied with this Section 8, then also less than the lowest Dilutive Price (as adjusted for stock splits, stock dividends and the like) at which such Additional Shares have been previously issued during the Adjustment Period, then the Company will issue to each Investor a number of shares, if positive, of Common Stock to such Investor determined by the following formula:

$$X = (A * B / C) - (A + D)$$

- Where:
- X = the number of shares of Common Stock to be issued to the Investor, rounded to the nearest whole number;
 - A = the number of Shares (as adjusted for stock splits, stock dividends and the like) then held by the Investor;
 - B = the Share Price (as adjusted for stock splits, stock dividends and the like);
 - C = the applicable Dilutive Price; and
 - D = the aggregate number of shares of Common Stock (as adjusted for stock splits, stock dividends and the like) issued to the Investor pursuant to this Section 8 prior to the date of such determination.

For purposes of this Agreement, the term "EXCLUDED SHARES" means: (i) shares of Common Stock issuable or issued after the Closing Date to officers, employees, consultants or directors of the Company directly or pursuant to a stock purchase, stock option, restricted stock or other written compensation plan or agreement approved by the Board of Directors of the Company (the "BOARD"); (ii) shares of Common Stock issued or issuable after the Closing Date, primarily for non-equity financing purposes and as approved by the Board, to financial institutions or lessors in connection with commercial credit arrangements, equipment financings or similar transactions or to vendors of goods or services or customers; (iii) shares of Common Stock issuable upon (a) exercise of warrants, options, notes or other rights to acquire securities of the Company, in each case, outstanding on the Agreement Date, (b) conversion of shares of the Company's Preferred Stock, par value \$0.01 per share outstanding on the Agreement Date or (c) exchange of promissory notes issued by the Company outstanding on the Agreement Date; (iv) capital stock or warrants or options to purchase capital stock issued in connection with bona fide acquisitions, mergers or similar transactions, the terms of which are approved by the Board; (v) shares of Common Stock issued or issuable to licensors of technology of the Company to pay expenses, royalties or milestone payments for which the Company is obligated under any licensing or related agreement; (vi) shares of Common Stock issuable or issued pursuant to stock splits, stock dividends and the like, or (vii) shares of Common Stock issued or issuable by way of dividend or other distribution on any shares of Common Stock issued pursuant to clauses (i)- (vi) above.

If the Company shall issue or sell any warrants or other rights to subscribe for or purchase any additional shares of Common Stock or any securities convertible into shares of Common Stock (collectively, "COMMON STOCK EQUIVALENTS") during the Adjustment Period, whether or not the rights to exchange or convert thereunder are immediately exercisable, and the effective price per share for which Common Stock is issuable upon the exercise, exchange or conversion of such Common Stock Equivalents shall be less than (i) the Share Price (as adjusted for stock splits, stock dividends and the like) and (ii) if Additional Shares have been previously issued during the Adjustment Period with respect to which the Company has fully complied with this Section 8, then also less than the lowest Dilutive Price (as adjusted for stock splits, stock dividends and the like) at which such Additional Shares have been previously issued during the Adjustment Period, then the Company shall issue to the Investor that number of shares of Common Stock that would be issuable pursuant to this Section 8 on the basis that the maximum number of additional shares of Common Stock issuable pursuant to all such Common Stock Equivalents shall be deemed to have been issued and outstanding and the Company shall have received all of the consideration payable therefor, if any, as of the date of the actual issuance of such Common Stock Equivalents. No further issuances shall be made under this Section 8 upon the actual issue of such Common Stock upon the exercise, conversion or exchange of such Common Stock Equivalents, unless such actual issue is at a per share consideration lower than the Dilutive Price used for purposes of the initial adjustment pursuant to this Section 8.

9. PARTICIPATION RIGHTS.

(A) Subject to the terms and conditions specified in this Section 9, the Company hereby grants to the Investor a right of first offer with respect to sales by the Company of Additional Shares, which in no event shall include Excluded Shares, on the same terms and conditions as offered by the Company to the other purchasers of such Additional Shares. If the Company proposes to offer any Additional Shares for sale at any time after June 30, 2004 and before the first anniversary of the Closing Date, the Company shall make an offering of such Additional Shares to the Investor in accordance with the following provisions:

(I) The Company shall deliver a notice (the "ISSUANCE NOTICE") to the Investor stating (A) its bona fide intention to offer such Additional Shares, (B) the number of such Additional Shares to be offered, (C) the price and terms, if any, upon which it proposes to offer such Additional Shares, and (D) the anticipated closing date of the sale of such Additional Shares.

(II) By written notification received by the Company, within five trading days after giving of the Issuance Notice (the "RESPONSE PERIOD"), the Investor may elect to purchase or obtain, at the price and on the terms specified in the Issuance Notice, up to \$125,000 of such Additional Shares. Any such purchase shall be completed at the same closing as that of any third party purchasers or at an additional closing thereunder.

(III) The Company may, during the 75-day period following the expiration of the Response Period, offer the remaining unsubscribed portion of such Additional Shares to any person or persons on substantially similar terms to those specified in the Issuance Notice. If the Company does not consummate the sale of such Additional Shares within such period or if such Additional Shares are offered on terms not substantially similar to the terms of the offer specified in the Issuance Notice, the right provided hereunder shall be deemed to be revived and such Additional Shares shall not be offered or sold unless first reoffered to the Investor in accordance herewith.

(B) The participation right set forth in this Section 9 may not be assigned or transferred, except that such right is assignable by the Investor to any wholly-owned subsidiary or parent of, or to any corporation or entity that is, within the meaning of the Securities Act, controlling, controlled by or under common control with, any such Investor, provided in any event that such assignee is an "accredited investor" as such term is defined in Rule 501(a) promulgated under the Securities Act.

10. MISCELLANEOUS.

(A) GOVERNING LAW. This Agreement, all acts and transactions pursuant hereto and the rights and obligations of the parties hereto shall be governed, construed and interpreted in accordance with the laws of the state of California, without giving effect to principles of choice of law.

(B) JURISDICTION AND VENUE. Any legal action or other legal proceeding relating to this Agreement or the enforcement of any provision of this Agreement shall be brought or otherwise commenced in any state or federal court located in the County of San Diego, California. Each party to this Agreement: (i) expressly and irrevocably consents and submits to the jurisdiction of each state and federal court located in the County of San Diego, California and each appellate court located in the state of California, in connection with any such legal proceeding; (ii) agrees that each state and federal court located in the County of San Diego, California shall be deemed to be a convenient forum; and (iii) agrees not to assert, by way of motion, as a defense or otherwise, in any such legal proceeding commenced in any state or federal court located in the County of San Diego, California any claim that such party is not subject personally to the jurisdiction of such court, that such legal proceeding has been brought in an inconvenient forum, that the venue of such proceeding is improper or that this Agreement or the subject matter of this Agreement may not be enforced in or by such court.

(C) ENTIRE AGREEMENT. This Agreement embodies the entire agreement and understanding between the parties hereto with respect to the subject matter hereof and supersedes all prior oral or written agreements and understandings relating to the subject matter hereof. No statement, representation, warranty, covenant or agreement of any kind not expressly set forth in this Agreement shall affect, or be used to interpret, change or restrict, the express terms and provisions of this Agreement.

(D) NOTICES. All notices and other communications hereunder shall be in writing and shall be given (and shall be deemed to have been duly given upon receipt) by delivery in person or facsimile transmission (received at the facsimile machine to which it is transmitted prior to 5:00 p.m., local time, on a business day in the State of California, for the party to which it is sent), by courier or express delivery service or by registered or certified mail (postage prepaid, return receipt requested) to the respective parties at the following addresses (or at such other address for a party as shall be specified in a notice given in accordance with this Section):

if to the Company: ADVENTRX Pharmaceuticals, Inc.
9948 Hibert Street, Suite 100
San Diego, CA 92131
Attention: Nicholas J. Virca
Facsimile: (858) 271-9678

with a copy to (not to Bingham McCutchen LLP
constitute notice): 3 Embarcadero Center
San Francisco, CA 94111-4067
Attention: Henry D. Evans, Jr.
Facsimile: (415) 393-2286

if to the Investor: Franklin M. Berger
19 East 80th Street
New York, NY 10021
Facsimile: (212) 988-9340

(E) AMENDMENTS AND WAIVERS. Any term of this Agreement may be amended, waived or departed from only with the written consent of the Company and the Investor. No such waiver or consent shall be deemed to be or shall constitute a waiver or consent with respect to any other terms or provisions of this Agreement, whether or not similar. Each such waiver or consent shall be effective only in the specific instance and for the purpose for which it was given, and shall not constitute a continuing waiver or consent.

(F) SUCCESSORS AND ASSIGNS. This Agreement is personal to each of the parties and may not be assigned without the written consent of the other party; provided, however, that the Investor shall be permitted to assign this Agreement to any person to whom it assigns or transfers securities issued or issuable pursuant to this Agreement in compliance with applicable securities laws and this Agreement. Any assignee must be an "accredited investor" as defined in Rule 501(a) promulgated under the Securities Act.

(G) SEVERABILITY. In the event that any court of competent jurisdiction shall determine that any provision, or any portion thereof, contained in this Agreement shall be unenforceable in any respect, then such provision shall be deemed limited to the extent that such court deems it enforceable, and as so limited shall remain in full force and effect. In the event that such court shall deem any such provision, or portion thereof, wholly unenforceable, the remaining provisions of this Agreement shall nevertheless remain in full force and effect.

(H) INTERPRETATION. The parties hereto acknowledge and agree that: (i) each party and such party's counsel has reviewed the terms and provisions of this Agreement; (ii) the rule of construction to the effect that any ambiguities are resolved against the drafting party shall not be employed in the interpretation of this Agreement; and (iii) the terms and provisions of this Agreement shall be construed fairly as to the parties hereto and not in favor of or against any party, regardless of which party was generally responsible for the preparation of this Agreement. Whenever used herein, the singular number shall include the plural, the plural shall include the singular, the use of any gender shall include all persons.

(I) HEADINGS AND CAPTIONS. The headings and captions of the various subdivisions of this Agreement are for convenience of reference only and shall in no way modify, or affect the meaning or construction of any of the terms or provisions hereof.

(J) NO WAIVER OF RIGHTS, POWERS AND REMEDIES. No failure or delay by a party hereto in exercising any right, power or remedy under this Agreement, and no course of dealing between the parties hereto, shall operate as a waiver of any such right, power or remedy of the party. No single or partial exercise of any right, power or remedy under this Agreement by a party hereto, nor any abandonment or discontinuance of steps to enforce any such right, power or remedy, shall preclude such party from any other or further exercise thereof or the exercise of any other right, power or remedy hereunder. The election of any remedy by a party hereto shall not constitute a waiver of the right of such party to pursue other available remedies. No notice to or demand on a party not expressly required under this Agreement shall entitle the party receiving such notice or demand to any other or further notice or demand in similar or other circumstances or constitute a waiver of the rights of the party giving such notice or demand to any other or further action in any circumstances without such notice or demand.

(K) SURVIVAL OF REPRESENTATIONS AND WARRANTIES. All representations and warranties made by the parties hereto in this Agreement, shall survive (i) the execution and delivery hereof, (ii) any investigations made by or on behalf of the parties and (iii) the closing of the transaction contemplated hereby.

(L) EXPENSES. Except as otherwise provided in any other Transaction Agreement, the Company and the Investor shall each be responsible for the payment of and bear their own expenses and legal fees relating to the preparation and negotiation of the Transaction Agreements and the consummation of the Transactions.

(M) COUNTERPARTS AND FACSIMILE DELIVERY. This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Any signature page delivered by facsimile or other electronic image transmission shall be binding to the same extent as an original signature page, with regard to any agreement subject to the terms hereof or any amendment thereto. Any party who delivers such a signature page agrees to later deliver an original counterpart to any party who requests it.

(N) SECURITIES LAW COMPLIANCE.

(I) SECURITIES ACT. The Company shall timely prepare and file with the Commission the form of notice of the sale of securities pursuant to the requirements of Regulation D regarding the sale of the Shares and Warrants under this Agreement.

(II) STATE SECURITIES LAW COMPLIANCE -- SALE. The Company shall timely prepare and file such applications, consents to service of process (but not including a general consent to service of process) and similar documents and take such other steps and perform such further acts as shall be required by the State of New York, with respect to the sale of the Shares and Warrants under this Agreement.

(III) STATE SECURITIES LAW COMPLIANCE --RESALE. Beginning no later than June 30, 2004 and continuing until (i) the Investor has sold all of its Registrable Securities under a Registration Statement or (ii) the Common Stock becomes a "covered security" under Section 18(b)(1)(A) of the Securities Act, the Company shall maintain within either Moody's Industrial Manual or Standard and Poor's Standard Corporation Descriptions (or any successors to these manuals which are similarly qualified as "recognized securities manuals" under state Blue Sky laws) an updated listing containing (i) the names of the officers and directors of the Company, (ii) a balance sheet of the Company as of a date that is at no time older than eighteen months and (iii) a profit and loss statement of the Company for either the preceding fiscal year or the most recent year of operations. Capitalized terms used in this Section 10(n)(iii), but not otherwise defined in this Agreement, shall have the meanings assigned in the Registration Rights Agreement.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first above written.

ADVENTRX PHARMACEUTICALS, INC.

By: /s/ Evan M. Levine

Name: Evan M. Levine

Title: Chief Operating Officer

/s/ Franklin M. Berger

FRANKLIN M. BERGER

SIGNATURE PAGE TO THE COMMON STOCK AND WARRANT PURCHASE AGREEMENT

SCHEDULE 3
DISCLOSURE SCHEDULE

EXHIBIT A-1

Form of A-1 Common Stock Purchase Warrant

EXHIBIT A-2

Form of A-2 Common Stock Purchase Warrant

EXHIBIT B

Form of Registration Rights Agreement

EXHIBIT C
INVESTOR SUITABILITY QUESTIONNAIRE

(ALL INFORMATION WILL BE TREATED CONFIDENTIALLY)

A. PERSONAL INFORMATION

Name: -----
(Exact name as it should appear on stock certificate.)

Residence Address: -----

Home Telephone Number: -----

Fax Telephone Number: -----

Email Address: -----

Social Security Number: -----

B. DELIVERY INFORMATION (Applicable only if different than residence.)

Name of Institution or Destination: -----

Contact Name: -----

Delivery Address: -----

Account Reference (if applicable): -----

Contact Telephone Number: -----

Contact Fax Telephone Number: -----

Contact Email Address: -----

C. EMPLOYMENT INFORMATION

Occupation: -----

Number of Years: -----

Present Employer: -----

Position/Title: -----

Business Address: -----

Business Telephone: -----

D. RESIDENT INFORMATION

Set forth in the space provided below the state(s)/country(ies) in which you have maintained your principal residence during the past three years and the date during which you resided in each state/country.

Are you registered to vote in, or do you have a driver's license issued by, or do you maintain a residence in any other state? If yes, in which state(s)?

Yes _____ No _____

E. INCOME

Do you reasonably expect either your own income from all sources during the current year to exceed \$200,000 or the joint income of you and your spouse (if married) from all sources during the current year to exceed \$300,000?

Yes _____ No _____

If not, please specify the amount:

What percentage of your income as shown above is anticipated to be derived from sources other than salary?

Was either your yearly income from all sources during each of the last two years in excess of \$200,000 or was the joint income of you and your spouse (if married) from all sources during each of such years in excess of \$300,000?

Yes _____ No _____

If no, please specify the amount for:

Last Year: _____

Year Before Last: _____

F. NET WORTH

Will your net worth* as of the date you purchase securities of the Company, together with the net worth of your spouse, be in excess of \$1,000,000?

Yes _____ No _____

If not, please specify amount:

* As used in this questionnaire the term "net worth" means the amount by which total assets exceed total liabilities. In computing net worth for purposes of this Item 5, you should value your principal residence at cost, including cost of improvements, or at that value recently appraised by an institutional lender making a secured loan or otherwise by a certified appraiser, net of encumbrances.

G. EDUCATION

Please describe your educational background and degrees obtained, if any.

H. AFFILIATION

If you have any pre-existing personal or business relationship with the Company or any of its officers, directors or controlling persons, please describe the nature and duration of such relationship.

I. BUSINESS AND FINANCIAL EXPERIENCE

Please describe in reasonable detail the nature and extent of your business, financial and investment experience which you believe give you the capacity to evaluate the merits and risks of the proposed investment and the capacity to protect your interests.

Are you purchasing the securities offered for your own account and for investment purposes only?

Yes _____ No _____

If no, please state for whom you are investing and/or the reason for investing.

The above information has been requested by the Company and will be used solely to confirm that the Company is complying with certain securities regulations. In furnishing the above information, the undersigned acknowledges that the Company will be relying thereon in assessing the requirements of the Securities Act of 1933, as amended, and other applicable securities laws.

The information contained in this questionnaire is true and complete, and the undersigned understands that the Company and its counsel will rely on such information for the purpose of complying with all applicable securities laws, as discussed above. The undersigned agrees to notify the Company promptly of any change in the foregoing information which may occur prior to any purchase by the undersigned of stock from the Company.

FRANKLIN M. BERGER

Date: _____

THIS WARRANT HAS BEEN, AND THE SHARES OF COMMON STOCK WHICH MAY BE RECEIVED PURSUANT TO THE EXERCISE OF THIS WARRANT WILL BE, ACQUIRED SOLELY FOR INVESTMENT AND NOT WITH A VIEW TO, OR FOR RESALE IN CONNECTION WITH, ANY DISTRIBUTION THEREOF. NEITHER THIS WARRANT NOR SUCH SHARES (TOGETHER, THE "SECURITIES") HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR ANY STATE SECURITIES LAWS. SUCH SECURITIES MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED OR HYPOTHECATED IN THE ABSENCE OF SUCH REGISTRATION OR AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE COMPANY THAT SUCH DISPOSITION IS EXEMPT FROM THE REGISTRATION AND PROSPECTUS DELIVERY REQUIREMENTS OF THE ACT AND OF ANY APPLICABLE STATE SECURITIES LAWS.

NO. WA1-64

ISSUED: APRIL 19, 2004

WARRANT TO PURCHASE COMMON STOCK

THIS CERTIFIES THAT, for good and valuable consideration, Franklin M. Berger (the "HOLDER") is entitled to purchase from Adventrx Pharmaceuticals, Inc., a Delaware corporation (the "COMPANY"), Forty-nine Thousand Nine Hundred Ninety-nine (49,999) fully paid and nonassessable shares of Common Stock, par value \$0.001 per share ("COMMON STOCK"), of the Company (as adjusted pursuant to Section 3 hereof) (the "WARRANT SHARES") at a price per share equal to Two Dollars (\$2.00) (as adjusted pursuant to Section 3 hereof) (the "EXERCISE PRICE"), subject to the provisions and upon the terms and conditions hereinafter set forth.

1. METHOD OF EXERCISE; PAYMENT.

(A) Exercise Period. The purchase right represented by this Warrant may be exercised in whole or part by the Holder during the term of this Warrant (as set forth in Section 9 hereof) at any time after the Commencement Date, as defined below, by the surrender of this Warrant (with the notice of exercise form attached hereto as Exhibit A (the "NOTICE OF EXERCISE") duly executed) to the principal office of the Company. If this Warrant shall have been exercised in part, the Company shall, at the time of delivery of the certificate or certificates representing Warrant Shares, deliver to the Holder a new Warrant evidencing the rights of the Holder to purchase the unpurchased shares of Common Stock called for by this Warrant, which new Warrant shall in all other respects be identical with this Warrant, or at the request of the Holder, appropriate notation may be made on this Warrant and the same returned to the Holder.

(B) Exercise. Upon exercise of this Warrant, the Holder shall pay the Company an amount equal to the product of (x) the Exercise Price multiplied by (y) the total number of Warrant Shares purchased pursuant to this Warrant, by wire transfer or certified check payable to the order of the Company or, at any time following the first anniversary of the Warrant Date, if there is not an effective Registration Statement (as defined in the Registration Rights Agreement, dated as of the Warrant Date, between

-1-

the Company and the Holder (the "REGISTRATION RIGHTS AGREEMENT")) with respect to all of the Warrant Shares, then at the option of the Holder, such amount may be paid by the surrender of a portion of shares of Common Stock then held by the Holder or issuable upon such exercise of this Warrant, which shall be valued and credited toward such amount due to the Company for the exercise of the Warrant based upon the Current Market Price of the Common Stock. The person or persons in whose name(s) any certificate(s) representing the Warrant Shares shall be issuable upon exercise of this Warrant shall be deemed to have become the holder(s) of record of, and shall be treated for all purposes as the record holder(s) of, the Warrant Shares represented thereby (and such Warrant Shares shall be deemed to have been issued) immediately prior to the close of business on the date upon which this Warrant is exercised.

"CURRENT MARKET PRICE" means, in respect of any share of Common Stock on any date herein specified,

(1) if there shall not then be a public market for the Common Stock, the higher of

(a) the book value per share of Common Stock at such date, and

(b) the value per share of Common Stock at such date as determined in good faith by the Board,

or

(2) _____ if there shall then be a public market for the Common Stock, the higher of (x) the book value per share of Common Stock at such date, and (y) the average of the daily market prices for the 10 consecutive trading days immediately before such date. The daily market price (the "DAILY MARKET PRICE") for each such trading day shall be (i) the closing price on such day on the principal stock exchange (including

Nasdaq) on which such Common Stock is then listed or admitted to trading, or quoted, as applicable, (ii) if no sale takes place on such day on any such exchange, the last reported closing price on such day as officially quoted on any such exchange (including Nasdaq), (iii) if the Common Stock is not then listed or admitted to trading on any stock exchange, the last reported closing bid price on such day in the over-the-counter market, as furnished by the National Association of Securities Dealers Automatic Quotation System or the National Quotation Bureau, Inc., (iv) if neither such corporation at the time is engaged in the business of reporting such prices, as furnished by any similar firm then engaged in such business, or (v) if there is no such firm, as furnished by any member of the National Association of Securities Dealers, Inc. (the "NASD") selected mutually by the holder of this Warrant and the Company or, if they cannot agree upon such selection, as selected by two such members of the NASD, one of which shall be selected by holder of this Warrant and one of which shall be selected by the Company.

(C) Stock Certificates. In the event of the exercise of this Warrant, certificates for the Warrant Shares so purchased shall be delivered to the Holder within a reasonable time after exercise, but in no case later than the date that is three business days following receipt by the Company of a Notice of Exercise duly completed and executed.

2. STOCK FULLY PAID; RESERVATION OF SHARES. All of the Warrant Shares issuable upon the exercise of the rights represented by this Warrant will, upon issuance

and receipt of the Exercise Price therefor, be fully paid and nonassessable, and free from all preemptive rights, rights of first refusal or first offer, taxes, liens and charges with respect to the issuance thereof. During the period within which the rights represented by this Warrant may be exercised, the Company shall at all times have authorized and reserved for issuance a sufficient number of shares of its Common Stock to provide for the exercise of the rights represented by this Warrant.

3. ADJUSTMENT OF EXERCISE PRICE AND NUMBER OF SHARES. The number and kind of Warrant Shares purchasable upon the exercise of this Warrant and the Exercise Price therefor shall be subject to adjustment from time to time upon the occurrence of certain events, as follows:

(A) Reclassification, Consolidation or Reorganization. In case of any reclassification of the Common Stock (other than a change in par value, or as a result of a subdivision or combination), or in case of any consolidation or merger of the Company with or into another corporation (other than a Change of Control, as defined below) (any of which is a "REORGANIZATION TRANSACTION"), the Company, or such successor corporation as the case may be, shall execute a new warrant, providing that the Holder shall have the right to exercise such new warrant, and procure upon such exercise and payment of the same aggregate Exercise Price, in lieu of the Warrant Shares theretofore issuable upon exercise of this Warrant, the kind and amount of shares of stock, other securities, money and property as would be payable for the Warrant Shares issuable upon exercise of this Warrant as if such Warrant Shares were outstanding on the consummation of the Reorganization Transaction. For purposes of this Warrant, the term "CHANGE OF CONTROL" shall mean (i) any acquisition of the Company by means of merger, acquisition, or other form of corporate reorganization in which outstanding shares of the Company are exchanged for securities or other consideration issued, or caused to be issued, by the acquiring corporation or its subsidiary or parent (other than a reincorporation transaction or change of domicile) and pursuant to which the holders of the outstanding voting securities of the Company immediately prior to such consolidation, merger or other transaction fail to hold equity securities representing a majority of the voting power of the Company or surviving entity immediately following such consolidation, merger or other transaction (excluding voting securities of the acquiring corporation held by such holders prior to such transaction) or (ii) a sale of all or substantially all of the assets of the Company.

(B) Stock Splits, Dividends and Combinations. In the event that the Company shall at any time subdivide the outstanding shares of Common Stock, or shall issue a stock dividend on its outstanding shares of Common Stock, the number of Warrant Shares issuable upon exercise of this Warrant immediately prior to such subdivision or to the issuance of such stock dividend shall be proportionately increased, and the Exercise Price shall be proportionately decreased, and in the event that the Company shall at any time combine the outstanding shares of Common Stock, the number of Warrant Shares issuable upon exercise of this Warrant immediately prior to such combination shall be proportionately decreased, and the Exercise Price shall be proportionately increased, effective at the close of business on the date of such subdivision, stock dividend or combination, as the case may be.

(C) Issuance of Additional Shares.

(I) If at any time after June 30, 2004, the Company shall issue or sell any shares of its Common Stock (other than Excluded Shares (as that term is defined below), "ADDITIONAL SHARES") in exchange for consideration in an amount per Additional Share less than the Exercise Price at the time the Additional Shares are issued or sold, then the Exercise Price immediately prior to such issue or sale shall be reduced to a price determined by dividing:

(1) an amount equal to the sum of (a) the number of shares of Common Stock outstanding immediately prior to such issue or sale multiplied by the then existing Exercise Price, plus (b) the consideration, if any, received by the Company upon such issue or sale, by

(2) the total number of shares of Common Stock outstanding immediately after such issue or sale.

(II) The provisions of Section 3(c)(i) shall not apply to any deemed issuance of Additional Shares for which an adjustment is provided under Section 3(a) or 3(b). No adjustment of the number of shares of Common Stock acquirable upon exercise of this Warrant shall be made under Section 3(c) upon the issuance of any shares of Common Stock which are issued pursuant to the exercise of any warrants or other subscription or purchase rights or pursuant to the exercise of any conversion or exchange rights in any convertible securities, if any such adjustment shall previously have been made upon the issuance of such warrants or other rights or upon the issuance of such convertible securities (or upon the issuance of any warrant or other rights therefor) pursuant to Section 3(d).

For purposes of this Warrant the term "EXCLUDED SHARES" means: (i) shares of Common Stock issuable or issued after the issuance date of this Warrant (the "WARRANT DATE") (as defined in the Purchase Agreement) to officers, employees, consultants or directors of the Company directly or pursuant to a stock purchase, stock option, restricted stock or other written compensation plan or agreement approved by the Board of Directors of the Company (the "BOARD"); (ii) shares of Common Stock issued or issuable after the Warrant Date, primarily for non-equity financing purposes and as approved by the Board, to financial institutions or lessors in connection with commercial credit arrangements, equipment financings or similar transactions or to vendors of goods or services or customers; (iii) shares of Common Stock issuable upon (a) exercise of warrants, options, notes or other rights to acquire securities of the Company, in each case, outstanding on the Warrant Date, (b) conversion of shares of the Company's Preferred Stock, par value \$0.01 per share, outstanding on the Warrant Date, (c) exchange of promissory notes issued by the Company which are outstanding on the Warrant Date, (iv) the Shares (as such term is defined in the Common Stock and Warrant Purchase Agreement, dated as of the Warrant Date, between the Company and the Holder (the "PURCHASE AGREEMENT")); (v) the Warrants (as such term is defined in the Purchase Agreement); (vi) capital stock or warrants or options to purchase capital stock issued in connection with bona fide acquisitions, mergers or similar transactions, the terms of which are approved by the Board; (vii) shares of Common Stock issued or issuable to licensors of technology of the Company to pay expenses, royalties or milestone payments for which the Company is obligated under any licensing or related agreement; (viii) shares of Common Stock issuable or issued pursuant to stock splits, stock dividends and the like, or (ix) shares of Common Stock issued or

issuable by way of dividend or other distribution on shares of Common Stock issued pursuant to clauses (i) - (viii) above.

(D) Issuance of Common Stock Equivalents.

(I) If at any time while this Warrant is outstanding the Company shall issue or sell any warrants or other rights to subscribe for or purchase any additional shares of Common Stock or any securities convertible into shares of Common Stock (other than the Additional Shares) (collectively, "COMMON STOCK EQUIVALENTS"), whether or not the rights to exchange or convert thereunder are immediately exercisable, and the effective price per share for which Common Stock is issuable upon the exercise, exchange or conversion of such Common Stock Equivalents shall be less than the Exercise Price in effect immediately prior to the time of such issue or sale, then the Exercise Price shall be adjusted as provided in Section 3(c) on the basis that the maximum number of additional shares of Common Stock issuable pursuant to all such Common Stock Equivalents shall be deemed to have been issued and outstanding and the Company shall have received all of the consideration payable therefor, if any, as of the date of the actual issuance of such Common Stock Equivalents. No further adjustments to the current Warrant Price shall be made under this Section 3(d) upon the actual issue of such Common Stock upon the exercise, conversion or exchange of such Common Stock Equivalents.

(II) Upon the expiration or termination of any such Common Stock Equivalents, the Exercise Price, to the extent in any way affected by or computed using such Common Stock Equivalents, shall be recomputed to reflect the issuance of the total number of shares of Common Stock (and convertible or exchangeable securities which remain in effect) actually issued upon the exercise, exchange or conversion of such Common Stock Equivalents to the extent that this Warrant is then outstanding.

(E) Other Action Affecting Common Stock. In case at any time or from time to time the Company shall take any action in respect of its Common Stock, other than the payment of dividends permitted by Section 3 or any other action described in Section 3, then, unless such action will not have a materially adverse effect upon the rights of the Holder, the number of shares of Common Stock or other stock into which this Warrant is exercisable and/or the purchase price thereof shall be adjusted in such manner as may be equitable in the circumstances.

(F) Certificate as to Adjustments. Upon the occurrence of each adjustment or readjustment of the Exercise Price, the Company, at its expense, shall promptly compute such adjustment or readjustment in accordance with the terms hereof and prepare and furnish to the Holder of this Warrant a certificate setting forth such adjustment or readjustment

and showing in detail the facts upon which such adjustment or readjustment is based. The Company shall, upon the written request at any time of the Holder of this Warrant, furnish or cause to be furnished to such Holder a like certificate setting forth (i) such adjustments and readjustments, (ii) the Exercise Price at the time in effect and (iii) the number of shares of Common Stock and the amount, if any, or other property which at the time would be received upon the exercise of Warrants owned by such Holder.

(G) Notice of Corporate Action. If at any time:

(i) the Company shall take a record of the holders of its Common Stock for the purpose of entitling them to receive a dividend (other than a cash dividend payable out of earnings or earned surplus legally available for the payment of dividends under the laws of the jurisdiction of incorporation of the Company) or other distribution, or any right to subscribe for or purchase any evidences of its indebtedness, any shares of stock of any class or any other securities or property, or to receive any other right, or

(ii) there shall be any capital reorganization of the Company, any reclassification or recapitalization of the capital stock of the Company or any consolidation or merger of the Company with, or any sale, transfer or other disposition of all or substantially all the property, assets or business of the Company to, another corporation, or

(iii) there shall be a voluntary or involuntary dissolution, liquidation or winding up of the Company;

then, in any one or more of such cases, the Company shall give to the Holder (i) at least 10-days' prior written notice of the date on which a record date shall be selected for such dividend, distribution or right or for determining rights to vote in respect of any such reorganization, reclassification, merger, consolidation, sale, transfer, disposition, dissolution, liquidation or winding up, and (ii) in the case of any such reorganization, reclassification, merger, consolidation, sale, transfer, disposition, dissolution, liquidation or winding up, at least 10-days' prior written notice of the date when the same shall take place. Such notice in accordance with the foregoing clause also shall specify (i) the date on which any such record is to be taken for the purpose of such dividend, distribution or right, the date on which the holders of Common Stock shall be entitled to any such dividend, distribution or right, and the amount and character thereof, and (ii) the date on which any such reorganization, reclassification, merger, consolidation, sale, transfer, disposition, dissolution, liquidation or winding up is to take place and the time, if any such time is to be fixed, as of which the holders of Common Stock shall be entitled to exchange their shares of Common Stock for securities or other property deliverable upon such reorganization, reclassification, merger, consolidation, sale, transfer, disposition, dissolution, liquidation or winding up. Each such written notice shall be sufficiently given if addressed to the Holder at the last address of the Holder appearing on the books of the Company and delivered in accordance with Section 11(d).

(H) Adjustment if Registration Statement Not Effective. If a Registration Statement (as defined in the Registration Rights Agreement, dated as of the Warrant Date, between the Company and the Holder (the "REGISTRATION RIGHTS AGREEMENT")) is not effective with respect to all the

Registrable Securities (as defined in the Registration Rights Agreement) other than Registrable Securities held by holders (i) which have not complied with the Registration Rights Agreement, including, without limitation, Section 4 thereof, or (ii) have otherwise not permitted the Company to include such Registrable Securities on the Registration Statement, on or prior to November 12, 2004,, then the Exercise Price shall be adjusted to equal \$1.50 (subject to adjustment for stock splits, reverse splits, stock dividends and the like, and subject to adjustment in proportion to any adjustment pursuant to Section 3(c)).

4. TRANSFER OF WARRANT. This Warrant may only be transferred in compliance with federal and state securities laws; provided, however, that the Company may withhold its consent to transfer or assignment of this Warrant to any person or entity who is deemed to be a competitor or prospective competitor of the Company, such determination to be made in the reasonable judgment of the Board. If, at the time of the surrender of this Warrant in connection with any transfer of this Warrant or the resale of the Warrant Shares, this Warrant or the Warrant Shares, as applicable, shall not be registered under the Securities Act of 1933, as amended (the "SECURITIES ACT"), the Company may require, as a condition of allowing such transfer (i) that the Holder or transferee of this Warrant or the Warrant Shares as the case may be, furnish to the Company a written opinion of counsel that is reasonably acceptable to the Company to the effect that such transfer may be made without registration under the Securities Act, (ii) that the Holder or transferee execute and deliver to the Company an investment letter in form and substance acceptable to the Company and substantially in the form attached as Exhibit B hereto and (iii) that the transferee be an "accredited investor" as defined in Rule 501(a) promulgated under the Securities Act. Transfer of this Warrant and all rights hereunder, in whole or in part, in accordance with the foregoing provisions, shall be registered on the books of the Company to be maintained for such purpose, upon surrender of this Warrant to the principal office of the Company or the office or agency designated by the Company, together with a written assignment of this Warrant substantially in the form of Exhibit C hereto duly executed by the Holder or its attorney-in-fact and funds sufficient to pay any transfer taxes payable upon the making of such transfer. Upon such surrender and, if required, such payment, the Company shall execute and deliver a new Warrant or Warrants in the name of the assignee or assignees and in the denomination specified in such instrument of assignment, and shall issue to the assignor a new Warrant evidencing the portion of this Warrant not so assigned, and this Warrant shall promptly be cancelled. Following a transfer that complies with the requirements of this Section 4, the Warrant may be exercised by a new holder for the purchase of shares of Common Stock regardless of whether the Company issued or registered a new Warrant on the books of the Company. This Section 4 shall survive the exercise or expiration of the Warrant.

5. CONDITIONS TO EXERCISE OF WARRANT.

(A) Each certificate evidencing the Warrant Shares issued upon exercise of this Warrant shall be stamped or imprinted with a legend substantially in the following form:

THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 (THE "ACT") AND MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED UNLESS AND UNTIL REGISTERED

UNDER THE ACT OR, IN THE OPINION OF COUNSEL IN FORM AND SUBSTANCE SATISFACTORY TO THE ISSUER OF THESE SECURITIES, SUCH OFFER, SALE OR TRANSFER, PLEDGE OR HYPOTHECATION IS IN COMPLIANCE THEREWITH.

(B) REMOVAL OF LEGEND AND TRANSFER RESTRICTIONS. Any legend endorsed on a certificate pursuant to this Section 5 shall be removed, and the Company shall issue a certificate without such legend to the holder of such Warrant Shares if (i) such Warrant Shares are resold pursuant to a registration statement under the Securities Act, and a prospectus meeting the requirements of Section 10 of the Securities Act is delivered or deemed delivered to the purchaser of such Warrant Shares, (ii) if such holder satisfies the requirements of Rule 144(k) or (iii) if such holder provides the Company with an opinion of counsel for such holder of the Warrant Shares, reasonably satisfactory to the Company, to the effect that a sale, transfer or assignment of such Warrant Shares may be made without registration. This paragraph shall survive any exercise of this Warrant.

(C) RESTRICTIONS ON EXERCISE AMOUNT. Unless a Holder delivers to the Company irrevocable written notice (x) prior to the date of issuance hereof or 61 days prior to the effective date of such notice that this Section 5(c) shall not apply to such Holder or (y) prior to a Change of Control, the Holder may not acquire a number of Warrant Shares to the extent that, upon such exercise, the number of shares of Common Stock then beneficially owned by such Holder and its affiliates and any other persons or entities whose beneficial ownership of Common Stock would be aggregated with the Holder's for purposes of Section 13(d) of the Securities Exchange Act of 1934, as amended (the "EXCHANGE ACT"), (including shares held by any "group" of which the Holder is a member, but excluding shares beneficially owned by virtue of the ownership of securities or rights to acquire securities that have limitations on the right to convert, exercise or purchase similar to the limitation set forth herein) exceeds 9.99% of the total number of shares of Common Stock of the Company then issued and outstanding. For purposes hereof, "group" has the meaning set forth in Section 13(d) of the Exchange Act and applicable regulations of the Securities Exchange Commission (the "COMMISSION"), and the percentage held by the holder shall be determined in a manner consistent with the provisions of Section 13(d) of the Exchange Act. Each delivery of a notice of exercise by a Holder will constitute a representation by such Holder that it has evaluated the limitation set forth in this paragraph and determined, based on the most recent public filings by the Company with the Commission, that the issuance of the full number of Warrant Shares requested in such notice of exercise is permitted under this paragraph.

6. FRACTIONAL SHARES. No fractional Warrant Shares will be issued in connection with any exercise hereunder, but in lieu of such fractional shares the Company shall make a cash payment therefor upon the basis of the Exercise Price then in effect.

7. REGISTRATION RIGHTS. The Holder shall have the registration rights described in the Registration Rights Agreement.

8. RIGHTS OF STOCKHOLDERS. No Holder shall be entitled, in its capacity as a Warrant holder, to vote or receive dividends or be deemed the holder of Warrant Shares or any other securities of the Company which may at any time be issuable on the exercise hereof for any purpose, nor shall anything contained herein be

construed to confer upon the Holder any of the rights of a stockholder of the Company or any right to vote for the election of directors or upon any matter submitted to stockholders at any meeting thereof, or to give or withhold consent to any corporate action (whether upon any recapitalization, issuance of stock, reclassification of stock, change of par value, consolidation, merger, conveyance, or otherwise) or to receive dividends or subscription rights or otherwise with respect to the Warrant Shares until this Warrant shall have been exercised and the Warrant Shares purchasable upon the exercise hereof shall have become deliverable, as provided herein.

9. TERM OF WARRANT. This Warrant shall become exercisable on the Warrant Date and shall no longer be exercisable as of the earlier of (i) 5:00 p.m., San Diego, California local time, on the date that is the five-year anniversary of the Warrant Date; and (ii) upon consummation of a Change of Control.

10. REDEMPTION AT COMPANY'S ELECTION. The Company may at the option of the Board, by at least seven-days' prior written notice to the Holder (the "REDEMPTION NOTICE"), redeem this Warrant, in whole or in part, at any time after June 30, 2004, provided that (i) the Daily Market Price for twenty consecutive trading days is equal to or greater than the product of (x) 2 multiplied by (y) the Exercise Price, (ii) either (A) all of the Warrant Shares underlying this Warrant to be redeemed are then registered under an effective registration statement or (B) may be sold pursuant to Rule 144 during a three-month period without registration under the Securities Act, (iii) sufficient shares of Common Stock of the Company are authorized and reserved for issuance upon the full exercise of this Warrant, (iv) all of the Warrant Shares issuable upon exercise of this Warrant are then listed on every stock exchange, market or bulletin board on which any Common Stock of the Company is then listed and (v) the Company is not in default of any material provision of any Transaction Agreement (as defined in the Purchase Agreement). The Redemption Notice shall set forth a date, not less than seven days after the date of the Redemption Notice, on which the redemption of this Warrant shall occur (the "REDEMPTION DATE"). On the Redemption Date, (i) the Company shall pay the Holder by certified check an amount equal to the product of (x) \$0.01 (as adjusted in proportion to any adjustment to the Exercise Price pursuant to Section 3 hereof) multiplied by (y) the number of Warrant Shares so redeemed; and (ii) the Holder shall deliver the original copy of this Warrant marked "REDEEMED" to the Company. If the Company shall redeem this Warrant in part, the Company shall, at the Redemption Date, provided that the Holder shall have delivered the original copy of this Warrant marked "REDEEMED" to the Company, deliver to the Holder a new Warrant evidencing the rights of the Holder to purchase the unredeemed shares of Common Stock called for by this Warrant, which new Warrant shall in all other respects be identical with this Warrant. Nothing in this Section 10 shall prevent the exercise of the Warrants at any time prior to the Redemption Date.

11. MISCELLANEOUS.

(A) This Warrant is being delivered in the State of California and shall be construed and enforced in accordance with and governed by the laws of the State of California, without giving effect to principles of conflicts of laws.

(B) The headings in this Warrant are for purposes of reference only, and shall not limit or otherwise affect any of the terms hereof.

(C) The terms of this Warrant shall be binding upon and shall inure to the benefit of any successors or assigns of the Company and of the Holder and of the Warrant Shares issued or issuable upon the exercise hereof.

(D) Any notice provided for or permitted under this Warrant shall be treated as having been given (a) upon receipt, when delivered personally or sent by confirmed facsimile or telecopy, (b) one day after sending, when sent by commercial overnight courier with written verification of receipt, or (c) three business days after deposit with the United States Postal Service, when mailed postage prepaid by certified or registered mail, return receipt requested, addressed if to the Company, at 9948 Hibert Street, Suite 100, San Diego, CA 92131, facsimile: (858) 271-9678, Attention: Nicholas J. Virca, or, if to the Holder, at such address or facsimile number as the Holder shall have furnished to the Company in writing, or at such other place of which the other party has been notified in accordance with the provisions of this Section 11(d).

(E) Except as may otherwise be provided herein, this Warrant constitutes the full and entire understanding and agreement between the parties with regard to the subjects hereof.

(F) Upon receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and, in the case of any such loss, theft or destruction, upon delivery of an indemnity agreement reasonably satisfactory in form and amount to the Company or, in the case of any such mutilation, upon surrender and cancellation of such Warrant, the Company at the Holder's expense will execute and deliver to the holder of record, in lieu thereof, a new Warrant of like date and tenor.

(G) This Warrant and any provision hereof may be amended, waived or terminated only by an instrument in writing signed by the Company and the Holder.

(H) Receipt of this Warrant by the Holder shall constitute acceptance of and agreement to the foregoing terms and conditions.

[Signature page follows.]

SIGNATURE PAGE TO THE A-1 WARRANT TO PURCHASE COMMON STOCK IN WITNESS WHEREOF, the Company has caused this Warrant to be signed by its duly authorized officer.

Issued : April 19, 2004.

ADVENTRX PHARMACEUTICALS, INC.

By: /s/ Evan M. Levine

Name: Evan M. Levine

Title: Chief Operating Officer

EXHIBIT A

NOTICE OF EXERCISE

TO: Adventrx Pharmaceuticals, Inc.
9948 Hibert Street, Suite 100
San Diego, CA 92131

1. The undersigned hereby elects to purchase _____ shares of Common Stock, par value \$0.001 per share, of the Company ("COMMON STOCK") pursuant to the terms of Section 1(b) of the A-1 Warrant to Purchase Common Stock dated _____ 2004 (the "WARRANT"), and tenders herewith payment of the purchase price of such shares in full.

2. The undersigned hereby elects to convert the attached Warrant into Common Stock of Adventrx Pharmaceuticals, Inc. through "cashless exercise" in the manner specified in the Warrant. This conversion is exercised with respect to _____ of the Shares covered by the Warrant.

Please issue a certificate or certificates representing said _____ shares of Common Stock in the name of the undersigned or in such other name as is specified below:

Name: _____

Address: _____

The undersigned hereby represents and warrants that the aforesaid shares of Common Stock are being acquired for the account of the undersigned for investment and not with a view to, or for resale, in connection with the distribution thereof, and that the undersigned has no present intention of distributing or reselling such shares, and that all representations and warranties of the undersigned with respect to the Warrant and Warrant Shares (as defined in the Warrant) set forth in Section 4 of the Purchase Agreement (as defined in the Warrant) were true and correct as of the Warrant Date (as defined in the Warrant) and are true and correct as of the date hereof.

By: _____

Name: _____

Title: _____

Date: _____

EXHIBIT B

FORM OF INVESTMENT REPRESENTATION LETTER

In connection with the acquisition of [warrants (the "Warrants") to purchase _____ shares of Common Stock of Adventrx Pharmaceuticals, Inc. (the "Company"), par value \$0.001 per share (the "Common Stock")][_____ shares of Common Stock of Adventrx Pharmaceuticals, Inc. (the "Company"), par value \$0.001 per share (the "Common Stock")], by _____ (the "Holder") from _____, the Holder hereby represents and warrants to the Company as follows:

The Holder (i) is an "Accredited Investor" as that term is defined in Rule 501 of Regulation D promulgated under the Securities Act of 1933, as amended (the "Act"); and (ii) has the ability to bear the economic risks of such Holder's prospective investment, including a complete loss of Holder's investment in the Warrants and the shares of Common Stock issuable upon the exercise thereof (collectively, the "Securities").

The Holder, by acceptance of the Warrants, represents and warrants to the Company that the Warrants and all securities acquired upon any and all exercises of the Warrants are purchased for the Holder's own account, and not with view to distribution of either the Warrants or any securities purchasable upon exercise thereof in violation of applicable securities laws.

The Holder acknowledges that (i) the Securities have not been registered under the Act, (ii) the Securities are "restricted securities" and the certificate(s) representing the Securities shall bear the following legend, or a similar legend to the same effect, until (i) in the case of the shares of Common Stock underlying the Warrants, such shares shall have been registered for resale by the Holder under the Act and effectively been disposed of in accordance with a registration statement that has been declared effective; or (ii) in the opinion of counsel for the Company such Securities may be sold without registration under the Act:

"[NEITHER] THE SECURITIES REPRESENTED BY THIS CERTIFICATE [NOR THE SECURITIES INTO WHICH THEY ARE EXERCISABLE] HAVE [NOT] BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), AND ALL SUCH SECURITIES ARE SUBJECT TO RESTRICTIONS ON TRANSFERABILITY AS SET FORTH IN THIS CERTIFICATE. [NEITHER] THE SECURITIES REPRESENTED HEREBY [NOR THE SECURITIES INTO WHICH THEY ARE EXERCISABLE] MAY [NOT] BE SOLD, TRANSFERRED, OR OTHERWISE DISPOSED OF IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT UNDER THE ACT OR AN OPINION OF COUNSEL, REASONABLY ACCEPTABLE TO COUNSEL FOR THE COMPANY, TO THE EFFECT THAT THE PROPOSED SALE, TRANSFER, OR DISPOSITION MAY BE EFFECTUATED WITHOUT REGISTRATION UNDER THE ACT."

IN WITNESS WHEREOF, the Holder has caused this Investment Representation Letter to be executed in its corporate name by its duly authorized officer this __ day of _____ 200_.

[Name]

By: _____
Name:
Title:

EXHIBIT C
ASSIGNMENT FORM

FOR VALUE RECEIVED the undersigned registered owner of this Warrant for the purchase of shares of Common Stock of Adventrx Pharmaceuticals, Inc. hereby sells, assigns and transfers unto the Assignee named below all of the rights of the undersigned under this Warrant, with respect to the number of shares of common stock set forth below:

- -----
- -----
- -----
(Name and Address of Assignee)
- -----
(Number of Shares of Common Stock)

and does hereby irrevocably constitute and appoint _____ attorney-in-fact to register such transfer on the books of the Company, maintained for the purpose, with full power of substitution in the premises.

Dated: _____
- -----
(Print Name and Title)
- -----
(Signature)
- -----
(Witness)

NOTICE: The signature on this assignment must correspond with the name as written upon the face of the Warrant in every particular, without alteration or enlargement or any change whatsoever.

THIS WARRANT HAS BEEN, AND THE SHARES OF COMMON STOCK WHICH MAY BE RECEIVED PURSUANT TO THE EXERCISE OF THIS WARRANT WILL BE, ACQUIRED SOLELY FOR INVESTMENT AND NOT WITH A VIEW TO, OR FOR RESALE IN CONNECTION WITH, ANY DISTRIBUTION THEREOF. NEITHER THIS WARRANT NOR SUCH SHARES (TOGETHER, THE "SECURITIES") HAVE BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR ANY STATE SECURITIES LAWS. SUCH SECURITIES MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED OR HYPOTHECATED IN THE ABSENCE OF SUCH REGISTRATION OR AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE COMPANY THAT SUCH DISPOSITION IS EXEMPT FROM THE REGISTRATION AND PROSPECTUS DELIVERY REQUIREMENTS OF THE ACT AND OF ANY APPLICABLE STATE SECURITIES LAWS.

NO. WA2-64

ISSUED: APRIL 19, 2004

A-2 WARRANT TO PURCHASE COMMON STOCK

THIS CERTIFIES THAT, for good and valuable consideration, Franklin M. Berger (the "HOLDER") is entitled to purchase from Adventrx Pharmaceuticals, Inc., a Delaware corporation (the "COMPANY"), Thirty-three Thousand Three Hundred Thirty-three (33,333) fully paid and nonassessable shares of Common Stock, par value \$0.001 per share ("COMMON Stock"), of the Company (as adjusted pursuant to Section 3 hereof) (the "WARRANT SHARES") at a price per share equal to Two Dollars and Fifty Cents (\$2.50) (as adjusted pursuant to Section 3 hereof) (the "EXERCISE PRICE"), subject to the provisions and upon the terms and conditions hereinafter set forth.

1. METHOD OF EXERCISE; PAYMENT.

(a) Exercise Period. The purchase right represented by this Warrant may be exercised in whole or part by the Holder during the term of this Warrant (as set forth in Section 9 hereof) at any time after the Commencement Date, as defined below, by the surrender of this Warrant (with the notice of exercise form attached hereto as Exhibit A (the "NOTICE OF EXERCISE") duly executed) to the principal office of the Company. If this Warrant shall have been exercised in part, the Company shall, at the time of delivery of the certificate or certificates representing Warrant Shares, deliver to the Holder a new Warrant evidencing the rights of the Holder to purchase the unpurchased shares of Common Stock called for by this Warrant, which new Warrant shall in all other respects be identical with this Warrant, or at the request of the Holder, appropriate notation may be made on this Warrant and the same returned to the Holder.

(b) Exercise. Upon exercise of this Warrant, the Holder shall pay the Company an amount equal to the product of (x) the Exercise Price multiplied by (y) the total number of Warrant Shares purchased pursuant to this Warrant, by wire transfer or certified check payable to the order of the Company or, at any time following the first anniversary of the Warrant

Date, if there is not an effective Registration Statement (as defined in the Registration Rights Agreement, dated as of the Warrant Date, between the Company and the Holder (the "REGISTRATION RIGHTS AGREEMENT")) with respect to all of the Warrant Shares, then at the option of the Holder, such amount may be paid by the surrender of a portion of shares of Common Stock then held by the Holder or issuable upon such exercise of this Warrant, which shall be valued and credited toward such amount due to the Company for the exercise of the Warrant based upon the Current Market Price of the Common Stock. The person or persons in whose name(s) any certificate(s) representing the Warrant Shares shall be issuable upon exercise of this Warrant shall be deemed to have become the holder(s) of record of, and shall be treated for all purposes as the record holder(s) of, the Warrant Shares represented thereby (and such Warrant Shares shall be deemed to have been issued) immediately prior to the close of business on the date upon which this Warrant is exercised.

"CURRENT MARKET PRICE" means, in respect of any share of Common Stock on any date herein specified,

(1) if there shall not then be a public market for the Common Stock, the higher of

(a) the book value per share of Common Stock at such date, and

(b) the value per share of Common Stock at such date as determined in good faith by the Board,

or

(2) if there shall then be a public market for the Common Stock, the higher of (x) the book value per share of Common Stock at such date, and (y) the average of the daily market prices for the 10 consecutive trading days immediately before such date. The daily market price (the "DAILY MARKET PRICE") for each such trading day shall be (i) the closing price on such day on the principal stock exchange (including Nasdaq) on which such Common Stock is then listed or admitted to trading, or quoted, as applicable, (ii) if no sale takes place on such day on any such exchange,

the last reported closing price on such day as officially quoted on any such exchange (including Nasdaq), (iii) if the Common Stock is not then listed or admitted to trading on any stock exchange, the last reported closing bid price on such day in the over-the-counter market, as furnished by the National Association of Securities Dealers Automatic Quotation System or the National Quotation Bureau, Inc., (iv) if neither such corporation at the time is engaged in the business of reporting such prices, as furnished by any similar firm then engaged in such business, or (v) if there is no such firm, as furnished by any member of the National Association of Securities Dealers, Inc. (the "NASD") selected mutually by the holder of this Warrant and the Company or, if they cannot agree upon such selection, as selected by two such members of the NASD, one of which shall be selected by holder of this Warrant and one of which shall be selected by the Company.

(c) Stock Certificates. In the event of the exercise of this Warrant, certificates for the Warrant Shares so purchased shall be delivered to the Holder within a reasonable time after exercise, but in no case later than the date that is three business days following receipt by the Company of a Notice of Exercise duly completed and executed.

2. STOCK FULLY PAID; RESERVATION OF SHARES. All of the Warrant Shares issuable upon the exercise of the rights represented by this Warrant will, upon issuance and receipt of the Exercise Price therefor, be fully paid and nonassessable, and free from all preemptive rights, rights of first refusal or first offer, taxes, liens and charges with respect to the issuance thereof. During the period within which the rights represented by this Warrant may be exercised, the Company shall at all times have authorized and reserved for issuance a sufficient number of shares of its Common Stock to provide for the exercise of the rights represented by this Warrant.

3. ADJUSTMENT OF EXERCISE PRICE AND NUMBER OF SHARES. The number and kind of Warrant Shares purchasable upon the exercise of this Warrant and the Exercise Price therefor shall be subject to adjustment from time to time upon the occurrence of certain events, as follows:

(a) Reclassification, Consolidation or Reorganization. In case of any reclassification of the Common Stock (other than a change in par value, or as a result of a subdivision or combination), or in case of any consolidation or merger of the Company with or into another corporation (other than a Change of Control, as defined below) (any of which is a "REORGANIZATION TRANSACTION"), the Company, or such successor corporation as the case may be, shall execute a new warrant, providing that the Holder shall have the right to exercise such new warrant, and procure upon such exercise and payment of the same aggregate Exercise Price, in lieu of the Warrant Shares theretofore issuable upon exercise of this Warrant, the kind and amount of shares of stock, other securities, money and property as would be payable for the Warrant Shares issuable upon exercise of this Warrant as if such Warrant Shares were outstanding on the consummation of the Reorganization Transaction. For purposes of this Warrant, the term "CHANGE OF CONTROL" shall mean (i) any acquisition of the Company by means of merger, acquisition, or other form of corporate reorganization in which outstanding shares of the Company are exchanged for securities or other consideration issued, or caused to be issued, by the acquiring corporation or its subsidiary or parent (other than a reincorporation transaction or change of domicile) and pursuant to which the holders of the outstanding voting securities of the Company immediately prior to such consolidation, merger or other transaction fail to hold equity securities representing a majority of the voting power of the Company or surviving entity immediately following such consolidation, merger or other transaction (excluding voting securities of the acquiring corporation held by such holders prior to such transaction) or (ii) a sale of all or substantially all of the assets of the Company.

(b) Stock Splits, Dividends and Combinations. In the event that the Company shall at any time subdivide the outstanding shares of Common Stock, or shall issue a stock dividend on its outstanding shares of Common Stock, the number of Warrant Shares issuable upon exercise of this Warrant immediately prior to such subdivision or to the issuance of such stock dividend shall be proportionately increased, and the Exercise Price shall be proportionately decreased, and in the event that the Company shall at any time combine the outstanding shares of Common Stock, the number of Warrant Shares issuable upon exercise of this Warrant immediately prior to such combination shall be proportionately decreased, and the Exercise Price shall be proportionately increased, effective at the close of business on the date of such subdivision, stock dividend or combination, as the case may be.

(c) Issuance of Additional Shares.

(I) If at any time after June 30, 2004, the Company shall issue or sell any shares of its Common Stock, other than Excluded Shares (as that term is defined below) ("ADDITIONAL SHARES"), in exchange for consideration in an amount per Additional Share less than the Exercise Price at the time the Additional Shares are issued or sold, then the Exercise Price immediately prior to such issue or sale shall be reduced to a price determined by dividing:

(1) an amount equal to the sum of (a) the number of shares of Common Stock outstanding immediately prior to such issue or sale multiplied by the then existing Exercise Price, plus (b) the consideration, if any, received by the Company upon such issue or sale, by

(2) the total number of shares of Common Stock outstanding immediately after such issue or sale.

(II) The provisions of Section 3(c)(i) shall not apply to any deemed issuance of Additional Shares for which an adjustment is provided under Section 3(a) or 3(b). No adjustment of the number of shares of Common Stock acquirable upon exercise of this Warrant shall be made under Section 3(c) upon the issuance of any shares of Common Stock which are issued pursuant to the exercise of any warrants or other subscription or purchase rights or pursuant to the exercise of any conversion or exchange rights in any convertible securities, if any such adjustment shall previously have been made upon the issuance of such warrants or other rights or upon the issuance of such convertible securities (or upon the issuance of any warrant or other rights therefor) pursuant to Section 3(d).

For purposes of this Warrant the term "EXCLUDED SHARES" means: (i) shares of Common Stock issuable or issued after the issuance date of this Warrant (the "WARRANT DATE") (as defined in the Purchase Agreement) to officers, employees, consultants or directors of the Company directly or pursuant to a stock purchase, stock option, restricted stock or other written compensation plan or agreement approved by the Board of Directors of the Company (the "BOARD"); (ii) shares of Common Stock issued or issuable after the Warrant Date, primarily for non-equity financing purposes and as approved by the Board, to financial institutions or lessors in connection with commercial credit arrangements, equipment financings or similar transactions or to vendors of goods or services or customers; (iii) shares of Common Stock issuable upon (a) exercise of warrants, options, notes or other rights to acquire securities of the Company, in each case, outstanding on the Warrant Date, (b) conversion of shares of the Company's Preferred Stock, par value \$0.01 per share, outstanding on the Warrant Date, (c) exchange of promissory notes issued by the Company which are outstanding on the Warrant Date, (iv) the Shares (as such term is defined in the Common Stock and Warrant Purchase Agreement, dated as of the Warrant Date, between the Company and the Holder (the "PURCHASE AGREEMENT")); (v) the Warrants (as such term is defined in the Purchase Agreement); (vi) capital stock or warrants or options to purchase capital stock issued in connection with bona fide acquisitions, mergers or similar transactions, the terms of which are

approved by the Board; (vii) shares of Common Stock issued or issuable to licensors of technology of the Company to pay expenses, royalties or milestone payments for which the Company is obligated under any licensing or related agreement; (viii) shares of Common Stock issuable or issued pursuant to stock splits, stock dividends and the like, or (ix) shares of Common Stock issued or issuable by way of dividend or other distribution on shares of Common Stock issued pursuant to clauses (i) - (viii) above.

(d) Issuance of Common Stock Equivalents.

(i) If at any time while this Warrant is outstanding the Company shall issue or sell any warrants or other rights to subscribe for or purchase any additional shares of Common Stock or any securities convertible into shares of Common Stock (other than the Additional Shares) (collectively, o "COMMON STOCK EQUIVALENTS"), whether or not the rights to exchange or convert thereunder are immediately exercisable, and the effective price per share for which Common Stock is issuable upon the exercise, exchange or conversion of such Common Stock Equivalents shall be less than the Exercise Price in effect immediately prior to the time of such issue or sale, then the Exercise Price shall be adjusted as provided in Section 3(c) on the basis that the maximum number of additional shares of Common Stock issuable pursuant to all such Common Stock Equivalents shall be deemed to have been issued and outstanding and the Company shall have received all of the consideration payable therefor, if any, as of the date of the actual issuance of such Common Stock Equivalents. No further adjustments to the current Warrant Price shall be made under this Section 3(d) upon the actual issue of such Common Stock upon the exercise, conversion or exchange of such Common Stock Equivalents.

(ii) Upon the expiration or termination of any such Common Stock Equivalents, the Exercise Price, to the extent in any way affected by or computed using such Common Stock o Equivalents, shall be recomputed to reflect the issuance of the total number of shares of Common Stock (and convertible or exchangeable securities which remain in effect) actually issued upon the exercise, exchange or conversion of such Common Stock Equivalents to the extent that this Warrant is then outstanding.

(e) Other Action Affecting Common Stock. In case at any time or from time to time the Company shall take any action in respect of its Common Stock, other than the payment of dividends permitted by Section 3 or any other action described in Section 3, then, unless such action will not have a materially adverse effect upon the rights of the Holder, the number of shares of Common Stock or other stock into which this Warrant is exercisable and/or the purchase price thereof shall be adjusted in such manner as may be equitable in the circumstances.

(f) Certificate as to Adjustments. Upon the occurrence of each adjustment or readjustment of the Exercise Price, the Company, at its expense, shall promptly compute such adjustment or readjustment in accordance with the terms hereof and prepare and furnish to the Holder of this Warrant a certificate setting forth such adjustment or readjustment and showing in detail the facts

upon which such adjustment or readjustment is based. The Company shall, upon the written request at any time of the Holder of this Warrant, furnish or cause to be furnished to such Holder a like certificate setting forth (i) such adjustments and readjustments, (ii) the Exercise Price at the time in effect and (iii) the number of shares of Common Stock and the amount, if any, or other property which at the time would be received upon the exercise of Warrants owned by such Holder.

(g) Notice of Corporate Action. If at any time:

(i) the Company shall take a record of the holders of its Common Stock for the purpose of entitling them to receive a dividend (other than a cash dividend payable out of earnings or earned surplus legally available for the payment of dividends under the laws of the jurisdiction of incorporation of the Company) or other distribution, or any right to subscribe for or purchase any evidences of its indebtedness, any shares of stock of any class or any other securities or property, or to receive any other right, or

(ii) there shall be any capital reorganization of the Company, any reclassification or recapitalization of the capital stock of the Company or any consolidation or merger of the Company with, or any sale, transfer or other disposition of all or substantially all the property, assets or business of the Company to, another corporation, or

(iii) there shall be a voluntary or involuntary dissolution, liquidation or winding up of the Company;

then, in any one or more of such cases, the Company shall give to the Holder (i) at least 10-days' prior written notice of the date on which a record date shall be selected for such dividend, distribution or right or for determining rights to vote in respect of any such reorganization, reclassification, merger, consolidation, sale, transfer, disposition, dissolution, liquidation or winding up, and (ii) in the case of any such reorganization, reclassification, merger, consolidation, sale, transfer, disposition, dissolution, liquidation or winding up, at least 10-days' prior written notice of the date when the same shall take place. Such notice in accordance with the foregoing clause also shall specify (i) the date on which any such record is to be taken for the purpose of such dividend, distribution or right, the date on which the holders of Common Stock shall be entitled to any such dividend, distribution or right, and the amount and character thereof, and (ii) the date on which any such reorganization, reclassification, merger, consolidation, sale, transfer, disposition, dissolution, liquidation or winding up is to take place and the time, if any such time is to be fixed, as of which the holders of Common Stock shall be entitled to exchange their shares of Common Stock for securities or other property deliverable upon such reorganization, reclassification, merger, consolidation, sale, transfer, disposition, dissolution, liquidation or winding up. Each such written notice shall be sufficiently given if addressed to the Holder at the last address of the Holder appearing on the books of the Company and delivered in accordance with Section 11(d).

4. TRANSFER OF WARRANT. This Warrant may only be transferred in compliance with federal and state securities laws; provided, however, that the Company may withhold its consent to transfer or assignment of this Warrant to any person or entity who is deemed to be a competitor or prospective competitor of the Company, such determination to be made in the reasonable judgment of the Board. If, at the time of the surrender of this Warrant in connection with any transfer of this Warrant or the resale of the Warrant Shares, this Warrant or the Warrant

Shares, as applicable, shall not be registered under the Securities Act of 1933, as amended (the SECURITIES ACT"), the Company may require, as a condition of allowing such transfer (i) that the Holder or transferee of this Warrant or the Warrant Shares as the case may be, furnish to the Company a written opinion of counsel that is reasonably acceptable to the Company to the effect that such transfer may be made without registration under the Securities Act, (ii) that the Holder or transferee execute and deliver to the Company an investment letter in form and substance acceptable to the Company and substantially in the form attached as Exhibit B hereto and (iii) that the transferee be an "accredited investor" as defined in Rule 501(a) promulgated under the Securities Act. Transfer of this Warrant, and all rights hereunder, in whole or in part, in accordance with the foregoing provisions, shall be registered on the books of the Company to be maintained for such purpose, upon surrender of this Warrant to the principal office of the Company or the office or agency designated by the Company, together with a written assignment of this Warrant substantially in the form of Exhibit C hereto duly executed by the Holder or its attorney-in-fact and funds sufficient to pay any transfer taxes payable upon the making of such transfer. Upon such surrender and, if required, such payment, the Company shall execute and deliver a new Warrant or Warrants in the name of the assignee or assignees and in the denomination specified in such instrument of assignment, and shall issue to the assignor a new Warrant evidencing the portion of this Warrant not so assigned, and this Warrant shall promptly be cancelled. Following a transfer that complies with the requirements of this Section 4, the Warrant may be exercised by a new holder for the purchase of shares of Common Stock regardless of whether the Company issued or registered a new Warrant on the books of the Company. This Section 4 shall survive the exercise or expiration of the Warrant.

5. CONDITIONS TO EXERCISE OF WARRANT.

(a) Each certificate evidencing the Warrant Shares issued upon exercise of this Warrant shall be stamped or imprinted with a legend substantially in the following form:

THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 (THE "ACT") AND MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED UNLESS AND UNTIL REGISTERED UNDER THE ACT OR, IN THE OPINION OF COUNSEL IN FORM AND SUBSTANCE SATISFACTORY TO THE ISSUER OF THESE SECURITIES, SUCH OFFER, SALE OR TRANSFER, PLEDGE OR HYPOTHECATION IS IN COMPLIANCE THEREWITH.

(b) REMOVAL OF LEGEND AND TRANSFER RESTRICTIONS. Any legend endorsed on a certificate pursuant to this Section 5 shall be removed, and the Company shall issue a certificate without such legend to the holder of such Warrant Shares if (i) such Warrant Shares are resold pursuant to a registration statement under the Securities Act, and a prospectus meeting the requirements of Section 10 of the Securities Act is delivered or deemed delivered to the purchaser of such Warrant Shares, (ii) if such holder satisfies the requirements of Rule 144(k) or

(iii) if such holder provides the Company with an opinion of counsel for such holder of the Warrant Shares, reasonably satisfactory to the Company, to the effect that a sale, transfer or assignment of such Warrant Shares may be made without registration. This paragraph shall survive any exercise of this Warrant.

(c) RESTRICTIONS ON EXERCISE AMOUNT. Unless a Holder delivers to the Company irrevocable written notice (x) prior to the date of issuance hereof or 61 days prior to the effective date of such notice that this Section 5(c) shall not apply to such Holder or (y) prior to a Change of Control, the Holder may not acquire a number of Warrant Shares to the extent that, upon such exercise, the number of shares of Common Stock then beneficially owned by such Holder and its affiliates and any other persons or entities whose beneficial ownership of Common Stock would be aggregated with the Holder's for purposes of Section 13(d) of the Securities Exchange Act of 1934, as amended (the "EXCHANGE ACT"), (including shares held by any "group" of which the Holder is a member, but excluding shares beneficially owned by virtue of the ownership of securities or rights to acquire securities that have limitations on the right to convert, exercise or purchase similar to the limitation set forth herein) exceeds 9.99% of the total number of shares of Common Stock of the Company then issued and outstanding. For purposes hereof, "group" has the meaning set forth in Section 13(d) of the Exchange Act and applicable regulations of the Securities and Exchange Commission (the "COMMISSION"), and the percentage held by the holder shall be determined in a manner consistent with the provisions of Section 13(d) of the Exchange Act. Each delivery of a notice of exercise by a Holder will constitute a representation by such Holder that it has evaluated the limitation set forth in this paragraph and determined, based on the most recent public filings by the Company with the Commission, that the issuance of the full number of Warrant Shares requested in such notice of exercise is permitted under this paragraph.

6. FRACTIONAL SHARES. No fractional Warrant Shares will be issued in connection with any exercise hereunder, but in lieu of such fractional shares the Company shall make a cash payment therefor upon the basis of the Exercise Price then in effect.

7. REGISTRATION RIGHTS. The Holder shall have the registration rights described in the Registration Rights Agreement.

8. RIGHTS OF STOCKHOLDERS. No Holder shall be entitled, in its capacity as a Warrant holder, to vote or receive dividends or be deemed the holder of Warrant Shares or any other securities of the Company which may at any time be issuable on the exercise hereof for any purpose, nor shall anything contained herein be construed to confer upon the Holder any of the rights of a stockholder of the Company or any right to vote for the election of directors or upon any matter submitted to stockholders at any meeting thereof, or to give or withhold consent to any corporate action (whether upon any recapitalization, issuance of stock, reclassification of stock, change of par value, consolidation, merger, conveyance, or otherwise) or to receive dividends or subscription rights or otherwise with respect to the Warrant Shares until this Warrant shall have been exercised and the Warrant Shares purchasable upon the exercise hereof shall have become deliverable, as provided herein.

9. TERM OF WARRANT. This Warrant shall become exercisable on the Warrant Date and shall no longer be exercisable as of the earlier of (i) 5:00 p.m., San Diego, California local time, on the date that is the five-year anniversary of the Warrant Date; and (ii) upon consummation of a Change of Control.

10. REDEMPTION AT COMPANY'S ELECTION. The Company may at the option of the Board, by at least seven-days' prior written notice to the Holder (the "REDEMPTION NOTICE"), redeem this Warrant, in whole or in part, at any time after June 30, 2004, provided that (i) the Daily Market Price for twenty consecutive trading days is equal to or greater than the product of (x) 2 multiplied by (y) the Exercise Price, (ii) either (A) all of the Warrant Shares underlying this Warrant to be redeemed are then registered under an effective registration statement or (B) may be sold pursuant to Rule 144 during a three-month period without registration under the Securities Act, (iii) sufficient shares of Common Stock of the Company are authorized and reserved for issuance upon the full exercise of this Warrant, (iv) all of the Warrant Shares issuable upon exercise of this Warrant are then listed on every stock exchange, market or bulletin board on which any Common Stock of the Company is then listed and (v) the Company is not in default of any material provision of any Transaction Agreement (as defined in the Purchase Agreement). The Redemption Notice shall set forth a date, not less than seven days after the date of the Redemption Notice, on which the redemption of this Warrant shall occur (the "REDEMPTION DATE"). On the Redemption Date, (i) the Company shall pay the Holder by certified check an amount equal to the product of (x) \$0.001 (as adjusted in proportion to any adjustment to the Exercise Price pursuant to Section 3 hereof) multiplied by (y) the number of Warrant Shares so redeemed; and (ii) the Holder shall deliver the original copy of this Warrant marked "REDEEMED" to the Company. If the Company shall redeem this Warrant in part, the Company shall, at the Redemption Date, provided that the Holder shall have delivered the original copy of this Warrant marked "REDEEMED" to the Company, deliver to the Holder a new Warrant evidencing the rights of the Holder to purchase the unredeemed shares of Common Stock called for by this Warrant, which new Warrant shall in all other respects be identical with this Warrant. Nothing in this Section 10 shall prevent the exercise of the Warrants at any time prior to the Redemption Date.

11. MISCELLANEOUS.

(a) This Warrant is being delivered in the State of California and shall be construed and enforced in accordance with and governed by the laws of the State of California, without giving effect to principles of conflicts of laws.

(b) The headings in this Warrant are for purposes of reference only, and shall not limit or otherwise affect any of the terms hereof.

(c) The terms of this Warrant shall be binding upon and shall inure to the benefit of any successors or assigns of the Company and of the Holder and of the Warrant Shares issued or issuable upon the exercise hereof.

(d) Any notice provided for or permitted under this Warrant shall be treated as having been given (a) upon receipt, when delivered personally or sent by confirmed facsimile or telecopy, (b) one day after sending, when sent by commercial overnight courier with written verification of receipt, or (c) three business days after deposit with the United States Postal Service, when mailed postage prepaid by certified or registered mail, return receipt requested, addressed if to the Company, at 9948 Hibert Street, Suite 100, San Diego, CA 92131, facsimile: (858) 271-9678,

Attention: Nicholas J. Virca, or, if to the Holder, at such address or facsimile number as the Holder shall have furnished to the Company in writing, or at such other place of which the other party has been notified in accordance with the provisions of this Section 11(d).

(e) Except as may otherwise be provided herein, this Warrant constitutes the full and entire understanding and agreement between the parties with regard to the subjects hereof.

(f) Upon receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and, in the case of any such loss, theft or destruction, upon delivery of an indemnity agreement reasonably satisfactory in form and amount to the Company or, in the case of any such mutilation, upon surrender and cancellation of such Warrant, the Company at the Holder's expense will execute and deliver to the holder of record, in lieu thereof, a new Warrant of like date and tenor.

(g) This Warrant and any provision hereof may be amended, waived or terminated only by an instrument in writing signed by the Company and the Holder.

(h) Receipt of this Warrant by the Holder shall constitute acceptance of and agreement to the foregoing terms and conditions.

[Signature page follows.]

IN WITNESS WHEREOF, the Company has caused this Warrant to be signed by its duly authorized officer.

Issued : April 19, 2004.

ADVENTRX PHARMACEUTICALS, INC.

By: /s/ Evan. M. Levine

Name: Evan. M. Levine

Title: Chief Operating Officer

SIGNATURE PAGE TO THE A-2 WARRANT TO PURCHASE COMMON STOCK

EXHIBIT A

NOTICE OF EXERCISE

TO: Adventrx Pharmaceuticals, Inc.
9948 Hibert Street, Suite 100
San Diego, CA 92131

1. The undersigned hereby elects to purchase _____ shares of Common Stock, par value \$0.001 per share, of the Company ("COMMON STOCK") pursuant to the terms of Section 1(b) of the A-2 Warrant to Purchase Common Stock dated _____ 2004 (the "WARRANT"), and tenders herewith payment of the purchase price of such shares in full.

2. The undersigned hereby elects to convert the attached Warrant into Common Stock of Adventrx Pharmaceuticals, Inc. through "cashless exercise" in the manner specified in the Warrant. This conversion is exercised with respect to _____ of the Shares covered by the Warrant.

Please issue a certificate or certificates representing said _____ shares of Common Stock in the name of the undersigned or in such other name as is specified below:

Name: _____

Address: _____

The undersigned hereby represents and warrants that the aforesaid shares of Common Stock are being acquired for the account of the undersigned for investment and not with a view to, or for resale, in connection with the distribution thereof, and that the undersigned has no present intention of distributing or reselling such shares, and that all representations and warranties of the undersigned with respect to the Warrant and Warrant Shares (as defined in the Warrant) set forth in Section 4 of the Purchase Agreement (as defined in the Warrant) were true and correct as of the Warrant Date (as defined in the Warrant) and are true and correct as of the date hereof.

By: _____

Name: _____

Title: _____

Date: _____

EXHIBIT B

FORM OF INVESTMENT REPRESENTATION LETTER

In connection with the acquisition of [warrants (the "Warrants") to purchase _____ shares of Common Stock of Adventrx Pharmaceuticals, Inc. (the "Company"), par value \$0.001 per share (the "Common Stock")][_____ shares of Common Stock of Adventrx Pharmaceuticals, Inc. (the "Company"), par value \$0.001 per share (the "Common Stock")], by _____ (the "Holder") from _____, the Holder hereby represents and warrants to the Company as follows:

The Holder (i) is an "Accredited Investor" as that term is defined in Rule 501 of Regulation D promulgated under the Securities Act of 1933, as amended (the "Act"); and (ii) has the ability to bear the economic risks of such Holder's prospective investment, including a complete loss of Holder's investment in the Warrants and the shares of Common Stock issuable upon the exercise thereof (collectively, the "Securities").

The Holder, by acceptance of the Warrants, represents and warrants to the Company that the Warrants and all securities acquired upon any and all exercises of the Warrants are purchased for the Holder's own account, and not with view to distribution of either the Warrants or any securities purchasable upon exercise thereof in violation of applicable securities laws.

The Holder acknowledges that (i) the Securities have not been registered under the Act, (ii) the Securities are "restricted securities" and the certificate(s) representing the Securities shall bear the following legend, or a similar legend to the same effect, until (i) in the case of the shares of Common Stock underlying the Warrants, such shares shall have been registered for resale by the Holder under the Act and effectively been disposed of in accordance with a registration statement that has been declared effective; or (ii) in the opinion of counsel for the Company such Securities may be sold without registration under the Act:

"[NEITHER] THE SECURITIES REPRESENTED BY THIS CERTIFICATE [NOR THE SECURITIES INTO WHICH THEY ARE EXERCISABLE] HAVE [NOT] BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), AND ALL SUCH SECURITIES ARE SUBJECT TO RESTRICTIONS ON TRANSFERABILITY AS SET FORTH IN THIS CERTIFICATE. [NEITHER] THE SECURITIES REPRESENTED HEREBY [NOR THE SECURITIES INTO WHICH THEY ARE EXERCISABLE] MAY [NOT] BE SOLD, TRANSFERRED, OR OTHERWISE DISPOSED OF IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT UNDER THE ACT OR AN OPINION OF COUNSEL, REASONABLY ACCEPTABLE TO COUNSEL FOR THE COMPANY, TO THE EFFECT THAT THE PROPOSED SALE, TRANSFER, OR DISPOSITION MAY BE EFFECTUATED WITHOUT REGISTRATION UNDER THE ACT."

IN WITNESS WHEREOF, the Holder has caused this Investment Representation Letter to be executed in its corporate name by its duly authorized officer this ___ day of _____ 200_.

[Name]

By: _____
Name:
Title:

EXHIBIT C
ASSIGNMENT FORM

FOR VALUE RECEIVED the undersigned registered owner of this Warrant for the purchase of shares of Common Stock of Adventrx Pharmaceuticals, Inc. hereby sells, assigns and transfers unto the Assignee named below all of the rights of the undersigned under this Warrant, with respect to the number of shares of common stock set forth below:

- -----
- -----
- -----
(Name and Address of Assignee)
- -----
(Number of Shares of Common Stock)

and does hereby irrevocably constitute and appoint _____ attorney-in-fact to register such transfer on the books of the Company, maintained for the purpose, with full power of substitution in the premises.

Dated: _____

- -----
(Print Name and Title)
- -----
(Signature)
- -----
(Witness)

NOTICE: The signature on this assignment must correspond with the name as written upon the face of the Warrant in every particular, without alteration or enlargement or any change whatsoever.

REGISTRATION RIGHTS AGREEMENT

This Registration Rights Agreement (this "AGREEMENT"), dated April 19, 2004 (the "AGREEMENT DATE"), is between ADVENTRX Pharmaceuticals, Inc., a Delaware corporation (the "COMPANY") and Franklin M. Berger (the "INVESTOR").

BACKGROUND

A. The Company and the Investor have entered into a Common Stock and Warrant Purchase Agreement (the "PURCHASE AGREEMENT") as of the Agreement Date pursuant to which the Company desires to sell to the Investor and the Investor desires to purchase from the Company shares of Common Stock, par value \$0.001 per share ("COMMON STOCK"), of the Company (the "SHARES").

B. As additional consideration for the purchase of the Shares, pursuant to the Purchase Agreement, the Company shall issue to the Investor certain warrants to purchase shares of Common Stock (the "WARRANTS").

C. A condition to the obligations under the Purchase Agreement is that the Company and the Investor enter into this Agreement in order to provide the Investor with certain rights to register the resale of the Shares and the Warrant Shares (as defined herein).

AGREEMENT

In consideration of the mutual promises, representations, warranties, covenants and conditions set forth in this Agreement, the parties agree as follows:

1. DEFINITIONS. For purposes of this Agreement, the term:

(A) "REGISTRABLE SECURITIES" means (a) the Shares and the Warrant Shares or other securities issued or issuable to the Investor or its transferees, assignees or designee (i) upon exercise of the Warrants, or (ii) upon any dividend or distribution with respect to, any exchange for or any replacement of the Shares, Warrants or Warrant Shares or (iii) upon any conversion, exercise or exchange of any securities issued in connection with any such distribution, exchange or replacement; (b) securities issued or issuable upon any stock split, stock dividend, recapitalization or similar event with respect to the foregoing; (c) securities issued pursuant to Section 8 of the Purchase Agreement, Section 9 or Section 10 of this Agreement or Section 3 of the Warrants and (d) any other security issued as a dividend or other distribution with respect to, in exchange for, in replacement or redemption of, or in reduction of the liquidation value of, any of the securities referred to in the preceding clauses. The parties acknowledge that the Company may choose to include the Registrable Securities hereunder on a registration statement with other similar securities.

(B) "INVESTOR" means collectively the Investor and any transferees, assignees or designees thereof who hold Registrable Securities.

(C) "COMMISSION" means the Securities and Exchange Commission.

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(D) "WARRANT SHARES" means the shares of Common Stock issuable upon exercise of the Warrants.

(E) "SECURITIES ACT" means the Securities Act of 1933, as amended.

(F) "EXCHANGE ACT" means the Exchange Act of 1934, as amended.

2. FILING OF REGISTRATION STATEMENT.

(A) The Company shall prepare and file with the Commission a "shelf" registration statement (a "REGISTRATION STATEMENT") on Form S-3 (or if such form is not available to the Company on another form appropriate for such registration in accordance herewith) covering all Registrable Securities for a secondary or resale offering to be made on a continuous basis pursuant to Rule 415, such Registration Statement to be filed by no later than June 30, 2004 (the "TARGET FILING DATE"). The Company shall use its best efforts to cause the Registration Statement to be declared effective under the Securities Act not later than 90 days after the Target Filing Date (including filing with the Commission a request for acceleration of effectiveness in accordance with Rule 461 promulgated under the Securities Act within five business days of the date that the Company is notified (orally or in writing, whichever is earlier) by the Commission that a Registration Statement will not be "reviewed," or not be subject to further review) and to keep such Registration Statement continuously effective under the Securities Act until such date as is the earlier of (x) the date when all Registrable Securities covered by such Registration Statement have been sold or (y) the second anniversary of the Agreement Date (the "EFFECTIVENESS PERIOD"). Upon the initial filing thereof, the Registration Statement shall cover at least 100% of the Shares and 100% of the Warrant Shares. Such Registration Statement also

shall cover, to the extent allowable under the Securities Act and the rules promulgated thereunder (including Securities Act Rule 416), such indeterminate number of additional shares of Common Stock resulting from stock splits, stock dividends or similar transactions with respect to the Registrable Securities. Not less than three business days prior to the filing of the Registration Statement or any related prospectus or any amendment or supplement thereto, the Company shall (i) furnish to the Investor copies of all such documents proposed to be filed, which documents (other than those incorporated by reference) and (ii) at the request of the Investor of Registrable Securities cause its officers and directors, counsel and independent certified public accountants to respond to such inquiries as shall be reasonably necessary, in the reasonable opinion of the Investor, to conduct a reasonable investigation within the meaning of the Securities Act. The Company shall not file the Registration Statement or any such prospectus or any amendments or supplements thereto to which the Investor shall reasonably object in writing within three business days after their receipt thereof.

(B) The Company shall (i) prepare and file with the Commission such amendments, including post-effective amendments, to the Registration Statement as may be necessary to keep the Registration Statement continuously effective as to all Registrable Securities for the Effectiveness Period and to the extent any Registrable Securities are not included in such Registration Statement for reasons other than the failure of the Investor to comply with Section 4 hereof,

shall prepare and file with the Commission such additional Registration Statements in order to register for resale under the Securities Act all Registrable Securities; (ii) cause the related prospectus to be amended or supplemented by any required prospectus supplement, and as so supplemented or amended to be filed pursuant to Rule 424 (or any similar provisions then in force) promulgated under the Securities Act; (iii) respond as promptly as possible, and in no event later than 10 business days, to any comments received from the Commission with respect to the Registration Statement or any amendment thereto and as promptly as possible, upon request, provide the Investor true and complete copies of all correspondence from and to the Commission relating to the Registration Statement; and (iv) comply in all material respects with the provisions of the Securities Act and the Exchange Act with respect to the disposition of all Registrable Securities covered by the Registration Statement during the applicable period in accordance with the intended methods of disposition by the Investor thereof set forth in the Registration Statement as so amended or in such prospectus as so supplemented.

(C) The Company shall notify the Investor as promptly as possible (i) when a prospectus or any prospectus supplement or post-effective amendment to the Registration Statement is proposed to be filed (but in no event in the case of this subparagraph (i), less than three business days prior to the date of such filing); (ii) when the Commission notifies the Company whether there will be a "review" of such Registration Statement; and (iii) with respect to the Registration Statement or any post-effective amendment, when the same has become effective, and after the effectiveness thereof: (A) of any request by the Commission or any other Federal or state governmental authority for amendments or supplements to the Registration Statement or prospectus or for additional information; (B) of the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement covering any or all of the Registrable Securities or the initiation of any proceedings for that purpose; (C) of the receipt by the Company of any notification with respect to the suspension of the qualification or exemption from qualification of any of the Registrable Securities for sale in any jurisdiction, or the initiation or threatening of any proceeding for such purpose; and (D) if the financial statements included in the Registration Statement become ineligible for inclusion therein or of the occurrence of any event that makes any statement made in the Registration Statement or prospectus or any document incorporated or deemed to be incorporated therein by reference untrue in any material respect or that requires any revisions to the Registration Statement, prospectus or other documents so that, in the case of the Registration Statement or the prospectus, as the case may be, it will not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading. Without limitation to any remedies to which the Investor may be entitled under this Agreement, if any of the events described in Section 2(c)(iii) occur, the Company shall use its best efforts to respond to and correct the event.

(D) The Investor acknowledges that the Registration Statement shall also register a significant amount of shares of Common Stock owned by other stockholders which have "piggy-back" registration rights under various agreements with the Company.

3. PIGGY-BACK REGISTRATION.

(A) RIGHT TO PIGGY-BACK. If (but without any obligation to do so other than as provided above) the Company proposes to register any shares of Common Stock in connection with any offering of shares of Common Stock pursuant to a registration statement under the Securities Act (other than a registration relating solely to the sale of securities to participants in a Company stock plan or a transaction covered by Rule 145 under the Securities Act, or a registration in which the only stock being registered is Common Stock issuable upon conversion of debt securities which are also being registered) (a "PUBLIC OFFERING"), the Company shall promptly give the Investor written notice of such registration, at least 10 business days prior to the filing of any registration statement under the Securities Act. Upon the written request of the Investor given within 5 business days after delivery of such written notice by the Company, the Company shall, subject to the provisions of Section 3(b) below, use its best efforts to cause to be registered under the Securities Act on such registration statement all of the Registrable Securities that the Investor has requested to be registered.

(B) UNDERWRITING. If the registration statement under which the Company gives notice under Section 3(a) is for an underwritten Public Offering, the Company shall so advise the Investor. The right of the Investor to registration pursuant to Section 3(a) above shall be conditioned upon the Investor's participation in such underwriting and the inclusion of the Registrable Securities in the underwriting to the extent provided herein. The Investor shall (together with the Company and any other holders of Company securities distributing their securities through such underwriting) enter into an underwriting agreement in customary form with the underwriter or underwriters selected for underwriting by the Company. Notwithstanding any other provision of Sections 3(a), if the underwriter determines that marketing factors require a limitation of the number of shares to be underwritten, the underwriter may exclude some or all of the Registrable Securities from such registration and underwriting.

4. FURNISH INFORMATION. It shall be a condition to the Company's obligations to take any action under this Agreement with respect to the Registrable Securities of the Investor that the Investor shall promptly furnish to the Company, upon request, such information regarding itself, the Registrable Securities, and the intended method of disposition of such securities as shall be necessary to effect the registration of its Registrable Securities. In that connection, the Investor shall be required to represent to the Company that all such information which is given is both complete and accurate in all material respects when made.

5. DELAY OF REGISTRATION. THE INVESTOR shall have no right to obtain or seek an injunction restraining or otherwise delaying any such registration as the result of any controversy that might arise with respect to the interpretation or implementation of the terms of this Agreement.

6. TERMINATION OF REGISTRATION RIGHTS. Following the end of the Effectiveness Period, the Company shall have no obligation to register the Registrable Securities pursuant to this Agreement or otherwise.

7. INDEMNIFICATION.

(A) To the extent permitted by law, the Company shall, notwithstanding any termination of this Agreement, indemnify and hold harmless the Investor, to the fullest extent permitted by applicable law, from and against any and all losses, claims, damages, liabilities, costs (including, without limitation, costs of preparation and reasonable attorneys' fees) and expenses (collectively, "LOSSES"), as incurred, arising out of or relating to any untrue or alleged untrue statement of a material fact contained or incorporated by reference in the Registration Statement, any prospectus or any form of prospectus or in any amendment or supplement thereto or in any preliminary prospectus, or arising out of or relating to any omission or alleged omission of a material fact required to be stated therein or necessary to make the statements therein (in the case of any prospectus or form of prospectus or amendment or supplement thereto, in the light of the circumstances under which they were made) not misleading (collectively a "VIOLATION"), provided, however, that the indemnity agreement contained in this Section 7(a) shall not apply to amounts paid in settlement of any such Loss if such settlement is effected without the prior written consent of the Company (which consent shall not be unreasonably withheld), nor shall the Company be liable to the Investor to the extent that any Loss arises out of or is based upon untrue statements, omissions or violations which occur in reliance upon and in conformity with information furnished expressly for use in connection with such registration by the Investor.

(B) To the extent permitted by law, the Investor shall, notwithstanding any termination of this Agreement, indemnify and hold harmless the Company, each of its directors, each of its officers who has signed the registration statement, each person, if any, who controls the Company (within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act), any underwriter, any other stockholder of the Company selling securities in such Registration Statement and any controlling person of any such underwriter or other stockholder, against any Losses, as incurred, arising out of or relating to any Violation in each case to the extent (but only to the extent) that such Violation occurs in reliance upon and in conformity with written information furnished in writing expressly for use in connection with such registration by the Investor; provided, however, that the indemnity agreement contained in this Section 7(b) shall not apply to amounts paid in settlement of any such Loss if such settlement is effected without the consent of the Investor, which consent shall not be unreasonably withheld. Notwithstanding anything to the contrary contained herein, the Investor shall be liable in the aggregate under this Section 7(b) for only such amounts, if any, as in the aggregate do not exceed the net proceeds to such Investor as a result of the sale of Registrable Securities pursuant to such Registration Statement.

8. LISTING. The Company shall cause all Registrable Securities to be listed on any United States securities exchange, quotation system, market or over-the-counter bulletin board on which similar securities issued by the Company are then listed and use its best efforts to maintain such listing.

9. FAILURE TO FILE REGISTRATION STATEMENT. The Company and the Investor agree that the Investor will suffer damages if the Registration Statement is not filed on or prior to the Target Filing Date and maintained in the manner contemplated herein during the Effectiveness Period. The Company and the Investor further agree that it would not be feasible to ascertain the extent of such damages with precision. Accordingly, if the Registration Statement is not filed on or prior to the Target Filing Date, the Company shall pay in cash or in shares of Common Stock (at the Company's option) as liquidated damages for such failure and not as a penalty to the Investor an amount equal to two percent (2%) of the purchase price the Investor paid for the Shares and Warrants purchased pursuant to the Purchase Agreement (the "PURCHASE PRICE") for each 30-day period until the Registration Statement has been filed with the Commission, which shall be pro rated for such periods less than 30 days (the "LATE FILING DAMAGES"). Payments to be made to the Investor pursuant to this Section 9 shall be due and payable within 5 business days of any demand therefor by the Investor, but in no event more than once during any 30-day period. The parties agree that the Late Filing Damages represent a reasonable estimate on the part of the parties, as of the date of this Agreement, of the amount of damages that may be incurred by the Investor if the Registration Statement is not filed on or prior to the Target Filing Date. If the Company elects to pay the Late Filing Damages in shares of Common Stock, such shares of Common Stock shall be valued at the average closing price of a share of Common Stock on the applicable trading market for the Common Stock for the 5-trading-day period immediately preceding the date of demand of such Late Filing Damages.

10. FAILURE OF REGISTRATION STATEMENT TO BECOME EFFECTIVE. The Company and the Investor agree that the Investor will suffer damages if the Registration Statement is not declared effective by the Commission on or prior to the ninetieth (90th) day following the Target Filing Date (the "EFFECTIVENESS DEADLINE"). The Company and the Investor further agree that it would not be feasible to ascertain the extent of such damages with precision. Accordingly, if the Registration Statement is not declared effective by the Commission prior to the Effectiveness Deadline, the Company shall pay in cash or in shares of Common Stock (at the Company's option) as liquidated damages for such failure and not as a penalty to the Investor an amount equal to (a) two percent (2%) of the Purchase Price for the first 30-day period following the Effectiveness Deadline (which shall be pro rated for such periods less than 30 days) and (b) one percent (1%) of the Purchase Price for each subsequent 30-day period (which shall be pro rated for such periods less than 30 days) (the "NON-EFFECTIVENESS DAMAGES") until either (x) the Registration Statement is declared effective by the Commission or (y) the first anniversary of the Agreement Date. Payments to be made to the Investor pursuant to this Section 10 shall be due and payable within 5 business days of any demand therefor by the Investor, but in no event more than once during any 30-day period. The parties agree that the Non-Effectiveness Damages represent a reasonable estimate on the part of the parties, as of the Agreement Date, of the amount of damages that may be incurred by the Investor if the Registration Statement is not declared effective on or prior to the ninetieth (90th) day following the Target Filing Date. If the Company elects to pay the Non-Effectiveness Damages in shares of Common Stock, such shares of Common Stock shall be valued at the average closing price of a share of Common Stock on the applicable trading market for the Common Stock for the 5-trading-day period immediately preceding the date of demand of such Non-Effectiveness Damages.

11. LISTING; EXCHANGE ACT REPORTS.

(A) The Company shall use commercially reasonable best efforts to list its Common Stock on the American Stock Exchange.

(B) With a view to making available to the Investor the benefits of Rule 144 promulgated under the Securities Act or any other similar rule or regulation of the Commission that may at any time permit the Investor to sell securities of the Company to the public without registration ("RULE 144"), the Company agrees to:

- (I) make and keep public information available, as those terms are understood and defined in Rule 144;
- (II) file with the Commission in a timely manner all reports and other documents required of the Company under the Securities Act and the Securities Exchange Act of 1934, as amended (the "EXCHANGE ACT") so long as the Company remains subject to such requirements and the filing of such reports and other documents is required for the applicable provisions of Rule 144; and
- (III) furnish to the Investor so long as the Investor owns Registrable Securities, promptly upon request, (i) a written statement by the Company that it has complied with the reporting requirements of Rule 144, the Securities Act and the Exchange Act, (ii) a copy of the most recent annual or quarterly report of the Company and such other reports and documents so filed by the Company to the extent any such report is not available on the Commission's website, and (iii) such other information as may be reasonably requested to permit the Investor to sell such securities pursuant to Rule 144 without registration.

12. MISCELLANEOUS.

(A) GOVERNING LAW. This Agreement, all acts and transactions pursuant hereto and the rights and obligations of the parties hereto shall be governed, construed and interpreted in accordance with the laws of the state of California, without giving effect to principles of choice of law.

(B) JURISDICTION AND VENUE. Any legal action or other legal proceeding relating to this Agreement or the enforcement of any provision of this Agreement shall be brought or otherwise commenced in any state or federal court located in the county of San Diego, California. Each party to this Agreement: (i) expressly and irrevocably consents and submits to the jurisdiction of each state and federal court located in the county of San Diego, California and each appellate court located in the state of California, in connection with any such legal proceeding; (ii) agrees that each state and federal court located in the county of San Diego, California shall be deemed to be a convenient forum; and (iii) agrees not to assert, by way of motion, as a defense or otherwise, in any such legal proceeding commenced in any state or federal court located in the county of San Diego, California any claim that such party is not subject personally to the jurisdiction of such court, that such legal proceeding has been brought in an inconvenient forum, that the venue of such proceeding is improper or that this Agreement or the subject matter of this Agreement may not be enforced in or by such court.

(C) ENTIRE AGREEMENT. This Agreement embodies the entire agreement and understanding between the parties hereto with respect to the subject matter hereof and supersedes all prior oral or written agreements and understandings relating to the subject matter hereof. No statement, representation, warranty, covenant or agreement of any kind not expressly set forth in this Agreement shall affect, or be used to interpret, change or restrict, the express terms and provisions of this Agreement.

(D) NOTICES. All notices and other communications hereunder shall be in writing and shall be given (and shall be deemed to have been duly given upon receipt) by delivery in person or facsimile transmission (received at the facsimile machine to which it is transmitted prior to 5:00 p.m., local time, on a business day in the state of California, for the party to which it is sent), by courier or express delivery service or by registered or certified mail (postage prepaid, return receipt requested) to the respective parties at the following addresses (or at such other address for a party as shall be specified in a notice given in accordance with this Section):

if to the Company: ADVENTRX Pharmaceuticals, Inc.
9948 Hibert Street, Suite 100
San Diego, CA 92131
Attention: Nicholas J. Virca
Facsimile: (858) 271-9678

with a copy to (not to constitute notice): Bingham McCutchen LLP
3 Embarcadero Center
San Francisco, CA 94111-4067
Attention: Henry D. Evans, Jr.
Facsimile: (415) 393-2286

if to the Investor: Franklin M. Berger
19 East 80th Street
New York, NY 10021
Facsimile: (212) 988-9340

(E) AMENDMENTS AND WAIVERS. Any term of this Agreement may be amended, waived or departed from only with the written consent of the Company and the Investor. No such waiver or consent shall be deemed to be or shall constitute a waiver or consent with respect to any other terms or provisions of this Agreement, whether or not similar. Each such waiver or consent shall be effective only in the specific instance and for the purpose for which it was given, and shall not constitute a continuing waiver or consent.

(F) SUCCESSORS AND ASSIGNS. This Agreement is personal to each of the parties hereto and may not be assigned without the written consent of the other party; provided, however, that the Investor shall be permitted to assign this Agreement to any person to whom it assigns or transfers the Warrants or Registrable Securities, other than in a public resale, in compliance with applicable securities laws. Any assignee must be an "accredited investor" as defined in Rule 501(a) promulgated under the Securities Act.

(G) SEVERABILITY. In the event that any court of competent jurisdiction shall determine that any provision, or any portion thereof, contained in this Agreement shall be unenforceable in any respect, then such provision shall be deemed limited to the extent that such court deems it enforceable, and as so limited shall remain in full force and effect. In the event that such court shall deem any such provision, or portion thereof, wholly unenforceable, the remaining provisions of this Agreement shall nevertheless remain in full force and effect.

(H) INTERPRETATION. The parties hereto acknowledge and agree that: (i) each party and such party's counsel has reviewed the terms and provisions of this Agreement; (ii) the rule of construction to the effect that any ambiguities are resolved against the drafting party shall not be employed in the interpretation of this Agreement; and (iii) the terms and provisions of this Agreement shall be construed fairly as to the parties hereto and not in favor of or against any party, regardless of which party was generally responsible for the preparation of this Agreement. Whenever used herein, the singular number shall include the plural, the plural shall include the singular, the use of any gender shall include all persons.

(I) HEADINGS AND CAPTIONS. The headings and captions of the various subdivisions of this Agreement are for convenience of reference only and shall in no way modify, or affect the meaning or construction of any of the terms or provisions hereof.

(J) NO WAIVER OF RIGHTS, POWERS AND REMEDIES. No failure or delay by a party hereto in exercising any right, power or remedy under this Agreement, and no course of dealing between the parties hereto, shall operate as a waiver of any such right, power or remedy of the party. No single or partial exercise of any right, power or remedy under this Agreement by a party hereto, nor any abandonment or discontinuance of steps to enforce any such right, power or remedy, shall preclude such party from any other or further exercise thereof or the exercise of any other right, power or remedy hereunder. The election of any remedy by a party hereto shall not constitute a waiver of the right of such party to pursue other available remedies. No notice to or demand on a party not expressly required under this Agreement shall entitle the party receiving such notice or demand to any other or further notice or demand in similar or other circumstances or constitute a waiver of the rights of the party giving such notice or demand to any other or further action in any circumstances without such notice or demand.

(K) REGISTRATION EXPENSES. All fees and expenses incident to the performance of or compliance with this Agreement by the Company shall be borne by the Company whether or not the Registration Statement is filed or becomes effective and whether or not any Registrable Securities are sold pursuant to the Registration Statement. The fees and expenses referred to in the foregoing sentence shall include, without limitation, (i) all registration and filing fees (including, without limitation, fees and expenses (A) with respect to filings required to be made with the American Stock Exchange and each other securities exchange, quotation system, market or over-the-counter bulletin board on which Registrable Securities are required hereunder to be listed, (B) with respect to filings required to be made with the Commission, and (C) in compliance with state securities or Blue Sky laws), (ii) printing expenses (including, without limitation, expenses of printing certificates for Registrable Securities and of printing or photocopying prospectuses), (iii) messenger, telephone and delivery expenses, (iv) Securities Act liability insurance, if the Company so desires such insurance, and (v) fees and expenses of all other persons retained by the Company in connection with the consummation of the

transactions contemplated by this Agreement, including, without limitation, the Company's independent public accountants (including, in the case of an underwritten offering, the expenses of any comfort letters or costs associated with the delivery by independent public accountants of a comfort letter or comfort letters) and legal counsel. In addition, the Company shall be responsible for all of its internal expenses incurred in connection with the consummation of the transactions contemplated by this Agreement (including, without limitation, all salaries and expenses of its officers and employees performing legal or accounting duties), the expense of any annual audit, and the fees and expenses incurred in connection with the listing of the Registrable Securities on any securities exchange as required hereunder.

(L) COUNTERPARTS AND FACSIMILE DELIVERY. This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Any signature page delivered by facsimile or other electronic image transmission shall be binding to the same extent as an original signature page, with regard to any agreement subject to the terms hereof or any amendment thereto. Any party who delivers such a signature page agrees to later deliver an original counterpart to any party who requests it.

[Signature page follows.]

SIGNATURE PAGE TO THE REGISTRATION RIGHTS AGREEMENT IN WITNESS WHEREOF,
the parties hereto have executed this Agreement as of the date first above
written.

ADVENTRX PHARMACEUTICALS, INC.

By: /s/ Evan M. Levine

Name: Evan M. Levine

Title: Chief Operating Officer

/s/ Franklin M. Berger

FRANKLIN M. BERGER

Rule 13a-14(a)/15d-14(a) Certification

I, Nicholas J. Virca, Chief Executive Officer of ADVENTRX Pharmaceuticals, Inc. (the "Company"), certify that:

1. I have reviewed this quarterly report on Form 10-QSB for the period ending March 31, 2004 of the Company;
2. Based on my knowledge, this quarterly report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this quarterly report;
3. Based on my knowledge, the financial statements, and other financial information included in this quarterly report, fairly present in all material respects the financial condition, results of operations and cash flows of the Company as of, and for, the periods presented in this quarterly report;
4. The Company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the Company and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Company and have:
 - a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this quarterly report is being prepared;
 - b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) evaluated the effectiveness of the Company's disclosure controls and procedures and presented in this quarterly report our conclusions about the effectiveness of the disclosure controls and procedures as of the end of the period covered by this report based on such evaluation ; and
 - d) disclosed in this report any changes in the Company's internal control over financial reporting that occurred during the Company's most recent fiscal quarter that has materially affected, or is reasonably likely to materially effect, the Company's internal control over financial reporting.
5. The Company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company's auditors and the audit committee of Company's board of directors (or persons performing the equivalent function):
 - a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Company's ability to record, process, summarize and report financial information; and
 - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal control over financial reporting.

May 12, 2004

/s/ NICHOLAS J. VIRCA
Nicholas J. Virca
Chief Executive Officer

Rule 13a-14(a)/15d-14(a) Certification

I, Steven M. Plumb, Chief Financial Officer of ADVENTRX Pharmaceuticals, Inc. (the "Company"), certify that:

1. I have reviewed this quarterly report on Form 10-QSB for the period ending March 31, 2004 of the Company;
2. Based on my knowledge, this quarterly report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this quarterly report;
3. Based on my knowledge, the financial statements, and other financial information included in this quarterly report, fairly present in all material respects the financial condition, results of operations and cash flows of the Company as of, and for, the periods presented in this quarterly report;
4. The Company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the Company and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Company and have:
 - a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this quarterly report is being prepared;
 - b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) evaluated the effectiveness of the Company's disclosure controls and procedures and presented in this quarterly report our conclusions about the effectiveness of the disclosure controls and procedures as of the end of the period covered by this report based on such evaluation ; and
 - d) disclosed in this report any changes in the Company's internal control over financial reporting that occurred during the Company's most recent fiscal quarter that has materially affected, or is reasonably likely to materially effect, the Company's internal control over financial reporting.
5. The Company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company's auditors and the audit committee of Company's board of directors (or persons performing the equivalent function):
 - a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Company's ability to record, process, summarize and report financial information; and
 - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal control over financial reporting.

May 12, 2004

/s/ STEVEN M. PLUMB
Steven M. Plumb, CPA
Chief Financial Officer

Section 1350 Certification

In connection with the Quarterly Report on Form 10-QSB of ADVENTRX Pharmaceuticals, Inc. (the "Company") for the quarterly period ended March 31, 2004 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), each of Nicholas J. Virca, Chief Executive Officer of the Company, and Steven M. Plumb, Chief Financial Officer of the Company, hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, to the best of his knowledge, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

/s/ NICHOLAS J. VIRCA

Nicholas J. Virca
Chief Executive Officer
May 12, 2004

/s/ STEVEN M. PLUMB

Steven M. Plumb
Chief Financial Officer
May 12, 2004