FORM 10-Q

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

(Mark One)

EXHIBIT 31.1 EXHIBIT 31.2 EXHIBIT 32.1

☑ QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended June 30, 2005

OR

o TRANSITION REPORT PURSUANT TO 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.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

84-1318182

(I.R.S. Employer Identification No.)

6725 Mesa Ridge Road, Suite 100 San Diego, California 92121 858-552-0866

(Address of principal executive offices, zip code and telephone number, including area code)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes 🗵 No o

Indicate by check mark whether the registrant is an accelerated filer (as defined in Rule 12-b-2 of the Exchange Act): Yes o No \square

The number of shares outstanding of the registrant's common stock, \$.001 par value, as of July 31, 2005 was 66,028,312.

ADVENTRX PHARMACEUTICALS, INC. AND SUBSIDIARY

FORM 10-Q QUARTERLY REPORT For the Period Ended June 30, 2005

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PART I — FINANCIAL INFORMATION

Item 1. Condensed Consolidated Financial Statements

ADVENTRX PHARMACEUTICALS, INC. AND SUBSIDIARY
(A Development Stage Enterprise)
Condensed Consolidated Balance Sheets

	June 30, 2005 (unaudited)	December 31, 2004
Assets	(,	
Current assets:		
Cash and cash equivalents	\$ 8,102,824	\$ 13,032,263
Accrued interest income	_	10,808
Prepaid expenses	471,335	115,144
Other current assets	3,138	_
Assets available for sale		108,000
Total current assets	8,577,297	13,266,215
Property and equipment, net	342,036	285,304
Other assets	58,387	57,268
Total assets	\$ 8,977,720	\$ 13,608,787
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable	\$ 270,779	\$ 532,327
Accrued liabilities	770,612	628,754
Accrued salary and related taxes	126,364	57,315
Total current liabilities	1,167,755	1,218,396
Commitments and contingencies	·	
Shareholders' equity:		
Common stock, \$0.001 par value. Authorized 100,000,000 shares; issued 55,046,086 shares in 2005 and 53,834,237 shares in 2004	55,047	53,835
Additional paid-in capital	49,147,347	47,553,497
Deficit accumulated during the development stage	(41,357,682)	(35,182,194)
Treasury stock, 23,165 shares at cost	(34,747)	(34,747)
Total shareholders' equity	7,809,965	12,390,391
Total liabilities and shareholders' equity	\$ 8,977,720	\$ 13,608,787

See accompanying notes to unaudited condensed consolidated financial statements.

ADVENTRX PHARMACEUTICALS, INC. AND SUBSIDIARY
(A Development Stage Enterprise)
Condensed Consolidated Statements of Operations
(unaudited)

	Three months	ended June 30, 2004	Six months of 2005	ended June 30, 2004	Inception (June 12, 1996) through June 30, 2005
Net sales	\$ —	\$ —	\$ —	\$ —	\$ 174,830
Cost of goods sold	_	_	_	_	51,094
Gross margin	_	_	_	_	123,736
Grant revenue	_	_	_	_	129,733
Interest income	64,597	13,341	101,919	16,687	304,197
	64,597	13,341	101,919	16,687	557,666
Operating expenses:			<u> </u>		
Research and development	2,236,609	773,091	3,941,406	1,069,466	11,415,660
General and administrative	1,123,577	745,838	2,273,910	1,160,220	14,707,207
Depreciation and amortization	34,965	3,666	62,091	6,718	10,202,107
Impairment loss — write off of goodwill	_	_	_	_	5,702,130
Interest expense	_	_	_	_	179,090
Equity in loss of investee					178,936
Total operating expenses	3,395,151	1,522,595	6,277,407	2,236,404	42,385,130
Loss before cumulative effect of change in accounting principle	(3,330,554)	(1,509,254)	(6,175,488)	(2,219,717)	(41,827,464)
Cumulative effect of change in accounting principle					(25,821)
Net loss	(3,330,554)	(1,509,254)	(6,175,488)	(2,219,717)	(41,853,285)
Preferred stock dividends	_	_	_	_	(621,240)
Net loss applicable to common stock	\$ (3,330,554)	\$ (1,509,254)	\$ (6,175,488)	\$ (2,219,717)	\$ (42,474,525)
Loss per common share — basic and diluted	\$ (.06)	\$ (.03)	\$ (.11)	\$ (.05)	

See accompanying notes to unaudited condensed consolidated financial statements.

ADVENTRX PHARMACEUTICALS, INC. AND SUBSIDIARY
(A Development Stage Enterprise)
Condensed Consolidated Statements of Shareholders' Equity (Deficit)
Inception (June 12, 1996) through June 30, 2005

	Cumula convert preferred series	tible stock, A	Cumula conver preferred series	tible stock, B	conve preferr seri	ulative ertible ed stock, ies C	Common		Additional paid-in	Deficit accumulated during the development	Treasury Stock,	Total shareholders' equity
Balances at June 12, 1996	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	capital	stage	at cost	(deficit)
(date of incorporation) Sale of common stock	_	\$ —	_	\$ —	_	\$ —	_	\$ —	\$ —	\$ —	\$ —	\$ —
without par value Change in par value of							503	5	5	_	_	10
common stock	_	_	_	_	_	_	_	(4)	4	_	_	_
Issuance of common stock and net liabilities												
assumed in acquisition Issuance of common stock	_	_				_	1,716,132	1,716	3,224	(18,094) (2,466)	_	(13,154)
Net loss							2,010,111	2,010	456 —	(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	_	_	_	_	_	_	3,720,740	3,727	3,003	(200,030)	_	(2/2,020)
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	_	_	_	_	_	_	3/3,091	3/0	007,074	_	_	000,230
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 Issuance of common stock at	_	_	_	_	_	_	(375,891)	(376)	(887,874)	561,166	_	(327,084)
conversion of notes												
payable Expense related to stock	_	_	_		_	_	450,264	451	363,549		_	364,000
warrants issued	_	_	_	_	_	_	_	_	260,000	- (4.204.200)	_	260,000
Net loss Balances at December 31,										(1,204,380)		(1,204,380)
1998 Sale of common stock	_	_	_	_	_	_	5,181,564	5,182	2,417,213	(2,947,653)	_	(525,258)
Expense related to stock						_	678,412	678	134,322	_	_	135,000
warrants issued Net loss	_	_	_	_	_	_		_	212,000	(1,055,485)	_	212,000 (1,055,485)
Balances at December 31,												
1999 Sale of preferred stock, net	_	_	_	_	_	_	5,859,976	5,860	2,763,535	(4,003,138)	_	(1,233,743)
of offering costs of	2.200	20							2 422 460			2 422 500
\$76,500 Issuance of common stock at	3,200	32		_		_	_	_	3,123,468	_	_	3,123,500
conversion of notes and interest payable		_		_			412,487	412	492,085	_		492,497
Issuance of common stock at	_	_	_	_	_	_	412,407	412	492,003	_	_	432,437
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 Issuance of warrants for						_	6,999,990	7,000	9,325,769	_	_	9,332,769
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 Cashless exercise of	_	_	_	_	_	_		_	(85,000)	_	_	(85,000)
warrants Net loss	_	_	_	_	_	_	599,066	599	(599)	(3,701,084)	_	(3,701,084)
Balances at December 31,												
2000 Dividends payable on	3,200	32	_	_	_	_	14,586,984	14,587	22,299,866	(7,704,222)	_	14,610,263
preferred stock	_	_	_	_	_	_	_	_	(256,000)	_	_	(256,000)
Repurchase of warrants Sale of warrants	_		_		_	_	=		(55,279) 47,741	_	_	(55,279) 47,741
Cashless exercise of warrants							210.402	210				
Issuance of common stock	_	_	_	_	_	_	218,493	219	(219)	_	_	_
to pay preferred dividends	_	_	_	_	_	_	93,421	93	212,907	_	_	213,000
Detachable warrants issued			· .				JJ,4421	33				
with notes payable Issuance of warrants to pay	_	_	_	_	_	_	_	_	450,000	_	_	450,000
operating expenses Issuance of common stock	_		_		_	_			167,138	_	_	167,138
to pay operating												
expenses Issuance of preferred stock	_	_	_	_	_	_	106,293	106	387,165	_	_	387,271
to pay operating	40=	_							400.400			100 = 6
expenses Net loss	137	<u>1</u>	_	=	_	=		_	136,499 —	(16,339,120)	=	136,500 (16,339,120)
Balances at December 31,	2.22	22					15 005 101	15.005	22 200 040			
2001	3,337	33	_	_	_	_	15,005,191	15,005	23,389,818	(24,043,342)	_	(638,486)
						3	3					

ADVENTRX PHARMACEUTICALS, INC. AND SUBSIDIARY
(A Development Stage Enterprise)
Condensed Consolidated Statements of Shareholders' Equity (Deficit) Inception (June 12, 1996) through June 30, 2005 CONTINUED FROM PREVIOUS PAGE

	Cumu conve preferre seri	d stock,	Cumul conver preferred serie	tible 1 stock,	Cumu conve preferre serio	rtible d stock,	Commor	n stock	Additional paid-in	Deficit accumulated during the development	Treasury Stock,	Total shareholders' equity
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	capital	stage	at cost	(deficit)
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)	_	_	_
Exercise of warrants	_	_	_	_	_	_	344,573	345	168,477	_	_	168,822
Sale of preferred stock at \$1.50	_	_	200,000	2,000	_	_	_	_	298,000	_	_	300,000
Sale of preferred stock at					TO 100	704						
\$10.00 Conversion of preferred	_	_	_	_	70,109	701	_	_	700,392	_	_	701,093
stock into common												
stock Preferred stock dividends	(3,000)	(30)		_			1,800,000	1,800	(1,770)	_	_	_
forgiven	_	_	_	_	_	_	_	_	335,440	_	_	335,440
Issuance of warrants to pay operating expenses	_	_	_	_	_	_	_	_	163,109	_	_	163,109
Issuance of common stock									100,100			100,100
to pay operating expenses							6,292	6	12,263			12,269
Issuance of preferred stock	_	_	_	_	_	_	0,232	0	12,203	_	_	12,209
to pay operating	126	1							6,000			6,001
expenses Issuance of stock options to	136	1		_				_	6,000	_		6,001
employees	_	_	_	_	_	_	_	_	329,296	(2.105.525)	_	329,296
Net loss Balances at December 31,										(2,105,727)		(2,105,727)
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		_		_	_			_	(37,040)			(37,040)
preferred stock into					(70.100)	(701)	14 021 000	14.022	(12.221)			
common stock Issuance of common stock	_	_	_	_	(70,109)	(701)	14,021,860	14,022	(13,321)	_	_	_
to pay interest on Bridge							4.05.000	105	E2 226			F2 404
Notes Sale of common stock at	_						165,830	165	53,326			53,491
\$0.40 per share, net of												
issuance costs Sale of common stock at	_	_	_	_	_	_	6,640,737	6,676	2,590,656	_	_	2,597,332
\$1.00 per share, net of												
issuance costs Exchange of warrants							3,701,733 235,291	3,668 235	3,989,181 49,486			3,992,849 49,721
Issuance of common stock							233,231	255	43,400			45,721
to pay operating expenses							230,000	230	206,569			206,799
Issuance of warrants to pay							230,000	230				
operating expenses Issuance of stock options to	_	_	_	_	_	_	_	_	156,735	_	_	156,735
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				_,			,,.	,	02,000,000	(=0, 10=,= 10)		,,,,
dividends payable on preferred stock	_	_	_	_	_	_	_	_	72,800	_	_	72,800
Conversion of Series A									, 2,000			72,000
cumulative preferred stock	(473)	(4)	_	_	_	_	236,500	236	(232)	_	_	_
Conversion of Series B	(473)	(+)										
preferred stock Cashless exercise of	_	_	(200,000)	(2,000)	_	_	200,000	200	1,800	_	_	_
warrants							464,573	465	(465)	_	_	_
Exercise of warrants	_	_	_	_	_	_	23,832	23	27,330	_	_	27,353
Issuance of warrants in settlement of a claim							_	_	86,375	_	_	86,375
Sale of common stock at							10 445 604	10.410				
\$1.50 per share Payment of financing and	_	_	_	_	_	_	10,417,624	10,419	15,616,031	_	_	15,626,450
offering costs	_								(1,366,774)			(1,366,774)
Issuance of stock options to employees	_	_	_	_	_	_	_	_	524,922	_	_	524,922
Acquisition of treasury												02 1,022
stock Net loss	_	_	_					_	34,747 —	(6,701,048)	(34,747)	(6,701,048)
Balances at December 31,										(0,/01,040)		(0,701,040)
2004							53,834,237	53,835	47,553,497	(35,182,194)	(34,747)	12,390,391
Exercise of warrants Issuance of stock options to	_	_	_	_			1,186,849	1,187	1,340,216	_	_	1,341,403
employees	_	_	_	_	_	_			230,159	_	_	230,159
Issuance of stock to vendor Net loss							25,000 —	25 —	23,475	(6,175,488)		23,500 (6,175,488)
Balances at June 30, 2005												
(unaudited)		<u> </u>		<u> </u>		<u> </u>	55,046,086	\$ 55,047	\$ 49,147,347	\$ (41,357,682)	\$ (34,747)	\$ 7,809,965

See accompanying notes to unaudited condensed consolidated financial statements.

ADVENTRX PHARMACEUTICALS, INC. AND SUBSIDIARY

(A Development Stage Enterprise)
Condensed Consolidated Statements of Cash Flows
(unaudited)

			Inception (June 12, 1996) through	
		Six months ended June 30, 2005 2004		
Cash flows from operating activities:		2004	2005	
Net loss	\$ (6,175,488)	\$ (2,219,717)	\$ (41,853,285)	
Adjustments to reconcile net loss to net cash used in operating activities:	(1)	, (, -, ,	, (,===, ==,	
Depreciation and amortization	62,091	6,718	9,752,107	
Amortization of debt discount	´—	· —	450,000	
Forgiveness of employee receivable	_	_	30,036	
Impairment loss — write off of goodwill	_	_	5,702,130	
Expenses paid by warrants	_	_	573,357	
Expenses paid by preferred stock	_	_	142,501	
Expenses related to stock warrants issued	_	_	612,000	
Expenses related to employee stock options issued	230,159	181,300	1,370,410	
Expenses paid by issuance of common stock	23,500	_	841,048	
Equity in loss of investee	_	_	178,936	
Write-off of license agreement	_	_	152,866	
Write-off assets available for sale	108,000	_	108,000	
Cumulative effect of change in accounting principle	_	_	25,821	
Changes in assets and liabilities, net of effect of acquisitions:				
(Increase) decrease in prepaid and other assets	(131,065)	(168,499)	(561,653)	
Increase (decrease) in accounts payable and accrued liabilities	(50,641)	180,142	646,484	
Increase in sponsored research payable and license obligation	<u> </u>	_	924,318	
Net cash used in operating activities	(5,933,444)	(2,020,056)	(20,904,924)	
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	(118.823)	(66,224)	(547,065)	
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 used in investing activities	(118,823)	(66,224)	(98,039)	
Cash flows from financing activities:	(110,020)	(00,22.)	(56,655)	
Proceeds from sale of preferred stock		_	4,200,993	
Proceeds from sale of common stock		15,626,450	24,152,596	
Proceeds from sale or exercise of warrants	1.341.403	27,353	1,752,993	
Repurchase of warrants	1,541,405	27,333	(55,279)	
Payment of financing and offering costs	(218,575)	(1,354,541)	(1,684,325)	
Payments of notes payable and long-term debt	(210,575)	(1,334,341)	(605,909)	
Proceeds from issuance of notes payable and detachable warrants		_	1,344,718	
1 0	1,122,828	14,299,262	29,105,787	
Net cash provided by financing activities				
Net increase (decrease) in cash and cash equivalents	(4,929,439)	12,212,982	8,102,824	
Cash and cash equivalents at beginning of period	13,032,263	4,226,397	<u> </u>	
Cash and cash equivalents at end of period	<u>\$ 8,102,824</u>	\$ 16,439,379	\$ 8,102,824	

See accompanying notes to unaudited condensed consolidated financial statements.

ADVENTRX Pharmaceuticals, Inc.

Notes to Condensed Consolidated Financial Statements

1. Description of the Company

ADVENTRX Pharmaceuticals, Inc., a Delaware corporation, (the Company), is a biopharmaceutical research and development company focused on introducing new technologies for anticancer and antiviral treatments that improve the performance and safety of existing drugs by addressing significant problems such as drug metabolism, toxicity, bioavailability and resistance. The Company currently does not manufacture, market, sell or distribute any product. Through our license agreements with University of Southern California (USC), and the National Institutes of Health (NIH), the Company has rights to drug candidates in varying stages of development.

On May 30, 2003, the Company merged our 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.

In July 2004, the Company formed a wholly owned subsidiary, ADVENTRX (Europe) Ltd., in the United Kingdom for the purpose of conducting drug trials in the European Union.

2. Unaudited interim financial statements

In the opinion of management, the accompanying unaudited condensed consolidated financial statements reflect all adjustments, consisting of normal recurring adjustments, necessary to present fairly the financial position of the Company as of June 30, 2005 and its results of operations and cash flows for the three and/or six months ended June 30, 2005 and 2004 and for the period from inception (June 12, 1996) through June 30, 2005. Information included in the consolidated balance sheet as of December 31, 2004 has been derived from, and certain terms used herein are defined in, the audited consolidated financial statements of the Company as of December 31, 2004 (the "Audited Financial Statements") included in the Company's Annual Report on Form 10-KSB (the "10-KSB") for the year ended December 31, 2004 that was previously filed with the Securities and Exchange Commission (the "SEC"). Pursuant to the rules and regulations of the SEC, certain information and disclosures normally included in financial statements prepared in accordance with accounting principles generally accepted in the United States of America have been condensed or omitted from these financial statements unless significant changes have taken place since the end of the most recent fiscal year. Accordingly, these unaudited condensed consolidated financial statements should be read in conjunction with the Audited Financial Statements and the other information also included in the 10-KSB

The results of the Company's operations for the six months ended June 30, 2005 are not necessarily indicative of the results of operations for the full year ending December 31, 2005.

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect reported amounts of assets and liabilities as of the dates of the condensed consolidated balance sheets and reported amount of revenues and expenses for the periods presented. Accordingly, actual results could materially differ from those estimates.

Supplementary Cash Flow Information

Noncash investing and financing transactions excluded from the condensed statements of cash flows for the six months ended June 30, 2005 and 2004 and for the period from inception (June 12, 1996) through June 30, 2005 are as follows:

	Six months 2005	Six months ended June 30, 2005 2004		
Issuance of warrants, common stock and preferred stock for:			June 30, 2005	
Conversion of notes payable and accrued interest	\$ —	\$ —	\$ 1,213,988	
Payment of operating expenses	23,500	_	1,247,781	
Conversion of preferred stock	_	2,000	2,705	
Acquisitions	_	_	14,617,603	
Payment of dividends	_	_	213,000	
Financial advisor services in conjunction with private placement	_	1,137,456	1,137,456	
Settlement of claim	_	_	86,375	
Acquisition of treasury stock in settlement of a claim	_	_	34,747	
Assumptions of liabilities in acquisitions	_	_	1,009,567	
Acquisition of license agreement for long-term debt	_	_	161,180	
Cashless exercise of warrants	68	465	3,810	
Dividends accrued			621,040	
Trade asset converted to available for sale asset	_	_	108,000	
Dividends extinguished	_	72,800	408,240	
Trade payable converted to note payable	_	_	83,948	
Issuance of warrants for return of common stock	_	_	50,852	
Detachable warrants issued with notes payable	_	_	450,000	

3. Net Loss Per Common Share

The computation of basic and diluted net loss per share for the three and six months ended June 30, 2005 and 2004 is as follows:

	Three mor	nths ended e 30,	Six months ended June 30,		
	2005	2004	2005	2004	
Numerator:					
Net loss	\$ (3,330,554)	\$ (1,509,254)	\$ (6,175,488)	\$ (2,219,717)	
Numerator for basic and diluted loss per share	\$ (3,330,554)	\$ (1,509,254)	\$ (6,175,488)	\$ (2,219,717)	
Denominator for basic and diluted loss per share - weighted average common shares					
outstanding	54,821,480	52,560,875	54,345,334	47,634,224	
Loss per common share-basic and diluted	\$ (0.06)	\$ (0.03)	\$ (0.11)	\$ (0.05)	

Net loss per common share is calculated according to Statement of Financial Accounting Standards No. 128, Earnings per Share, using the weighted average number of shares of common stock outstanding during the period.

The following potentially dilutive shares 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 as of June 30, 2005 and 2004:

	June 30, 2005	June 30, 2004
Warrants	10,031,899	10,854,964
Options	1,625,000	3,320,000
Total	11,656,889	14,174,964

4. Stock Compensation Plans

On May 24, 2005, at the Company's annual meeting of stockholders, the Company's stockholders approved the 2005 Equity Incentive Plan (the "2005 Plan") and the Employee Stock Purchase Plan. The 2005 Plan provides the Company with the flexibility to grant other forms of compensation to its directors, officers, employees, consultants, agents, advisors and third party service providers. The 2005 Plan permits the Company to issue up to 6,000,000 shares of common stock for the grant of options, share appreciation rights, restricted shares, restricted share units, performance awards, annual incentive awards and other share based awards and cash-based awards. The 2005 Plan is intended to comply with applicable securities law requirements, permit the performance-based awards to qualify for deductibility under Section 162(m) of the Internal Revenue Code and allow for the issuance of incentive stock options.

The Company applies Statement of Financial Accounting Standards No. 123 (revised) and related interpretations in accounting for employee stock-based compensation.

The Company recognized compensation expense of \$100,933 and \$94,440 in the three months ended June 30, 2005 and 2004, respectively, and \$230,159 and \$181,300 in the six months ended June 30, 2005 and 2004, respectively, related to the portion of employee stock options which vested in those periods.

5. Equity Transactions

In the six months ended June 30, 2005, the Company's warrant holders exercised 36 warrants for an aggregate of 1,186,849 shares of common stock, with proceeds to the Company of \$1,341,403.

On April 14, 2005, the Company issued 25,000 shares of common stock as partial payment for services rendered by a consulting firm. Those shares were recognized at fair market value as of the date of obligation and resulted in compensation expense of \$23,500 in the first quarter of 2005, when the services were performed.

6. Commitments and Contingencies

Litiaation

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 preceding that would have a material adverse effect on the Company's financial position, results of operations or cash flows. Notwithstanding the foregoing, on March 28, 2005, the Company received a letter from counsel to a former executive in which the former executive claims that the Company constructively terminated him, discriminated against him on the basis of age and committed various torts against him. No settlement demand was specifically made by the former executive in this letter otherwise did not state any specific monetary damages that this former executive has purportedly sustained. The Company believes that these claims lack merit and intends to vigorously defend against them. The Company has not reserved for any monetary claims in this matter. In April 2005, the Company attended a mediation session with this former executive at which the Company was unable to reach a settlement of the former executive's claims. The Company currently plans to schedule another mediation session with respect to this matter in September 2005.

7. Subsequent Events

In July 2005, the Company's warrant holders exercised four warrants for an aggregate of 97,571 shares of common stock, with proceeds to the Company of \$191,874.

In July 2005, 1,017,000 new stock options to purchase shares have been approved by the Board of Directors and granted to employees and consultants under the 2005 Plan, and pursuant to the terms of the 2005 Plan, 200,000 new stock options were granted to non-executive members of the Company's Board of Directors. In addition, 1,625,000 of existing stock options which were granted prior to May of 2004 are now covered under the 2005 Plan.

On July 22, 2005, the placement closed on July 28, 2005 and resulted in net proceeds of \$18,400,000. Management believes that the cash and cash equivalents after this financing will be sufficient to meet our projected operating requirements through June 2006. The Company announced a private placement of its stock, consisting of the sale of 10,810,809 shares of the Company's common stock, at \$1.85 per share, as well as the issuance of warrants to purchase 10,810,809 shares of common stock at an exercise price of \$2.26 per share.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion and analysis should be read in conjunction with the financial statements and related notes contained elsewhere in this report. See "Risk Factors" regarding certain factors known to us that could cause reported financial information not to be necessarily indicative of future results.

Forward Looking Statements

This Quarterly Report on Form 10-Q 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 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 Quarterly 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 under the heading "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.

Overview

We are a biopharmaceutical research and development company focused on introducing new technologies for anticancer and antiviral treatments that improve the performance and safety of existing drugs by addressing significant problems such as drug metabolism, toxicity, bioavailability and resistance. We do not manufacture, market, sell or distribute any product. Through our license agreements with University of Southern California (USC) and the National Institutes of Health (NIH), we have rights to drug candidates in varying stages of development. Our current drug candidates are described in detail in our Annual Report on Form 10-KSB for the fiscal year ended December 31, 2004.

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

In July 2004, we formed a wholly owned subsidiary, ADVENTRX (Europe) Ltd., in the United Kingdom for the purpose of conducting drug trials in the European Union.

We have incurred net losses since our inception. As of June 30, 2005, our accumulated deficit was approximately \$41 million. We expect to incur substantial and increasing losses for the next several years as we continue development and possible commercialization of new products.

To date, we have funded our operations primarily through sales of equity securities.

Our business is subject to significant risks, including risks inherent in our ongoing clinical trials, the regulatory approval processes, the results of our research and development efforts, commercialization, and competition from other pharmaceutical companies.

Critical Accounting Policies

Our discussion and analysis of our financial condition and results of operations is based on our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of the consolidated financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities and expenses and the related disclosure of contingent assets and liabilities. We review our estimates on an on-going basis, including those related to valuation of goodwill, intangibles and other long-lived assets. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the bases for making judgments about the carrying values of assets and liabilities. Actual results may differ from these estimates under different assumptions or conditions. Our accounting policies are described in more detail in Note 1 to our consolidated financial statements included in our Annual Report on Form 10-KSB. We have identified the following as the most critical accounting policies and estimates used in the preparation of our consolidated financial statements.

Stock Compensation Plans. In December 2004, the FASB issued Statement of Financial Accounting Standards No. 123 (revised 2004), Share-Based Payment (SFAS 123R). We currently recognize our option grants and associated expenses in accordance with SFAS 123R guidance, and therefore SFAS 123R is not expected to have a material effect on our consolidated financial position or results of operations.

The Company recognized compensation expense of \$100,933 and \$94,440 in the three months ended June 30, 2005 and 2004, respectively, and \$230,159 and \$181,300 in the six months ended June 30, 2005 and 2004, respectively, related to the portion of employee stock options which vested in those periods.

Results of Operations

Three Months Ended June 30, 2005

Research and Development Expenses. Total research and development expenses were \$2.2 million for the three months ended June 30, 2005 compared to \$773,000 for the comparable period in 2004, an increase of \$1.5 million or 189%. The quarter to quarter increase in research and development expenses was primarily related to clinical trial expenses for our Phase II and Phase IIb clinical trials of CoFactor. Other factors include increased headcount and personnel costs, clinical trial and related clinical manufacturing costs, contract and other outside service fees, quality assurance, quality control, medical affairs and the development of a manufacturing process for CoFactor.

We currently expect that our research and development expenses will significantly increase from the level of expenses in the quarter ended June 30, 2005 as we ramp up our Phase III pivotal clinical trial of CoFactor for the treatment of metastatic colorectal cancer in the United States, and continue enrolling patients in our Phase IIb clinical trial of CoFactor for the treatment of metastatic colorectal cancer in Europe. The timing of the increase in expense will be directly related to the launch of the Phase III trial, and the amount of increase will be directly related to the success and speed of patient enrollment in the Phase IIb and Phase III trials.

General and Administrative Expenses. General and administrative expenses were \$1.1 million for the three months ended June 30, 2005 compared to \$746,000 for the comparable period in 2004, an increase of \$378,000 or 51%. The quarter to quarter increase in general and administrative expenses was primarily due to the hiring of additional personnel in the finance, marketing and business development departments, increased directors and officers insurance premiums, increased legal fees, and increased expenses associated with business development activities. We expect that our general and administrative expenses will increase measurably during the third quarter of 2005 as we have hired additional accounting staff, and as we continue our evaluation, testing and documenting of our system of internal controls over financial reporting as we prepare to comply with Section 404 of the Sarbanes-Oxley Act of 2002 and that these expenses will be sustained at least through the end of 2005 as we continue this process.

Interest Income. Interest income for the three months ended June 30, 2005 was \$65,000 compared to \$13,000 of net interest income for the comparable period in 2004. The increase is attributable to higher interest rates earned on invested balances from proceeds received in a financing we closed in April 2004.

Six Months Ended June 30, 2005

Research and Development Expenses. Total research and development expenses were \$3.9 million for the six months ended June 30, 2005 compared to \$1.1 million for the comparable period in 2004, an increase of \$2.9 million or 269%. The year over year increase in research and development expenses was primarily related to clinical trial expenses for our Phase II and Phase IIb clinical trials of CoFactor. Other factors include increased headcount and personnel costs, clinical trial and related clinical manufacturing costs, contract and other outside service fees, quality assurance, quality control, medical affairs and the development of a manufacturing process for CoFactor.

As stated above, we currently expect that our research and development expenses will significantly increase from the level of expenses in the six months ended June 30, 2005 as we ramp up our Phase III pivotal clinical trial of CoFactor for the treatment of metastatic colorectal cancer in the United States, and continue enrolling patients in our Phase IIb clinical trial of CoFactor for the treatment of metastatic colorectal cancer in Europe.

General and Administrative Expenses. General and administrative expenses were \$2.3 million for the six months ended June 30, 2005 compared to \$1.2 million for the comparable period in 2004, an increase of \$1.1 million or 96%. The year over year increase in general and administrative expenses was primarily due to the hiring of additional personnel in the finance and marketing and business development departments, increased directors and officers insurance premiums, increased legal fees, the payments for settlements of certain disputes, and increased expenses associated with business development activities. We expect that our general and administrative expenses will increase measurably during the third quarter of 2005 as we ramp up our evaluation, testing and documenting of our system of internal controls over financial reporting as we prepare to comply with Section 404 of the Sarbanes-Oxley Act of 2002 and that these expenses will be sustained at least through the end of 2005 as we continue this process.

Interest Income. Interest income for the six months ended June 30, 2005 was \$102,000 compared to \$17,000 of net interest income for the comparable period in 2004. The increase is attributable to higher interest rates earned in 2005, and a higher average invested balance from proceeds received in a financing we closed in April 2004.

Liquidity and Capital Resources

As of June 30, 2005, our principal sources of liquidity were our cash and cash equivalents which totaled \$8.1 million as compared to \$13.0 million as of December 31, 2004. This decrease was primarily due to the use of cash to fund research and development and general and administrative expenses.

Net cash used in operating activities was \$5.9 million during the six months ended June 30, 2005, compared with \$2.0 million during the six months ended June 30, 2004. The increase in net cash used in operating activities was due to increased funding for clinical trials, and our increased operating expenses as we added additional personnel in general and administrative functions to support our expanded research and development activities.

Net cash used in investing activities was \$119,000 during the six months ended June 30, 2005 compared with \$66,000 during the six months ended June 30, 2004. Cash used in investing activities for the six months ended June 30, 2005 and 2004 consisted of purchases of office, computer and lab equipment.

Net cash provided by financing activities was \$1.1 million during the six months ended June 30, 2005 compared with net cash provided by financing activities of \$14.3 million during the six months ended June 30, 2004. The cash flows from financing activities for the six months ended June 30, 2005 were primarily proceeds from the exercise of warrants. The cash flows from financing activities for the six months ended June 30, 2004 were primarily due to the sale of common stock related to a financing event which occurred in April 2004.

Our future capital uses and requirements depend on numerous forward-looking factors and cannot be budgeted with any reasonable certainty. These factors include but are not limited to the following:

- the progress of our clinical trials;
- the progress of our research activities;
- · the number and scope of our research programs;
- the progress of our preclinical development activities;
- our ability to establish and maintain strategic collaborations;
- the costs involved in enforcing or defending patent claims and other intellectual property rights;
- the costs and timing of regulatory approvals;
- · the costs of establishing or expanding manufacturing, sales and distribution capabilities;
- the success of the commercialization of our products; and
- the extent to which we license, acquire or invest in other products, technologies and businesses.

To date, we have funded our operations primarily through the sale of equity securities. Through June 30, 2005, we had an accumulated deficit of approximately \$41 million, with total additional paid-in capital of approximately \$49 million. The \$49 million of additional paid-in capital is comprised of \$29 million in net proceeds from the sale of equity securities, plus non-cash equity issuances for acquisitions of \$15 million, plus other non-cash equity transactions for operating expenses of \$5 million. As a result of our private placement which closed on July 28, 2005, we believe that our existing cash and cash equivalents as of July 31, 2005 will be sufficient to meet our projected operating requirements through June 30, 2006.

We intend to finance our operations and capital expenditure needs through the sale of additional equity securities, debt financing or strategic collaboration agreements. We cannot be sure that additional financing will be available when needed or that, if available, financing will be obtained on favorable terms. If we raise additional funds by issuing equity securities, substantial dilution to existing stockholders would likely result. If we raise additional funds by incurring debt financing, which is not likely given our lack of operating revenue, the terms of the debt may involve significant cash payment obligations as well as covenants and specific financial ratios that may restrict our ability to operate our business. In addition, we may not be successful in obtaining collaboration agreements, or in receiving milestone or royalty payments under those agreements. Having insufficient funds may require us to delay, scale back or eliminate some or all of our research or development programs or to relinquish greater or all rights to product candidates at an earlier stage of development or on less favorable terms than we would otherwise choose. Failure to obtain adequate financing also may adversely affect our ability to operate as a going concern.

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.

We had an accumulated deficit of \$41 million as of June 30, 2005. Since we presently have no source of revenues and are committed to continuing our 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 or other regulatory agencies and successfully marketed. In addition, we fund our operations primarily through the sale of securities, and have had limited working capital for our product development and other activities. We do not believe that debt financing from financial institutions will be available until at least the time that one of our products is approved for commercial production.

We have no current product sales revenues or profits.

We have devoted our 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 our present activities, and no revenues will likely be available until, and unless, the new products are clinically tested, approved by the FDA or other regulatory agencies and successfully marketed, either by us or a marketing partner, an outcome which we are not able to guarantee.

It is uncertain that we will have access to future capital.

It is not expected that we will generate positive cash flow from operations for at least the next several years. As a result, substantial additional equity or debt financing for research and development or clinical development will be required to fund our activities. Although we have raised such equity financing in April 2004 and July 2005, we cannot be certain that we will be able to continue to obtain such financing on favorable or satisfactory terms, if at all, or that it will be sufficient to meet our cash requirements. Any additional equity financing could result in substantial dilution to stockholders, and debt financing, if available, will most likely involve restrictive covenants that preclude us from making distributions to stockholders and taking other actions beneficial to stockholders. If adequate funds are not available, we may be required to delay or reduce the scope of our drug development program or attempt to continue development by entering into arrangements with collaborative partners or others that may require us to relinquish some or all of our rights to proprietary drugs. The inability to fund our capital requirements would have a material adverse effect on us.

We are not certain that we will be successful in the development of our drug candidates.

The successful development of any new drug is highly uncertain and is subject to a number of significant risks. Our drug candidates, all of 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, (vi) be affected by third parties holding proprietary rights that will preclude us from marketing a drug product, or (vii) not be able to be immediately manufactured by manufacturers in a timely manner in accordance with required standards of quality. There can be no assurance that the development of our drug candidates will demonstrate the efficacy and safety of our drug candidates as therapeutic drugs, or, even if demonstrated, that there will be sufficient advantages to their use over other drugs or treatments so as to render the drug product commercially viable. In the past, we have been faced with limiting the scope and/or delaying the launch of preclinical and clinical drug trials due to limited cash and personnel resources. We have also chosen to terminate licenses of some drug candidates that were not showing sufficient promise to justify continued expense and development. In the event that we are not successful in developing and commercializing one or more drug candidates, investors are likely to realize a loss of their entire investment.

We have been delayed at certain times in the past in the development of our drug products by limited funding. In addition, if certain of our scientific and technical personnel resigned at or about the same time, the development of our drug products would probably be delayed until new personnel were hired and became familiar with the development programs.

Positive results in preclinical and 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 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. In the past, we have terminated licenses of drug candidates when our preclinical trials did not support or verify earlier preclinical data. There is a significant risk that any of our drug candidates could fail to show satisfactory results in continued trials, and would not justify further development.

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

We are engaged in a segment of the pharmaceutical industry that is highly competitive and rapidly changing. If successfully developed and approved, any of our drug candidates will likely compete with several existing therapies. CoFactor, our leading drug candidate, would likely compete against a well-established product, leucovorin. In addition, there are numerous companies with a focus in oncology and/or anti-viral therapeutics that are pursuing the development of new pharmaceuticals that target the same diseases as are targeted by the drugs being developed by us. We anticipate that we 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 we may market and sell. Competitive products may render our drugs obsolete or noncompetitive prior to our recovery of development and commercialization expenses.

Many of our competitors such as Merck and Pfizer 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. Companies such as Gilead, Roche, GlaxoSmithKline all have drugs in various stages of development that could become competitors. Accordingly, competitors may succeed in commercializing products more rapidly or effectively than us, which would have a material adverse effect on us.

There is no assurance that our products will have market acceptance.

Our success will depend in substantial part on the extent to which a drug product, once approved, 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 of our drug products.

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.

Our ability to commercialize our 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. We cannot guarantee that adequate third-party insurance coverage will be available for us to establish and maintain price levels sufficient for realization of an appropriate return on our investments in developing new therapies. If we are successful in getting FDA approval for CoFactor, we will be competing against a generic drug, leucovorin, which has a lower cost and a long, established history of reimbursement. Receiving sufficient reimbursement for purchase costs of CoFactor will be necessary to make it cost effective and competitive versus the established drug, leucovorin. 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 use of our products, the market acceptance of these products would be adversely affected if the amount of reimbursement available for the use of our therapies proved to be unprofitable for health care providers.

Uncertainties related to health care reform measures may affect our success.

There have been some federal and state proposals in the past to subject the pricing of health care goods and services, including prescription drugs, to government control and to make other changes to the U.S. health care system. None of the proposals seems to have affected any of the drugs in our programs. However, it is uncertain if future legislative proposals would be adopted that might affect the drugs in our programs or what actions federal, state, or private payors for health care treatment and services may take in response to any such health care reform proposals or legislation. Any such health care reforms could have a material adverse effect on the marketability of any drugs for which we ultimately require FDA approval.

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 will delay marketing of new products for a considerable period of time, impose costly procedures upon our activities, and provide an advantage to larger companies that compete with us. There can be no assurance that the FDA or other regulatory approval for any products developed by us 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 our ability to utilize any of our technologies, thereby adversely affecting our 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.

Our success will depend on licenses and proprietary rights we receive from other parties, and on any patents we may obtain.

Our success will depend in large part on our ability and our licensors' ability 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 (iv) 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. We have obtained licenses to patents and other proprietary rights from University of Southern California, and the National Institutes of Health.

The patent positions of pharmaceutical companies, including ours, are uncertain and involve complex legal and factual questions. There is no guarantee that we or our 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 us. In addition, we cannot be certain that any patents issued to or licensed by us will not be challenged, invalidated, infringed or circumvented, or that the rights granted thereunder will provide competitive disadvantages to us.

Litigation, which could result in substantial cost, may also be necessary to enforce any patents to which we have rights, or to determine the scope, validity and unenforceability of other parties' proprietary rights, which may affect our rights. 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 our 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 us pending resolution of the disputed matters.

We may also rely on unpatented trade secrets and know-how to maintain our competitive position, which we seek 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 we will have adequate remedies for any breach, or that trade secrets will not otherwise become known or be independently discovered by competitors.

Our license agreements can be terminated in the event of a breach.

The license agreements pursuant to which we license our core technologies for our potential drug products permit the licensors, respectively National Institutes of Health, and the University of Southern California, to terminate the agreement under certain circumstances, such as the failure by us to use our reasonable best efforts to commercialize the subject drug or the occurrence of any other uncured material breach by us. The license agreements also provide that the licensor is primarily responsible for obtaining patent protection for the technology licensed, and we are required to reimburse the licensor 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. In the past, we have let lapse certain licenses for drug candidates when we determined that the expense and risk of continued development outweighed the likely benefits of that continued development. The termination of any license agreement could have a material adverse effect on us.

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 we may infringe or be infringing these claims. Although we have not been notified of any patent infringement, nor notified others of patent infringement, such 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.

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. We are currently dependent upon our scientific staff, which has a deep background in our drug candidates and the ongoing preclinical and clinical trials. Recruiting and retaining senior employees with relevant drug development experience in oncology and anti-viral therapeutics is costly and time-consuming. There can be no assurance that we will be able to attract and retain such individuals on an uninterrupted basis and on commercially acceptable terms, and the failure to do so could have a material adverse effect on us by significantly delaying one or more of our drug development programs. These individuals are employed under offer letters, rather than employment agreements.

We currently have no sales capability, and limited marketing capability.

We currently do not have sales personnel. We have limited marketing and business development personnel. We 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 we will be able to establish marketing, distribution or sales capabilities or make arrangements with third parties to perform those activities on terms satisfactory to us, or that any internal capabilities or third party arrangements will be cost-effective.

In addition, any third parties with which we 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 we will be able to control the amount and timing of resources that any third party may devote to our products or prevent any third party from pursuing alternative technologies or products that could result in the development of products that compete with, or the withdrawal of support for, our products.

We do 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.

We do not have any manufacturing capacity. When required, we will seek to establish relationships with third-party manufacturers for the manufacture of clinical trial material and the commercial production of drug products as we have with our current manufacturing partners. There can be no assurance that we 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 our drug products 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 our manufacturing requirements on commercially acceptable terms would have a material adverse effect on us.

We are dependent in part on third parties for drug development and research facilities.

We do not possess research and development facilities necessary to conduct all of our drug development activities. We engage consultants and independent contract research organizations to design and conduct clinical trials in connection with the development of our drugs. As a result, these important aspects of a drug's development will be outside our direct control. In addition, there can be no assurance that such third parties will perform all of their obligations under arrangements with us 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.

Our business will expose us 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 us. We intend to obtain additional limited product liability insurance for our clinical trials, directly or through our marketing development partners or contract research organization (CRO) partners, when they begin in the U.S. and to expand our insurance coverage if and when we begin marketing commercial products. However, there can be no assurance that we will be able to obtain product liability insurance on commercially acceptable terms or that we will be able to maintain such insurance at a reasonable cost or in sufficient amounts to protect against potential losses. A successful product liability claim or series of claims brought against us could have a material adverse effect on us.

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

Market prices for the our 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 us or our 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.

Changes in laws and regulations that affect the governance of public companies has increased our operating expenses and will continue to do so.

Recently enacted changes in the laws and regulations affecting public companies, including the provisions of the Sarbanes-Oxley Act of 2002 and the listing requirements for American Stock Exchange have imposed new duties on us and on our executives, directors, attorneys and independent accountants. In order to comply with these new rules, we have hired and expect to hire additional personnel and use additional outside legal, accounting and advisory services, which have increased and are likely to continue increasing our operating expenses. In particular, we expect to incur additional administrative expenses as we implement Section 404 of the Sarbanes-Oxley Act, which requires management to report on, and our independent registered public accounting firm to attest to, our internal controls. For example, we expect to incur significant expenses in connection with the implementation, documentation and testing of our existing and newly implemented control systems. Management time associated with these compliance efforts necessarily reduces time available for other operating activities, which could adversely affect operating results. If we are unable to achieve full and timely compliance with these regulatory requirements, we could be required to incur additional costs, expend additional money and management time on remedial efforts which could adversely affect our results of operations.

Failure to implement effective control systems, or failure to complete our assessment of the effectiveness of our internal control over financial reporting, may subject us to regulatory sanctions and could result in a loss of public confidence, which could harm our operating results.

Under the supervision of our Chief Executive Officer and our Chief Financial Officer, we evaluated the effectiveness of our disclosure controls and procedures as of December 31, 2004 and again as of June 30, 2005. Based upon that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that as of both these dates, our disclosure controls and procedures were not effective to ensure that management is alerted to material information required to be disclosed by us in the reports we file with the SEC and that such material information is recorded and reported within the time periods specified in the SEC's rules and forms. Since December 31, 2004, management has implemented changes intended to improve certain aspects of our disclosure controls and procedures. If we fail to implement effective disclosure controls and procedures, we may be unable to make timely disclosure of material information, which could subject us to regulatory sanctions, loss of public confidence and stockholder lawsuits.

Pursuant to Section 404 of the Sarbanes-Oxley Act, beginning with our year ending December 31, 2005, if we are an "accelerated filer" as of December 31, 2005, or December 31, 2006, if we are not an "accelerated filer" as of December 31, 2005, we will be required to include in our annual report our assessment of the effectiveness of our internal control over financial reporting and our audited financial statements as of the end of that fiscal year. Furthermore, our independent registered public accounting firm will be required to attest to whether our assessment of the effectiveness of our internal control over financial reporting is fairly stated in all material respects and separately report on whether it believes we maintained, in all material respects, effective internal control over financial reporting as of December 31, 2005, if we are an "accelerated filer" as of December 31, 2005, or December 31, 2006, we are not an "accelerated filer" as of December 31, 2005.

In connection with its audit of our financial statements for the fiscal year ended December 31, 2004, J.H. Cohn LLP, our independent registered public accounting firm, advised our Audit Committee that it had identified material weaknesses in our accounting function that we need to re-evaluate and strengthen. We are taking steps intended to remedy these material weaknesses. However, if we fail to remedy these material weaknesses, fail to timely complete our assessment, or if our independent registered public accounting firm cannot timely attest to our assessment, we could be subject to regulatory sanctions and a loss of public confidence in our internal control. In addition, any failure to implement required new or improved controls, or difficulties encountered in their implementation, could harm our operating results or cause us to fail to timely meet our regulatory reporting obligations.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

The primary objective of our investment activities is to preserve principal while maximizing the income we receive from our investments without significantly increasing the risk of loss. Some of the investable securities permitted under our cash management policy may be subject to market risk for changes in interest rates. To mitigate this risk, we maintain a portfolio of cash equivalent and short-term investments in a variety of securities which may include investment grade commercial paper, money market funds, government debt issued by the United States of America, state debt, certificates of deposit and investment grade corporate debt. Presently, we are exposed to minimal market risks associated with interest rate changes because of the relatively short maturities of our investments and we do not expect interest rate fluctuations to materially affect the aggregate value of our financial instruments. We manage the sensitivity of our results of operations to these risks by maintaining investment grade short-term investments. Our cash management policy does not allow us to purchase or hold derivative or commodity instruments or other financial instruments for trading purposes. Additionally, our policy stipulates that we periodically monitor our investments for adverse material holdings related to the underlying financial solvency of the issuer. As of June 30, 2005, our investments consisted mostly of cash and U.S. government debt. Our results of operations and financial condition would not be significantly impacted by either a 10% increase or decrease in interest rates due mainly to the short-term nature of our investment portfolio. We have not used derivative financial instruments in our investment portfolio. Additionally, we do not invest in foreign currencies or other foreign investments.

Item 4. Controls and Procedures.

Evaluation of disclosure controls and procedures.

Under the supervision of our Chief Executive Officer and our Chief Financial Officer, we evaluated the effectiveness of our disclosure controls and procedures as of June 30, 2005. Based upon that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that as of June 30, 2005, our disclosure controls and procedures were not effective to ensure that management is alerted to material information required to be disclosed by us in the reports we file with the SEC and that such material information is recorded and reported within the time periods specified in the SEC's rules and forms. This is primarily because our accounting system software has limitations that may not allow us to ensure prior period financial information is not changed and because we lack a formal process to review and document journal entries. Our accounting system software currently allows users to make changes to historical data and is limited in its ability to provide us with accurate costing information. We are unaware of any instances in which any users of such software made any changes to historical data.

As of June 30, 2005, management has enhanced our internal accounting capability by hiring a controller with the appropriate level of technical expertise, and has engaged a firm to provide tax services.

As of June 30, 2005, management has engaged various consulting firms to migrate our accounting system to a new system with fewer limitations and greater controls. As of June 30, 2005 the majority of this work has been completed. Management has also engaged a consulting firm to ensure that we meet our reporting and control requirements under the Sarbanes-Oxley rules by the end of this calendar year. Management has also implemented a formal review and documentation process based on current industry best-practices, and will continue to implement this throughout the remainder of the year.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings.

In the normal course of business, we may become subject to lawsuits and other claims and proceedings. Such matters are subject to uncertainty and outcomes are often not predictable with assurance. We are not aware of any pending or threatened lawsuit or proceeding that would have a material adverse effect on our financial position, results of operations or cash flows. Notwithstanding the foregoing, on March 28, 2005, we received a letter from counsel to a former executive in which the former executive claims that we constructively terminated him, discriminated against him on the basis of age and committed various torts against him. No settlement demand was specifically made by the former executive in this letter and the letter otherwise did not state any specific monetary damages that this former executive has purportedly sustained. We believe that these claims lack merit and intend to vigorously defend against them. On April 4, 2005, we attended a mediation session with this former executive at which we were unable to reach a settlement of the former executive's claims. We currently plan to schedule another mediation session with respect to this matter in September 2005.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

During the three months ending June 30, 2005, we issued 983,100 shares of common stock to warrant holders in connection with their exercise of 31 outstanding warrants totaling 1,040,984 shares. We received gross proceeds of \$1,219,153 upon exercise of these warrants. In addition, from July 1, 2005 through July 31, 2005, we issued 97,571 shares of common stock to 4 of our warrant holders in connection with their exercise of outstanding warrants. We received gross proceeds of \$191,874 upon exercise of these warrants. Pursuant to the terms of an agreement we entered into with Burnham Hill Partners, a division of Pali Capital, Inc., in March 2004, we are obligated to pay a 4% cash commission on each cash exercise of warrants issued in a financing that we consummated in April 2004. In accordance with this obligation, we paid Burnham Hill Partners approximately \$34,975 in connection with the exercises of warrants during the three months ending June 30, 2005, and we owe Burnham Hill Partners approximately \$4,333 in connection with the exercises of warrants from July 1, 2005 through July 31, 2005. No other commission or other remuneration was paid or given directly or indirectly in connection with these warrant exercises. The issuances of shares of common stock upon exercise of these warrants were not registered under the Securities Act of 1933 in reliance upon Section 4(2) of such Act.

Item 4. Submission of Matters to a Vote of Security Holders

The annual stockholders meeting of the Company was held on May 24, 2005. Stockholders re-elected M. Ross Johnson, Evan M. Levine, Michael M. Goldberg, Mark J. Pykett, and Mark Bagnall as directors, consisting of all of the directors standing for re-election. In addition, stockholders approved the adoption of the 2005 Equity Incentive Plan and the 2005 Employee Stock Purchase Plan, as described in the Company's current report on Form 8-K filed June 10, 2005, and ratified the appointment of J.H. Cohn LLP as the Company's independent registered public accounting firm for the fiscal year ended December 31, 2005.

The following table shows the tabulation of the votes cast in connection with these matters:

		Votes		
		Against/	Votes	Broker
Proposal	Votes For	Withheld	Abstained	Non-Votes
Election of Directors				
M. Ross Johnson	35,903,174	147,638		
Evan M. Levine	35,904,224	146,588		
Michael M. Goldberg	35,904,474	146,388		
Mark J. Pykett	35,907,724	143,088		
Mark Bagnall	35,907,724	143,088		
Approval of 2005 Equity Incentive Plan	18,625,219	715,337	54,475	
Approval of 2005 Employee Stock Purchase Plan	18,778,381	588,703	27,947	
Ratification of J.H. Cohn LLP	35,930,619	83,798	36,395	

Item 6. Exhibits.

An Exhibit Index has been attached as part of this quarterly report and is incorporated herein by reference.

Date: August 12, 2005

Signatures

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

Date: August 12, 2005 ADVENTRX Pharmaceuticals, Inc.

/s/ Evan M. Levine By: President and Chief Executive Officer

ADVENTRX Pharmaceuticals, Inc. By: /s/ Carrie Carlander

Chief Financial Officer, Treasurer and Vice President, Finance ADVENTRX Pharmaceuticals, Inc.

Exhibit Index

Exhibit		Description
3.1(1)		Certificate of Incorporation of Victoria Enterprises, Inc.
3.2(1)		Certificate of Amendment of Certificate of Incorporation of Victoria Enterprises, Inc.
3.3(1)		Certificate of Amendment of Certificate of Incorporation of BioQuest, Inc.
3.4(1)		Certificate of Amendment of Certificate of Incorporation of BioQuest, Inc.
3.5(1)		Certificate of Ownership and Merger Merging Biokeys, Inc. with and into Biokeys Pharmaceuticals, Inc.
3.6(2)		Amended and Restated Bylaws of Biokeys Pharmaceuticals, Inc.
3.7(1)		Certificate of Amendment to the Certificate of Incorporation of ADVENTRX Pharmaceuticals, Inc.
3.8 (3)		Certificate of Designation of BioQuest, Inc.
3.9 (4)		Certificate of Designation of Series B Convertible Preferred Stock and Series C Convertible Preferred Stock of Biokeys Pharmaceuticals, Inc.
4.1 (5)		Common Stock and Warrant Purchase Agreement, dated as of April 5, 2004, among the Company and the Investors named therein
4.2 (5)		A-1 Warrant to Purchase Common Stock issued to Investors pursuant to the Common Stock and Warrant Purchase Agreement with the Investors
4.3 (5)		A-2 Warrant to Purchase Common Stock issued to Investors pursuant to the Common Stock and Warrant Purchase Agreement with the Investors
4.4 (6)		Common Stock and Warrant Purchase Agreement, dated April 8, 2004, between the Company and CD Investment Partners, Ltd.
4.5 (6)		A-1 Warrant to Purchase Common Stock issued to CD Investment Partners, Ltd.
4.6 (6)		A-2 Warrant to Purchase Common Stock issued to CD Investment Partners, Ltd.
4.7 (6)		Warrant to Purchase Common Stock issued on April 8, 2004 to Burnham Hill Partners
4.8 (6)		Warrant to Purchase Common Stock issued on April 8, 2004 to Ernest Pernet
4.9 (6)		Warrant to Purchase Common Stock issued on April 8, 2004 to W.R. Hambrecht + Co., LLC
4.10 (5	j)	Registration Rights Agreement, dated as of April 5, 2004, among the Company and the Investors named therein
4.11 (6))	Registration Rights Agreement, dated as of April 8, 2004, between the Company and CD Investment Partners, Ltd.
4.12		Not used
4.13		Not used
4.14 (7	")	Common Stock and Warrant Purchase Agreement, dated April 19, 2004, between the Company and Franklin Berger
4.15 (7	')	A-1 Warrant to Purchase Common Stock issued to Franklin Berger
4.16 (7	")	A-2 Warrant to Purchase Common Stock issued to Franklin Berger
4.17 (7	')	Registration Rights Agreement, dated as of April 19, 2004, between the Company and Franklin Berger
4.18 (5	j)	Registration Rights Agreement, dated, 2001, between the Company and certain stockholders
4.19 (5	j)	Warrant to Purchase Common Stock issued by the Company
4.20 (5	j)	Stock Subscription Agreement
4.21 (5	j)	Warrant to Purchase Common Stock issued by the Company
4.22 (5	5)	Warrant for the Purchase of Shares of Common Stock No. WA-2A issued June 14, 2001 to Robert J. Neborsky and Sandra S. Neborsky, JTWROS
4.23		Securities Purchase Agreement, dated as of July 21, 2005, among the Company and the Investors named therein
4.24		Rights Agreement, dated as of July 27, 2005, among the Company and the Investors named therein
4.25		Warrant issued to Investors except North Sound Legacy Institutional Fund LLC and North Sound Legacy International Ltd. pursuant to Securities Purchase Agreement
		with the Investors
4.26		Warrant issued to North Sound Legacy Institutional Fund LLC and North Sound Legacy International Ltd. pursuant to Securities Purchase Agreement with the Investors
4.27		Engagement Letter with CIBC World Markets, dated as of May 16, 2005
4.28 (1		2005 Equity Incentive Plan
4.29 (1		Form of Stock Option Agreement under 2005 Equity Incentive Plan
4.30 (1		2005 Employee Stock Purchase Plan
4.31 (1	.7)	Form of Subscription Agreement under 2005 Employee Stock Purchase Plan
10.1		Not used.
10.2		Not used.
10.3 (8	3)	Option and License Agreement, dated January 23, 1998, between the Company and the University of Southern California (Request for confidential treatment of certain
		data)
10.4 (2)	!)	First Amendment to License Agreement, dated August 16, 2000, between the Company and the University of Southern California (Request for confidential treatment of
		certain data)
10.5 (8	3)	Option and License Agreement, dated August 17, 2000, between the Company and the University of Southern California (Request for confidential treatment of certain
		data)
10.6 (9))	Standard Multi-Tenant Office Lease — Gross, dated June 3, 2004, between the Company and George V. Casey & Ellen M. Casey, Trustees of the Casey Family Trust
	0)	dated June 22, 1998
10.7 (1		Patent License Agreement, effective August 1, 2002, between the Company and the National Institutes of Health
10.9 (1		Offer Letter, dated March 5, 2003, from the Company to Joan M. Robbins, Ph.D.
10.10 (Amendment to Option and License Agreement, dated April 21, 2003, the Company and the University of Southern California
10.11 (Offer Letter, dated March 1, 2004, from the Company to Cellia Habita, M.D., Ph.D.
10.12 (Offer Letter, dated November 15, 2004, from the Company to Brian Culley
10.13 ((13)	Offer Letter, dated November 17, 2004, from the Company to Carrie Carlander
31.1		Rule 13a-14(a)/15d-14(a) Certification
31.2		Rule 13a-14(a)/15d-14(a) Certification
32.1		Section 1350 Certifications
(1)	Incorpora	ted by reference to the same-numbered exhibit to the Company's Form 8-A, filed April 27, 2004
(2)	Incorpora	ted by reference to the same-numbered exhibit to the Company's Registration Statement on Form 10-SB, filed October 2, 2001.
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- (2) Incorporated by reference to the same-numbered exhibit to the Company's Registration Statement on Form 10-SB, filed October 2, 2001.
- (3) Incorporated by reference to Exhibit 4.1 to the Company's Registration Statement on Form 10-SB, filed October 2, 2001.
- (4) Incorporated by reference to Exhibit 4.2 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).
- (5) Incorporated by reference to the same-numbered exhibit to the Company's Registration Statement on Form S-3, filed June 30, 2004.
- (6) Incorporated by reference to the same-numbered exhibit 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 Quarterly Report on Form 10-QSB, filed May 12, 2004.
- (8) Incorporated by reference to the same-numbered exhibit to the Company's Registration Statement on Form 10-SB/A, filed January 14, 2002.
- (9) Incorporated by reference to the same-numbered exhibit to the Company's Quarterly Report on Form 10-QSB, filed August 10, 2004.
- (10) Incorporated by reference to the same-numbered exhibit to the Company's Quarterly Report on Form 10-QSB, filed November 26, 2002.
- $(11) \quad \text{Incorporated by reference to the same-numbered exhibit to the Company's Annual Report on Form 10-KSB, filed April 16, 2003.}$
- $(12) \quad \text{Incorporated by reference to Exhibit 10.6 to the Company's Quarterly Report on Form 10-QSB, filed August 14, 2003.}$
- (13) Incorporated by reference to the same-numbered exhibit to the Company's Annual Report on Form 10-KSB, filed March 31, 2005.
- (14) Incorporated by reference to Exhibit 10.1 to the Company's Registration Statement Form S-8, filed July 13, 2005.
- (15) Incorporated by reference to Exhibit 10.2 to the Company's Registration Statement Form S-8, filed July 13, 2005.

- (16) Incorporated by reference to Exhibit 10.3 to the Company's Registration Statement Form S-8, filed July 13, 2005.
- (17) Incorporated by reference to Exhibit 10.4 to the Company's Registration Statement Form S-8, filed July 13, 2005.

Exhibit 4.23

SECURITIES PURCHASE AGREEMENT

dated as of July 21, 2005,

by and among

ADVENTRX PHARMACEUTICALS, INC.

and

ENTITIES LISTED ON APPENDIX A (each a "Purchaser").

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SECURITIES PURCHASE AGREEMENT

THIS SECURITIES PURCHASE AGREEMENT (this "Agreement") is made as of the 21st day of July 2005 by and among ADVENTRX Pharmaceuticals, Inc. (the "Company"), a Delaware corporation, with its principal offices at 6725 Mesa Ridge Road, Suite 100, San Diego, California 92121, and the entities listed on Appendix A (each, a "Purchaser").

IN CONSIDERATION of the mutual covenants contained in this Agreement, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Company and the Purchasers hereby agree as follows:

Section 1. Purchase and Sale of Stock and Warrants.

Subject to the terms and conditions of this Agreement, on the Closing Date (as defined herein), each Purchaser agrees to purchase severally and not jointly and the Company agrees to issue and sell to such Purchaser severally and not jointly that number of whole shares of the Company's common stock, \$0.001 par value, (the "Common Stock") set forth opposite such Purchaser's name on Appendix A (the "Shares"), at a purchase price that is equal to One Dollar and Eighty-Five Cents (\$1.85) per Share and a warrant to purchase that number of shares of Common Stock set forth opposite such Purchaser's name on Appendix A, at an exercise price of Two Dollars Twenty-Six Cents (\$2.26) per share, substantially in the form attached hereto as Appendix F-1 or with respect to North Sound Legacy Institutional Fund LLC and North Sound Legacy International Ltd. in the form attached hereto as Appendix F-2 (each, a "Warrant" and collectively the "Warrants"). The shares of Common Stock issuable upon exercise of the Warrants are referred to herein as the Warrant Shares. The Shares and the Warrants are referred to herein collectively as the "Securities." The Purchasers and the Company agree and acknowledge that the Company may, at any Purchaser's prior written request, include in the Warrant issuable to such Purchaser pursuant to this Agreement a provision, agreed to by such Purchaser and the Company, pursuant to which such Purchaser would be prohibited from exercising such Warrant to the extent that such Purchaser would upon exercise beneficially hold a number of shares of Common Stock in excess of an agreed percentage of the total number of shares of Common Stock then issued and outstanding.

2.1. The Closing.

- (a) The purchase and sale of the Securities upon the terms and conditions hereof will take place at a closing (the "Closing") to be held at the offices of Cooley Godward LLP, Five Palo Alto Square, 3000 El Camino Real, Palo Alto, CA 94306-2155, or such other location as the parties may agree, on the second business day after all conditions to closing set forth in Section 2.2 have been satisfied or waived, but in no event later than July 29, 2005 unless otherwise agreed to among the Company and the Purchasers (the "Closing Date").
- (b) The Company shall provide wire transfer instructions for the payment of the Purchase Price prior to the Closing.
 - 2.2. Conditions to Closing.
- (a) The Company's obligation to complete the purchase and sale of the Securities and deliver such stock and warrant certificate(s) to each Purchaser is subject to:
 - (i) receipt by the Company of immediately available funds in the full amount of the purchase price for the Securities being purchased hereunder as set forth opposite such Purchaser's name on Appendix A (the "Purchase Price"), in accordance with the wire transfer instructions delivered by the Company pursuant to Section 2.1(b);
 - (ii) the accuracy in all material respects of the representations and warranties made by such Purchaser in Section 4 below as of the Closing Date and the fulfillment in all material respects of those undertakings of such Purchaser in this Agreement to be fulfilled on or prior to the Closing Date;
 - (iii) the aggregate Purchase Price paid by the Purchasers at the Closing shall be greater than or equal to \$15,000,000;
 - (iv) the Company shall have received notification from American Stock Exchange LLC ("Amex") that the Shares and Warrant Shares have been approved for listing with Amex; and
 - (v) the receipt by the Company from all Purchasers other than North Sound Legacy Institutional Fund LLC, North Sound Legacy International Ltd. and Royal Bank of Canada of a copy of the Rights Agreement duly executed by each such Purchaser.

- (b) Each Purchaser's obligation to complete the purchase and sale of the Securities is subject to:
 - (i) the accuracy in all material respects of the representations and warranties made by the Company in Section 3 below as of the Closing Date and the fulfillment in all material respects of those undertakings of the Company in this Agreement to be fulfilled on or prior to the Closing Date:
 - (ii) delivery by the Company to such Purchaser of an opinion, dated as of the Closing Date, from Bingham McCutchen LLP, counsel to the Company, in the form attached as Appendix B hereto;
 - (iii) the Company's delivery to its transfer agent of irrevocable instructions, subject to fulfillment of the conditions set forth in Section 2.2(a), to issue to such Purchaser or in such nominee name(s) as designated by such Purchaser in writing such number of Shares set forth opposite such Purchaser's name on Appendix A or, if requested by the Purchaser, one or more certificates representing such Shares;
 - (iv) the issuance of or an undertaking by the Company at the Closing to issue, subject to fulfillment of the conditions set forth in Section 2.2(a), to such Purchaser or in such nominee name(s) as designated by such Purchaser in writing a Warrant exercisable for that number of shares of Common Stock set forth opposite such Purchaser's name on Appendix A or, if requested by the Purchaser, one or more Warrants representing the right to purchase such shares;
 - (v) fulfillment by the Company of the closing conditions set forth in Section 7(f), (g), (j), (k) and (l) of that certain engagement letter dated May 16, 2005 between the Company and CIBC World Markets Corp. ("CIBC"), or waiver of such conditions by CIBC;
 - (vi) the aggregate Purchase Price paid by the Purchasers at the Closing shall be greater than or equal to \$15,000,000;
 - (vii) the Company shall have received notification from Amex that the Shares and Warrant Shares have been approved for listing with Amex; and
 - (viii) the receipt by all Purchasers other than North Sound Legacy Institutional Fund LLC, North Sound Legacy International Ltd. and Royal Bank of Canada of a copy of the Rights Agreement in the form of Exhibit G hereto (the "Rights Agreement") duly executed by the Company.

Section 3. Representations, Warranties and Covenants of the Company. Except as set forth on the corresponding sections of the Company's disclosure schedule attached hereto as Appendix C (the "Disclosure Schedule"), or as specifically contemplated by this Agreement, the Company hereby represents and warrants to, and covenants with, each Purchaser as of the Closing Date (or such other date specified below) as follows:

3.1. No Material Misstatements. The Private Placement Memorandum dated May 16, 2005, as supplemented June 16, 2005, June 21, 2005 and July 21, 2005, relating to the offering of the Shares, including all exhibits and annexes thereto (including, in particular, the Company's Annual Report on Form 10-KSB for the fiscal year ended December 31, 2004 (the "Annual Report"), the Company's Proxy Statement for the Annual Meeting Stockholders held on May 24, 2005, and the Company's Quarterly Report on Form 10-Q for the 3 months ended March 31, 2005 (the "Quarterly Report"), and all exhibits thereto), as the same may be amended or supplemented, (the "Memorandum"), did not, as of its date, contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary in order to make the statements therein not misleading. Except as set forth in the Memorandum, there has been no material adverse change in the business, financial condition or prospects of the Company since March 31, 2005.

3.2. Incorporated Documents.

- (a) The documents contained in or incorporated by reference in the Memorandum or distributed by the Company to the Purchasers as a supplement to the Memorandum, which were filed with the Securities and Exchange Commission (the "Commission"), at the time they were filed with the Commission, complied in all material respects with the requirements of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and the rules and regulations of the Commission thereunder, and none of such documents contained an untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading.
- (b) Since January 1, 2003, the Company has filed all documents required to be filed by it prior to the date hereof with the Commission pursuant to the reporting requirements of the Exchange Act (the "SEC Documents").
- 3.3. Certain Data. The statistical and market-related data included in the Memorandum are based on or derived from sources that the Company believes to be reliable and accurate.

3.4. Financial Statements.

- (a) The financial statements of the Company (including all notes and schedules thereto) included in the Memorandum present fairly in all material respects the financial position of the Company and its consolidated subsidiaries at the dates indicated and the statement of operations, stockholders' equity and cash flows of the Company and its consolidated subsidiaries for the periods specified; and such financial statements and related schedules and notes thereto, have been prepared in conformity with generally accepted accounting principles, consistently applied throughout the periods involved (subject, in the case of any unaudited financial information, to the absence of note disclosure and normal year-end adjustments). The summary financial data included in the Memorandum present fairly the information shown therein as at the respective dates and for the respective periods specified and have been presented on a basis consistent with the consolidated financial statements set forth in the Memorandum and other financial information (subject, in the case of any unaudited financial information, to the absence of note disclosure and normal year-end adjustments).
- (b) As of their respective dates, the financial statements of the Company included in the SEC Documents complied as to form in all material respects with applicable accounting requirements and published rules and regulations of the Commission with respect thereto. Such financial statements have been prepared in accordance with generally accepted accounting principles, consistently applied, during the periods involved (except as may be otherwise indicated in such financial statements or the notes thereto) and fairly present in all material respects the financial position of the Company as of the dates thereof and the results of its operations and cash flows for the periods then ended (subject, in the case of unaudited statements, to the absence of note disclosure and normal year end audit adjustments).
- 3.5. Books and Records; Internal Controls. The books, records and accounts of the Company and its subsidiaries accurately and fairly reflect, in all material respects, in reasonable detail, the transactions in, and dispositions of, the assets of, and the results of operations of, the Company and its subsidiaries. The Company and each of its subsidiaries maintains a system of internal accounting controls sufficient to provide reasonable assurances 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 accordance 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; the chief executive officer and the chief financial officer

of the Company have made all certifications required by the Sarbanes-Oxley Act of 2002, as amended (the "Sarbanes-Oxley Act"), and any related rules and regulations promulgated by the Commission, and the statements contained in any such certification are complete and correct; the Company maintains "disclosure controls and procedures" (as defined in Rule 13a-14(c) under the Exchange Act); the Company is otherwise in compliance in all material respects with all applicable effective provisions of the Sarbanes-Oxley Act and is actively taking steps to ensure that it will be in compliance with other applicable provisions of the Sarbanes-Oxley Act upon the effectiveness of such provisions.

- 3.6. Independent Accountants. To the knowledge of the Company, J.H. Cohn LLP, whose reports are included as a part of the Memorandum, is and, during the periods covered by its reports, was an independent public accounting firm as required by the Securities Act of 1933, as amended (the "Securities Act"), and the rules and regulations of the Commission thereunder.
- 3.7. Organization; Good Standing. The Company and each of its subsidiaries, is duly organized, validly existing and in good standing under the laws of their respective jurisdictions of incorporation or organization. The Company and each of its subsidiaries is duly qualified to do business and is in good standing as a foreign corporation in each jurisdiction in which the nature of the business conducted by it or location of the assets or properties owned, leased or licensed by it requires such qualification, except for such jurisdictions where the failure to so qualify individually or in the aggregate would not result in a material adverse effect on the assets, properties, condition, financial or otherwise, or in the results of operations, business affairs or business prospects of the Company and its subsidiaries considered as a whole (a "Material Adverse Effect"); and to the Company's knowledge, no proceeding has been instituted in any such jurisdiction revoking, limiting or curtailing, or seeking to revoke, limit or curtail, such power and authority or qualification and, to the Company's knowledge, no such proceeding is planned or threatened.
- 3.8. Absence of Litigation. Except as set forth in the SEC Documents, there is no action, suit, proceeding, inquiry or investigation before or by any court, public board, government agency, self-regulatory organization or body pending or, to the actual knowledge of the executive officers of the Company or any of its subsidiaries, threatened in writing against the Company or any of the Company's subsidiaries or any of the Company's or the subsidiaries' officers or directors in their capacities as such, that, either individually or in the aggregate, would result in a Material Adverse Effect.
- 3.9. Brokers or Finders. No broker, investment banker, financial advisor or other individual, corporation, general or limited partnership, limited

liability company, firm, joint venture, association, enterprise, joint securities company, trust, unincorporated organization or other entity (each a "Person"), other than CIBC, RBC Capital Markets and Burnham Hill Partners, a division of Pali Capital, Inc. (together, the "Placement Agent"), the fees and expenses of which will be paid by the Company, is entitled to any broker's, finder's, financial advisor's or other similar fee or commission in connection with the transactions contemplated by this Agreement based upon arrangements made by or on behalf of the Company.

- 3.10. Use of Proceeds. The Company intends to use the net proceeds from the sale of the Securities hereunder as described in the Memorandum.
- 3.11. Licenses; Leases. The Company and each of its subsidiaries has all requisite corporate power and authority, and all necessary authorizations, approvals, consents, orders, licenses, certificates and permits of and from all governmental or regulatory bodies or any other person or entity (collectively, the "Permits"), to own, lease and license its assets and properties and conduct its business, all of which are valid and in full force and effect, except where the lack of such Permits, individually or in the aggregate, would not result in a Material Adverse Effect. The Company and each of its subsidiaries has fulfilled and performed in all material respects all of its material obligations with respect to such Permits and no event has occurred that allows, or after notice or lapse of time would allow, revocation or termination thereof or results in any other material impairment of the rights of the Company thereunder. Except as may be required under the Securities Act and state and foreign Blue Sky laws, no other Permits are required to enter into, deliver and perform this Agreement and to issue and sell the Securities.

3.12. Intellectual Property.

(a) (i) The Company and its subsidiaries own, or hold under license, and will have on and after the Closing Date full, legally enforceable rights to use, free of any Encumbrances (as defined below), all patents, patent rights, patent applications, licenses, inventions, discoveries, improvements, copyrights (whether registered or unregistered), writings and other works of authorship (including software), know-how (including trade secrets and other unpatented and/or unpatentable proprietary or confidential information, systems or procedures), trademarks (whether registered or unregistered), trademark applications, service marks and trade names (collectively, the "Intellectual Property") that are material and necessary to conduct and operate the business of the Company as currently conducted, and to the Company's knowledge as currently proposed to be conducted, as described in the Memorandum (the "Company Business"), (ii) to the Company's knowledge, neither the use or exploitation of any of its Intellectual Property nor the conduct and operations of the Company Business in the manner currently conducted, each as described in the Memorandum, infringes upon, misappropriates, violates or

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conflicts in any way with the Intellectual Property rights of any other Person, (iii) to the Company's knowledge, neither the use of any of its Intellectual Property nor the conduct and operation of the Company Business as currently proposed to be conducted by the Company, as described in the Memorandum, will infringe upon, misappropriate, violate or conflict in any way with the Intellectual Property rights of any other Person, (iv) to the Company's knowledge, there is no, nor has there been within the last three years, any pending or threatened assertion or claim related to the use or exploitation of its Intellectual Property or the conduct or operation of the Company Business as described in the Memorandum, involving the infringement, misappropriation, or violation of, or conflict with, in any way the Intellectual Property rights of any other Person, (v) the Company is not and has not been, a party to any action, suit, proceeding or, to the knowledge of the Company, investigation, any of which involve a claim of infringement or misappropriation of any Intellectual Property of any Person, (vi) the Company has not been the subject of, and the Company has no actual knowledge of, any claims with respect to the validity, enforceability or ownership of any of its Intellectual Property and (vii) to the Company's knowledge, there have been no unauthorized uses, disclosures, infringements, or misappropriations by any Person of any of its Intellectual Property or any breaches by any Person, including the Company, of any licenses or other agreements involving its Intellectual Property, which in each case has or could reasonably be expected to have a Material Adverse Effect.

- (b) To the Company's knowledge, no Person currently is in default with regard to any agreement relating to its Intellectual Property, and there exists no condition or event (including the execution, delivery and performance of this Agreement) which, with the giving of notice or the lapse of time or both, would constitute a default by the Company under any such agreement, or would give any Person any right of termination, cancellation or acceleration of any performance under any such agreement or result in the creation or imposition of any Encumbrance, in each case.
- (c) For purposes of this Section 3.11, "Encumbrance" means (i) any security interest, pledge, mortgage, deed of trust, hypothecation, lien (including environmental and tax liens), charge, encumbrance, adverse claim, preferential arrangement or restriction of any kind, including any restriction on the use, voting, transfer, receipt of income or other exercise of any attributes of ownership, (ii) interest of a vendor or a lessor under any conditional sale agreement, capital lease or title retention agreement (or any financing lease having substantially the same economic effect) and (iii) any purchase option, call or similar right of a third Person.
- 3.13. Real Property. Neither the Company nor any of its subsidiaries owns any real property. All real property held under lease by the Company and its subsidiaries is held by them under valid, existing and enforceable

leases, free and clear of all liens, encumbrances, claims, security interests and defects, except such as are not material and do not materially interfere with the use made or proposed to be made of such property by the Company and its subsidiaries. Neither the Company nor any of its subsidiaries has sustained any loss or interference with its assets, businesses or properties (whether owned or leased) from fire, explosion, earthquake, flood or other calamity, whether or not covered by insurance, or from any labor dispute or any court or legislative or other governmental action, order or decree which in each case has resulted or would result in a Material Adverse Effect.

- 3.14. Material Contracts. The Company has attached to the Annual Report and the Quarterly Report each document, contract or other agreement that the Company was required to attach to such report as a material contract pursuant to Item 601(b)(10) of Regulation S-K under the Securities Act (a "Material Contract"). Each description of each Material Contract in the Annual Report or the Quarterly Report reflects in all material respects the material terms of such Material Contract. Each Material Contract is in full force and effect and is valid and enforceable by and against the Company or its subsidiaries, as the case may be, in accordance with its terms. Neither the Company nor any of its subsidiaries, if a subsidiary is a party, nor to the Company's knowledge, any other party is in default in the observance or performance of any term or obligation to be performed by it under any Material Contract, and no event has occurred which with notice or lapse of time or both would constitute such a default, in any such case which default or event, individually or in the aggregate, would result in a Material Adverse Effect. No default exists, and no event has occurred which with notice or lapse of time or both would constitute a default, in the due performance and observance of any term, covenant or condition, by the Company or its subsidiaries, if a subsidiary is a party thereto, of any other agreement or instrument to which the Company or any of its subsidiaries is a party or by which Company or its properties or business or a subsidiary or its properties or business is bound which default or event, individually or in the aggregate, would result in a Material Adverse Effect.
- 3.15. No Violation. Neither the Company nor any of its subsidiaries is in violation of any term or provision of its charter or by-laws or of any franchise, license, permit, judgment, decree, order, statute, rule or regulation, where the consequences of such violation, individually or in the aggregate, would result in a Material Adverse Effect.
- 3.16. Due Authorization and Delivery. All necessary corporate action has been duly and validly taken by the Company to authorize the execution, delivery and performance of this Agreement and the issuance and sale of the Securities by the Company. This Agreement has been duly and validly authorized, executed and delivered by the Company and constitutes and will constitute legal,

valid and binding obligations of the Company enforceable against the Company in accordance with its terms, except as the enforceability thereof may be limited by bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting the enforcement of creditors' rights generally and by general equitable principles.

- 3.17. No Default. Neither the execution, delivery and performance of this Agreement by the Company nor the consummation of any of the transactions contemplated hereby (including, without limitation, the issuance and sale by the Company of the Securities) will give rise to a right to terminate or accelerate the due date of any payment due under, or conflict with or result in the breach of any term or provision of, or constitute a default (or an event which with notice or lapse of time or both would constitute a default) under, or require any consent or waiver under, or result in the execution or imposition of any lien, charge or encumbrance upon any properties or assets of the Company or its subsidiaries pursuant to the terms of, any indenture, mortgage, deed of trust or other agreement or instrument to which the Company or any of its subsidiaries is a party or by which either the Company or its subsidiaries or any of their properties or businesses is bound, or any franchise, license, permit, judgment, decree, order, statute, rule or regulation applicable to the Company or any of its subsidiaries or violate any provision of the charter or by-laws of the Company or any of its subsidiaries.
- 3.18. Capitalization; Liabilities. The Company has authorized capital stock as set forth under the caption "Description of Common Stock" in the Memorandum and outstanding capital stock as set forth under the caption "Summary of Offering Terms" in the Memorandum. The Company has duly authorized the issuance of certificates evidencing the Shares and the issuance of the Warrants. When issued the certificates evidencing the Shares and Warrant Shares will be in due and proper legal form. All of the issued and outstanding shares of Common Stock have been duly and validly issued and are fully paid and nonassessable. There are no statutory preemptive or other similar rights to subscribe for or to purchase or acquire any shares of Common Stock of the Company or any of its subsidiaries or any such rights pursuant to its Certificate of Incorporation or by-laws or any agreement or instrument to or by which the Company or any of its subsidiaries is a party or bound. The Shares and the Warrant Shares, when issued and sold pursuant to this Agreement and the Warrants, will be duly and validly issued, fully paid and nonassessable and none of them will be issued in violation of any preemptive or other similar right. Except as disclosed in the Memorandum, there is no outstanding option, warrant or other right calling for the issuance of, and there is no commitment, plan or arrangement to issue, any share of stock of the Company or any of its subsidiaries or any security convertible into, or exercisable or exchangeable for, such stock. The Common Stock and Shares conform in all material respects to all statements in relation thereto contained in the Memorandum. All outstanding shares of capital stock of each of the Company's subsidiaries have been duly authorized and

validly issued, and are fully paid and nonassessable and are owned directly by the Company or by another wholly-owned subsidiary of the Company free and clear of any security interests, liens, encumbrances, equities or claims, other than those described in the Memorandum. Since April 30, 2005, neither the Company nor its subsidiaries has issued any securities (other than upon the exercise of outstanding warrants or options that are disclosed in the Memorandum). Since March 31, 2005, neither the Company nor its subsidiaries has (i) incurred any liability or obligation, direct or contingent, for borrowed money, except such liabilities or obligations incurred in the ordinary course of business; (ii) entered into any transaction not in the ordinary course of business; or (iii) declared or paid any dividend or made any distribution on any shares of its stock or redeemed, purchased or otherwise acquired or agreed to redeem, purchase or otherwise acquire any shares of its capital stock.

- 3.19. Lock-Up. In addition to any applicable provisions of the Rights Agreement, for a period of ninety (90) days from the effective date of the Registration Statement (as defined in Section 6.1(a)(i) below), the Company will not, without the prior written consent of CIBC and Purchasers holding at least 66% of the Shares, sell, contract to sell or otherwise dispose of or issue any securities of the Company, except pursuant to previously issued warrants or options, any agreements providing for anti-dilution or other stock purchase or share issuance rights in existence on the date hereof, any employee benefit or similar plan of the Company in existence on the date hereof, or any technology license agreement, strategic alliance or joint venture in existence on the date hereof. The Company agrees that the provisions of the Rights Agreement are cumulative to, and are not in any way limited by, the preceding provisions of this Section 3.19.
- 3.20. Employees. Neither the Company nor any of its subsidiaries is involved in any labor dispute nor, to the knowledge of the Company, is any such dispute threatened, which dispute would result in a Material Adverse Effect. The Company is not aware of any existing or imminent labor disturbance by the employees of any of its principal suppliers or contractors which would result in a Material Adverse Effect.
- 3.21. Related Party Transactions. Since January 1, 2004, no transaction has occurred between or among the Company and any of its officers or directors, shareholders or any affiliate or affiliates of any such officer or director or shareholder that is not described in the Memorandum.
- 3.22. Market Stabilization. The Company has not taken, nor will it take, directly or indirectly, any action designed to or which might reasonably be expected to cause or result in, or which has constituted or which might reasonably be expected to constitute, the stabilization or manipulation of the price of the Common

Stock or any security of the Company to facilitate the sale or resale of any of the Securities.

- 3.23. Taxes. The Company and each of its subsidiaries has filed all Federal, state, local and foreign tax returns which are required to be filed through the date hereof, which returns are true and correct in all material respects or has received timely extensions thereof, and has paid all taxes shown on such returns and all assessments received by it to the extent that the same are material and have become due. There are no tax audits or investigations pending of which the Company has notice, which if adversely determined would result in a Material Adverse Effect and to the knowledge of the Company there are not any material proposed additional tax assessments against the Company or any of its subsidiaries.
 - 3.24. AMEX Compliance; Listing.
- (a) The Company is in compliance with the requirements of Amex for continued listing of the Common Stock thereon and has not received any notification that, and has no knowledge that, Amex is contemplating terminating such listing nor, to the Company's knowledge, is there any basis therefor. The transactions contemplated by this Agreement will not violate the rules and regulations of Amex.
- (b) The Shares and Warrant Shares have been duly authorized for listing on the American Stock Exchange.
- 3.25. Insurance. The Company and its subsidiaries are insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as are customary for development stage entities of approximately equal size to the Company and its subsidiaries which are engaged in a business similar to the Company's business; all policies of insurance and fidelity or surety bonds insuring the Company or any of its subsidiaries or the Company's or its subsidiaries' respective businesses, assets, employees, officers and directors are in full force and effect; the Company and each of its subsidiaries are in compliance with the terms of such policies and instruments in all material respects; and neither the Company nor any subsidiary of the Company has any reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business at a cost that is not materially greater than the current cost. Since January 1, 2003, neither the Company nor any of its subsidiaries has been denied any insurance coverage which it has sought or for which it has applied.
 - 3.26. Environmental Laws.

- (a) (i) Each of the Company and each of its subsidiaries is in compliance in all material respects with all rules, laws and regulation relating to the use, treatment, storage and disposal of toxic substances and protection of health or the environment ("Environmental Law") which are applicable to its business; (ii) neither the Company nor its subsidiaries has received any notice from any governmental authority or third party of an asserted claim under Environmental Laws; (iii) each of the Company and each of its subsidiaries has received all permits, licenses or other approvals required of it under applicable Environmental Laws to conduct its business and is in compliance with all terms and conditions of any such permit, license or approval (except where failure to receive such permits, licenses or approvals would not have a Material Adverse Effect); (iv) no facts currently exist that will require the Company or any of its subsidiaries to make future material capital expenditures to comply with Environmental Laws; and (v) no property which is or has been owned, leased or occupied by the Company or its subsidiaries has been designated as a Superfund site pursuant to the Comprehensive Environmental Response, Compensation of Liability Act of 1980, as amended (42 U.S.C. Section 9601, et. seq.) or otherwise designated as a contaminated site under applicable state or local law. Neither the Company nor any of its subsidiaries has been named as a "potentially responsible party" under the CER, CLA 1980.
- 3.27. Investment Company. The Company is not and, after giving effect to the offering and sale of the Securities and the application of proceeds thereof as described in the Memorandum, will not be an "investment company" within the meaning of the Investment Company Act of 1940, as amended (the "Investment Company Act").
- 3.28. Solicitation; Other Issuances of Securities. Neither the Company nor any of its subsidiaries or affiliates, nor any Person acting on its or their behalf, (i) has engaged in any form of general solicitation or general advertising (within the meaning of Regulation D under the Securities Act) in connection with the offer or sale of the Securities, (ii) has, directly or indirectly, made any offers or sales of any security or solicited any offers to buy any security, under any circumstances that would require registration of the Securities under the Securities Act or (iii) has issued any shares of Common Stock or shares of any series of preferred stock or other securities or instruments convertible into, exchangeable for or otherwise entitling the holder thereof to acquire shares of Common Stock which would be integrated with the sale of the Securities to such Purchaser for purposes of the Securities Act or of any applicable stockholder approval provisions, including, without limitation, under the rules and regulations of any exchange or automated quotation system on which any of the securities of the Company are listed or designated, nor will the Company or any of its subsidiaries or affiliates take any action or steps that would require registration of any of the Securities under the Securities Act or cause the offering of the Securities to be integrated with other

offerings. Assuming the accuracy of the representations and warranties of Purchasers, the offer and sale of the Securities by the Company to the Purchasers pursuant to this Agreement will be exempt from the registration requirements of the Securities Act.

- 3.29. No Corrupt Practices. The Company and any other person associated with or acting on behalf of the Company including, without limitation, any director, officer, agent or employee of the Company or its subsidiaries, has not, directly or indirectly, while acting on behalf of the Company or its subsidiaries (i) used any corporate funds for unlawful contributions, gifts, entertainment or other unlawful expenses relating to political activity; (ii) made any unlawful payment to foreign or domestic government officials or employees or to foreign or domestic political parties or campaigns from corporate funds; (iii) violated any provision of the Foreign Corrupt Practices Act of 1977, as amended; or (iv) made any other unlawful payment.
- 3.30. No Money Laundering. The operations of the Company and its subsidiaries are and have been conducted at all times in compliance with applicable financial recordkeeping and reporting requirements of the Currency and Foreign Transactions Reporting Act of 1970, as amended, the money laundering statutes of all jurisdictions, the rules and regulations thereunder and any related or similar rules, regulations or guidelines, issued, administered or enforced by any governmental agency (collectively, the "Money Laundering Laws") and no action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Company or any of it subsidiaries with respect to the Money Laundering Laws is pending, or to the best knowledge of the Company, threatened.
- 3.31. No OFAC Sanctions. Neither the Company nor any of its subsidiaries nor, to the knowledge of the Company, any director, officer, agent, employee or affiliate of the Company or any of its subsidiaries is currently subject to any U.S. sanctions administered by the Office of Foreign Assets Control of the U.S. Treasury Department ("OFAC"); and the Company will not directly or indirectly use the proceeds of the offering, or lend, contribute or otherwise make available such proceeds to any subsidiary, joint venture partner or other person or entity, for the purpose of financing the activities of any person currently subject to any U.S. sanctions administered by OFAC.
- 3.32. ERISA. The Company has fulfilled its obligations, if any, under the minimum funding standards of Section 302 of the U.S. Employee Retirement Income Security Act of 1974 ("ERISA") and the regulations and published interpretations thereunder with respect to each "plan" as defined in Section 3(3) of ERISA and such regulations and published interpretations in which its

employees are eligible to participate and each such plan is in compliance in all material respects with the presently applicable provisions of ERISA and such regulations and published interpretations. No "Reportable Event" (as defined in 12 ERISA) has occurred with respect to any "Pension Plan" (as defined in ERISA) for which the Company could have any liability.

Section 4. Representations, Warranties and Covenants of Each Purchaser.

Each Purchaser for itself and no other Purchaser hereby represents and warrants to, and covenants with, the Company as of the Closing Date (or such other date specified below) as follows:

- 4.1. Organization. Such Purchaser is an entity duly organized and validly existing in good standing (to the extent such concepts are applicable) under the laws of its jurisdiction of organization. Such Purchaser has all requisite corporate power and authority and all necessary governmental approvals to carry on its business as now being conducted, except as would not result in a Material Adverse Effect on such Purchaser's ability to consummate the transactions contemplated by this Agreement.
- 4.2. Authorization, Enforcement, and Validity. Such Purchaser has the requisite power and authority to enter into this Agreement and to consummate the transactions contemplated hereby. Such Purchaser has taken all necessary action to authorize the execution, delivery and performance of this Agreement. Upon the execution and delivery of this Agreement, this Agreement shall constitute a valid and binding obligation of the Purchaser enforceable in accordance with its terms, except as enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting creditors' and contracting parties' rights generally and except as enforceability may be subject to general principles of equity.
- 4.3. Consents and Approvals; No Violation. The execution, delivery and performance of this Agreement by such Purchaser and the consummation by such Purchaser of the transactions contemplated hereby will not (i) result in a violation of such Purchaser's organizational documents; (ii) conflict with, or constitute a default or give to others any rights of termination, amendment, acceleration or cancellation of, any material agreement, indenture or instrument to which such Purchaser is a party (except for such conflicts, defaults, terminations, amendments, accelerations, cancellations and violations as would not, individually or in the aggregate, result in a Material Adverse Effect on such Purchaser's ability to consummate the transactions contemplated by this Agreement); or (iii) result in a violation of any law, rule, regulation, order, judgment or decree applicable to such Purchaser or any of its subsidiaries, except for such violations as would not,

individually or in the aggregate, result in a Material Adverse Effect on such Purchaser's ability to consummate the transactions contemplated by this Agreement. Such Purchaser is not required to obtain any consent, authorization or order of, or make any filing or registration with, any court or governmental agency or any regulatory or self-regulatory agency (other than a Schedule 13D, Form 3 or other filing required by the SEC) in order for it to execute, deliver or perform any of its obligations under or contemplated by this Agreement, except where the failure to obtain such consents, authorization or orders or to make such filings or registrations would not, individually or in the aggregate, result in a Material Adverse Effect on such Purchaser's ability to consummate the transactions contemplated by this Agreement.

- 4.4. Investment Experience. Such Purchaser is an accredited investor within the meaning of Rule 501 of Regulation D promulgated under the Securities Act, is knowledgeable, sophisticated and experienced in making, and is qualified to make, decisions with respect to investments in shares representing an investment decision like that involved in the purchase of the Securities.
- 4.5. Investment Intent And Limitation On Dispositions. Such Purchaser is acquiring Securities for its own account for investment only and has no intention of selling or distributing any of such Securities or the Warrant Shares or any arrangement or understanding with any other Persons regarding the sale or distribution of such Securities or the Warrant Shares except in accordance with the provisions of Section 6. Such Purchaser will not, directly or indirectly, offer, sell, pledge, transfer or otherwise dispose of (or solicit any offers to buy, purchase or otherwise acquire or take a pledge of) any of the Securities or the Warrant Shares except in accordance with the provisions of Section 6 or pursuant to and in accordance with an exemption from the registration requirements of Section 5 of the Securities Act.

4.6. Information And Risk.

- (a) Such Purchaser has received and reviewed the Memorandum and has requested, received, reviewed and considered all other information such Purchaser deems relevant in making an informed decision to purchase the Securities. Such Purchaser has had an opportunity to discuss the Company's business, management and financial affairs with its management and also had an opportunity to ask questions of officers and employees of the Company that were answered to such Purchaser's satisfaction.
- (b) Such Purchaser recognizes that an investment in the Securities involves a high degree of risk, including a risk of total loss of such Purchaser's investment. Such Purchaser is able to bear the economic risk of holding the

Securities for an indefinite period, and has knowledge and experience in the financial and business matters such that it is capable of evaluating the risks of the investment in the Securities.

- (c) Such Purchaser has, in connection with such Purchaser's decision to purchase Securities, not relied upon any representations or other information (whether oral or written) other than as set forth in the representations and warranties of the Company contained herein or the Memorandum.
- (d) Such Purchaser has, with respect to all matters relating to this Agreement and the offer and sale of the Securities, relied solely upon the advice of such Purchaser's own counsel and has not relied upon or consulted any counsel to the Placement Agent or counsel to the Company.
- (e) Such Purchaser understands and acknowledges that nothing in the Memorandum, this Agreement, any other materials presented to the Purchaser or any communications between the Purchaser and the Placement Agent in connection with the purchase and sale of the Securities constitutes legal, tax or investment advice. Such Purchaser has consulted such legal, tax and investment advisors as it, in its sole discretion, has deemed necessary or appropriate in connection with its purchase of Securities.
- (f) Such Purchaser acknowledges that the Placement Agent has acted solely as placement agent for the Company in connection with the offering of the Securities by the Company, that the information and data provided to such Purchaser in connection with the transactions contemplated hereby have not been subjected to independent verification by the Placement Agent, and that the Placement Agent makes no representation or warranty with respect to the accuracy or completeness of such information, data or other related disclosure material. Such Purchaser further acknowledges that in making its decision to enter into this Agreement and to purchase Securities that it has relied on its own examination of the Company and the terms of, and consequences, of holding the Securities. Each Purchaser further acknowledges that the provisions of this Section 4.6 are also for the benefit of, and may also be enforced by, the Placement Agent.
- 4.7. Restricted Securities. Such Purchaser understands that the Securities are and the Warrant Shares upon issuance will be "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. Such Purchaser understands that it may resell the Securities and the Warrant Shares pursuant to Rule

144 only after the satisfaction of certain requirements, including the requirement that the Securities be held for at least one year prior to resale.

- 4.8. No Obligation to Register. Such Purchaser further acknowledges and understands that, except as provided in Section 6, the Company is under no obligation to register the Securities or the Warrant Shares.
- 4.9. Disclosures to the Company. Such Purchaser understands that the Company is relying on the statements contained herein to establish an exemption from registration under federal and state securities laws. In addition, such Purchaser will promptly notify the Company of any changes in the information set forth in the Registration Statement (as defined in Section 6.1(a)(i) below) regarding such Purchaser.
- 4.10. Nature of Purchasers. Except as set forth on Appendix A, such Purchaser: (i) is, to its knowledge, not an affiliate (as such term is defined pursuant to Rule 12b-2 promulgated under the Exchange Act) of any other Purchaser, (ii) is not constituted as a partnership, association, joint venture or any other type of joint entity with any other Purchaser, and (iii) to its knowledge, is not acting as part of a group (as such term is defined under Section 13(d) of the Exchange Act) with any other Purchaser. If at any time after the Closing Date such Purchaser becomes an affiliate (as defined herein) of any other Purchaser (except as set forth above), such Purchaser will provide prompt written notice to the Company.
- 4.11. Ownership. Such Purchaser (including any Person controlling, controlled by, or under common control with such Purchaser, as the term "control" is defined pursuant to the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended, and its implementing regulations (the "HSR Act")) does not, and upon the consummation of the transactions contemplated by this Agreement will not, hold voting securities of the Company exceeding an aggregate fair market value as of the Closing Date of fifty three million one hundred dollars (\$53,100,000), calculated pursuant to the HSR Act.
- 4.12. Brokers or Finders. No broker, investment banker, financial advisor or other Person is entitled to any broker's, finder's, financial advisor's or other similar fee or commission in connection with the transactions contemplated hereby based upon arrangements made by or on behalf of such Purchaser.
- 4.13. Acknowledgement. Such Purchaser acknowledges and agrees that the Company does not make and has not made any representations or warranties with respect to the transactions contemplated by this Agreement other than those specifically set forth in Section 3.

4.14. No Short Sales. Between the time such Purchaser learned about the Offering and the public announcement of the Offering, such Purchaser has not engaged in any short sales or similar transactions with respect to the Common stock, nor has such Purchaser, directly or indirectly, caused any Person to engage in any short sales or similar transactions with respect to the Common Stock.

Section 5. Survival of Representations and Warranties.

Notwithstanding any investigation made by any party to this Agreement or by the Placement Agent, all representations and warranties as to each respective Closing made by the Company and the Purchasers herein shall survive for a period of 18 months following the Closing Date.

Section 6. Registration of the Shares and Warrant Shares; Compliance with the Securities Act .

- 6.1. Registration Procedures And Expenses.
- (a) Except for such times as the Company may be required to suspend the use of a prospectus forming a part of the Registration Statement (as defined below), the Company will:
 - (i) as soon as practicable, but in no event later than forty-five (45) days following the Closing Date, use reasonable best efforts to prepare and file with the Commission a registration statement on Form S-3 (the "Registration Statement") covering the resale of the Registrable Securities (as defined in Section 6.1(e) below) by each Purchaser other than those Registrable Securities held by Purchasers that have not complied with Section 6.3; provided, however, that within 10 days of receiving the information required pursuant to Section 6.3 with respect to Registrable Securities omitted from the Registration Statement, the Company shall amend or supplement the Registration Statement to register for resale any Registrable Securities initially omitted therefrom, provided, further, however, that if the Registration Statement shall have been declared effective by the Commission, the Company shall have no obligation to make a post-effective amendment to the Registration Statement pursuant to the foregoing proviso but shall, to the extent permitted under rules and regulations promulgated by the Commission, supplement the Registration Statement to register for resale such omitted Registrable Securities;
 - (ii) use best efforts to cause the Registration Statement, as amended, to become effective under the Securities Act as soon as practicable but in any event no later than ninety (90) days after the Closing Date;

- (iii) prepare and file with the Commission such amendments and supplements to the Registration Statement and the prospectus used in connection therewith (A) as may be necessary to keep the Registration Statement continuously effective until the earlier of (i) as to each Purchaser, such time as all of the Registrable Securities may be sold pursuant to Rule 144(k) of the Securities Act, or (ii) such time as all Registrable Securities purchased by the Purchasers have been sold pursuant to the Registration Statement and (B) as may be reasonably requested by a Purchaser in order to incorporate information concerning such Purchaser or such Purchaser's intended method of distribution;
- (iv) so long as the Registration Statement is effective covering the resale of Registrable Securities owned by the Purchasers, furnish to each Purchaser with respect to the Registrable Securities registered under the Registration Statement (and to each underwriter, if any, of such Registrable Securities) such reasonable number of copies of prospectuses and such other documents as such Purchaser may reasonably request in order to facilitate the public sale or other disposition of all or any of the Registrable Securities by such Purchaser;
- (v) use commercially reasonable efforts to file documents required of the Company for normal Blue Sky clearance in states specified in writing by the Purchasers; provided, however, that the Company shall not be required to qualify to do business or consent to service of process generally in any jurisdiction in which the Company is not now so qualified or has not so consented;
- (vi) bear all expenses in connection with the procedures in paragraphs (a) through (c) of this Section 6.1 and the registration of the Registrable Securities pursuant to the Registration Statement, other than fees and expenses, if any, of counsel or other advisers to the Purchasers or brokerage fees and commissions incurred by the Purchasers, provided, however, that the Company shall reimburse the Purchasers for the reasonable documented fees and expenses of one counsel selected by Purchasers holding a majority of the Shares and reasonably acceptable to all Purchasers and approved by the Company, which approval shall not be unreasonably withheld;
- (vii) use all commercially reasonable efforts to prevent the issuance of any stop order or other order suspending the effectiveness of such Registration Statement and, if such an order is issued, to obtain the withdrawal thereof at the earliest possible time and to notify each Purchaser of the issuance of such order and the resolution thereof;

- (viii) furnish to each Purchaser, promptly after the date that such Registration Statement becomes effective, but in any event within two business days thereafter, a letter of outside counsel representing the Company addressed to such Purchaser, confirming the date of effectiveness of such Registration Statement and the absence of any stop order, to the knowledge of the Company;
- (ix) provide to each Purchaser and its representatives, if requested, the opportunity to conduct a reasonable inquiry of the Company's financial and other records during normal business hours and make available its officers, directors and employees for questions regarding information which such Purchaser may reasonably request in order to fulfill any due diligence obligation on its part; and
- (x) if requested a reasonable time in advance, permit counsel for the Purchasers to review the Registration Statement and all amendments and supplements thereto, and any comments made by the staff of the Commission and the Company's responses thereto, within a reasonable period of time prior to the filing thereof with the Commission (or, in the case of comments made by the staff of the Commission, within a reasonable period of time following the receipt thereof by the Company);

provided, that in any event, the Company shall not be required to provide, and shall not provide, any Purchaser with material, non-public information unless such Purchaser agrees to receive such information and enters into a written confidentiality agreement with the Company pursuant to which such Purchaser would be prohibited from using or disclosing such information until such time as such information becomes public other than by breach of such confidentiality agreement by such Purchaser, provided, further, however, that the Company shall use commercially reasonable best efforts to make public such information on or prior to the date the Commission shall have declared the Registration Statement effective.

- (b) The Company shall be permitted to suspend for one or more periods (provided that the aggregate length of such suspension shall not exceed twenty business days in any 365-day period) the actions required under Sections 6.1(a)(i) through (iii) to the extent that the Board of Directors of the Company concludes in good faith that the disclosure of additional information in the prospectus is required by law and that such suspension is necessary to permit such disclosure.
- (c) If (i) a Registration Statement covering (A) all of the Shares and the Warrant Shares and (B) any other shares of Common Stock issued or issuable in respect to the Shares and the Warrant Shares because of stock splits, stock dividends,

reclassifications, recapitalizations or similar events (together, the "Registrable Shares") required to be covered thereby and required to be filed by the Company pursuant to this Section 6.1 is (A) not filed with the SEC on or before forty-five (45) days after the Closing Date (a "Filing Failure") or (B) if such Registration Statement is not declared effective by the SEC on or before (1) ninety (90) days after the Closing Date (an "Effectiveness Failure") or (ii) on any day after the effective date of the Registration Statement sales of all the Registrable Shares required to be included on such Registration Statement cannot be made (other than as permitted during a suspension pursuant to Section 6.1(b) of this Agreement) pursuant to such Registration Statement (including, without limitation, because of a failure to keep such Registration Statement effective, to disclose such information as is necessary for sales to be made pursuant to such Registration Statement or to register sufficient shares of Shares) (a "Maintenance Failure"), then, the Company shall pay as liquidated damages (the "Liquidated Damages") for such failure and not as a penalty to any Purchaser an amount in cash determined in accordance with the formula set forth below:

For each 30-day period that a Filing Failure, Effectiveness Failure or Maintenance Failure remains uncured, the Company shall pay an amount equal to the purchase price paid to the Company for all Shares then held by such Purchaser multiplied by 1% for the first 30-day period or any portion thereof and increasing by an additional 1% with regard to each additional 30-day period until such Filing Failure, Effectiveness Failure or Maintenance Failure is cured. For any partial 30-day period in which a Filing Failure, Effectiveness Failure or Maintenance Failure exists but is cured prior to the end of the 30-day period, the Company shall pay the Purchasers a pro rata portion of the amount which would be due if the failure continued for the entire 30-day period. For example, if the purchase price paid for all Shares then held by a Purchaser is \$5,000,000, then, (a) at the end of the 30th day, the Liquidated Damages would be 1% or \$50,000, (b) at the end of the 60th day, the Liquidated Damages for the first 30-day period would have been 1% or \$50,000 and for the second 30-day period would be 2% or \$100,000, and (c) at the end of the 105th day, the Liquidated Damages for the first 30-day period would have been 1% or \$50,000, for the second 30-day period 2% or \$100,000, for the third 30-day period 3% or \$150,000, and for the final 15-day period, 4% applied pro rata to such 15 days, or \$100,000.

Payments to be made pursuant to this Section 6.2(c) shall be due and payable to the Purchasers at the end of each calendar month during which Liquidated Damages shall have accrued. The parties agree that the Liquidated 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 holders of Registrable Shares if a

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Filing Failure, Effectiveness Failure or Maintenance Failure occurs. The parties agree that Liquidated Damages shall be the exclusive monetary damages under this Agreement with respect to any Filing Failure, Effectiveness Failure or Maintenance Failure. Notwithstanding the foregoing, no Liquidated Damages shall be due or payable to a Purchaser in any event if as of the date of the Filing Failure, Effectiveness Failure or Maintenance Failure such Purchaser could sell all of the Registrable Shares such Purchaser then holds without registration by reason of Rule 144(k) of the Securities Act.

- (d) With a view to making available to the Purchasers the benefits of Rule 144 (or its successor rule) and any other rule or regulation of the Commission that may at any time permit the Purchaser to sell Registrable Securities to the public without registration, the Company covenants and agrees to: (i) make and keep public information available, as those terms are understood and defined in Rule 144, until the earlier of (A) six months after such date as all of the Purchasers' Registrable Securities may be resold pursuant to Rule 144(k) or any other rule of similar effect or (B) such date as all of the Purchasers' Registrable Securities shall have been resold; (ii) file with the Commission in a timely manner all reports and other documents required of the Company under the Exchange Act; and (iii) furnish to the Purchaser upon request, as long as the Purchaser owns any Registrable Securities, (A) a written statement by the Company that it has complied with the reporting requirements of the Exchange Act, and (B) such information other than publicly-available SEC filings filed via EDGAR as may be reasonably requested in order to avail the Purchaser of any rule or regulation of the Commission that permits the selling of any such Registrable Securities without registration.
- (e) For purposes of this Agreement, the term "Registrable Securities" shall mean (A) the Shares and Warrant Shares; and (B) any other shares of Common Stock issued or issuable in respect to the Shares and Warrant Shares because of stock splits, stock dividends, reclassifications, recapitalizations or similar events.
 - 6.2. Restrictions on Transferability.
- (a) Each Purchaser agrees that it will not effect any disposition of the Warrants or Registrable Securities that would constitute a sale within the meaning of the Securities Act or pursuant to any applicable state securities or Blue Sky laws of any state, except (i) as contemplated in the Registration Statement referred to in Section 6.1 above, (ii) pursuant to the requirements of Rule 144 (in which case such Purchaser will provide the Company with reasonable evidence of such Purchaser's compliance therewith) or (iii) pursuant to an exemption from the registration requirements of Section 5 of the Securities Act as supported by a written opinion of legal counsel reasonably satisfactory to the Company and addressed to the Company

to the effect that registration is not required in connection with the proposed transfer; whereupon the holder of such securities shall be entitled to transfer such securities; provided, however, that notwithstanding the foregoing provisions of this section 6.2(a), no such restrictions shall apply to a transfer by a Purchaser that is (A) a partnership transferring to its partners or former partners in accordance with partnership interests and without consideration, (B) a corporation transferring to a wholly-owned subsidiary or a parent corporation that owns all of the capital stock of the Purchaser, (C) a limited liability company transferring to its members or former members in accordance with their interest in the limited liability company and without consideration, or (D) an individual transferring to the Purchaser's family member or trust for the benefit of an individual Purchaser. Each certificate evidencing the securities transferred as above provided shall bear the appropriate restrictive legends as may be required by Section 7.

- (b) Each Purchaser agrees that there may occasionally be times when the Company must suspend the use of the prospectus forming a part of the Registration Statement until such time as an amendment or supplement to the Registration Statement has been filed by the Company and declared effective, or until such time as the Company has filed an appropriate report with the Commission pursuant to the Exchange Act. Each Purchaser hereby covenants that such Purchaser will not sell any Registrable Securities pursuant to said prospectus during the period commencing at the time at which the Company gives the Purchasers written notice of the suspension of the use of said prospectus and ending at the time the Company gives the Purchasers written notice that the Purchasers may thereafter effect sales pursuant to said prospectus. The Company agrees to file such amendment, supplement or report as soon as practicable following such notice of suspension.
- (c) None of the Registrable Securities or Warrants shall be transferable except upon the conditions specified in this Section 6, which are intended to ensure compliance with the provisions of the Securities Act. Each Purchaser will cause any proposed transferee of the Registrable Securities or Warrants held by such Purchaser to agree to take and hold such securities subject to the provisions and upon the conditions specified in this Section 6 if and to the extent that such securities continue to be restricted securities in the hands of the transferee, and each such transferee, upon making such agreement, shall be deemed a Purchaser for the purposes of Sections 6, 7, 8, 9 and 10 hereof, and shall be entitled to the benefits of a Purchaser thereunder and subject to the terms and conditions applicable to Purchasers thereunder.
- 6.3. Furnish Information. It shall be a condition to the Company's obligations to take any action under this Agreement with respect to the registration of a Purchaser's Registrable Securities that such Purchaser shall promptly furnish to the Company, upon request, such information regarding itself, such Purchaser's

Registrable Securities, and the intended method of disposition of such Registrable Securities as required by the form of Selling Stockholder Questionnaire attached hereto as Appendix D. In connection therewith, each Purchaser 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.

- 6.4. Delay of Registration. The Purchasers 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.
 - 6.5. Termination Of Conditions And Obligations.
- (a) The conditions precedent imposed by Section 6.2 above regarding the transferability of the Registrable Securities and Warrants shall cease and terminate as to any particular number of the Shares upon the date on which the Purchaser may sell without volume limitations all such securities then held by the Purchaser without registration by reason of Rule 144 or any other rule of similar effect.
- (b) The expiration or termination of this Agreement for any reason will have no effect on the rights of any of the parties under the provisions of this Section 6.

Section 7. Legends.

(a) Such Purchaser understands and agrees that each certificate or other document evidencing any of the Shares, Warrant Shares or Warrants shall be endorsed with the legend substantially in the form set forth below, and such Purchaser covenants that such Purchaser will not transfer such securities represented by any such certificate or document without complying with the restrictions on transfer described in the legend endorsed thereon (unless there is in effect a registration statement under the Securities Act covering such proposed transfer, such securities have been sold under Rule 144 promulgated under the Securities Act ("Rule 144") or as otherwise permitted by the provisions of Section 6.2 above) and understands that the Company will refuse to register a transfer of any such securities unless the conditions specified in the following legend are satisfied:

"THE SHARES/WARRANTS REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR ANY STATE SECURITIES LAWS. EXCEPT AS SPECIFIED IN THIS LEGEND, SUCH SHARES MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED OR HYPOTHECATED, OR

OTHERWISE TRANSFERRED IN THE ABSENCE OF A REGISTRATION STATEMENT IN EFFECT WITH RESPECT THERETO UNDER SUCH ACT UNLESS SOLD PURSUANT TO RULE 144 OF SUCH ACT OR UNLESS SUCH SALE, PLEDGE, HYPOTHECATION OR TRANSFER IS OTHERWISE EXEMPT FROM REGISTRATION AND ANY APPLICABLE STATE SECURITIES LAWS. THE COMPANY MAY REQUEST A WRITTEN OPINION OF COUNSEL, REASONABLY SATISFACTORY TO THE COMPANY, TO THE EFFECT THAT REGISTRATION IS NOT REQUIRED IN CONNECTION WITH SUCH SALE OR OTHER TRANSFER."

- (b) Such certificates shall not contain the above legend (i) following any sale of such Registrable Securities pursuant to an effective Registration Statement or Rule 144, or (ii) if the securities represented by such certificate are eligible for sale under Rule 144(k) and the Purchaser has requested removal of such legend. Following the effective date of the Registration Statement or at such earlier time as a legend is no longer required for certain Shares, the Company will, no later than three trading days following the delivery by a Purchaser to the Company or the Company's transfer agent of a legended certificate representing such Shares and a properly completed and executed copy of the Certificate Regarding Resale of Common Stock in the form of Appendix E hereto (or a form of certification substantially similar), deliver or cause to be delivered to such Purchaser a certificate representing such Shares that is free from all restrictive and other legends.
- (c) Such Purchaser covenants that such Purchaser will not transfer the securities represented by any such certificate without complying with any applicable requirements under the Securities Act to deliver the final prospectus included in the effective Registration Statement to any offeree of Registrable Securities.

Section 8. Indemnification.

(a) Definitions.

- (i) For purposes of this Section 8, but not Section 8(c), the term "Purchaser" shall include the Purchaser and any affiliate (as such term is defined pursuant to Rule 12b-2 promulgated under the Exchange Act) of such Purchaser;
- (ii) For purposes of this Section 8, the term "Prospectus" shall mean the prospectus and any amendment or supplement thereto in the form first filed with the Commission pursuant to Rule 424(b) promulgated under the Securities Act or, if no Rule 424(b) filing is required, filed as part

of the Registration Statement at the time of effectiveness, as supplemented or amended from time to time; and

(iii) For purposes of this Section 8, the term "Registration Statement" shall include any final prospectus, exhibit, supplement or amendment included in or relating to the Registration Statement.

- (b) The Company agrees to indemnify and hold harmless each of the Purchasers and each Person, if any, who controls any Purchaser within the meaning of the Securities Act, against any losses, claims, damages, liabilities or expenses, joint or several, to which such Purchasers or such controlling Person may become subject, under the Securities Act, the Exchange Act, or any other federal or state statutory law or regulation, or at common law or otherwise (including in settlement of any litigation, if such settlement is effected with the written consent of the Company), insofar as such losses, claims, damages, liabilities or expenses (or actions in respect thereof as contemplated below) arise out of or are based upon any untrue statement or alleged untrue statement of any material fact contained in the Registration Statement or Prospectus, or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances in which they were made, not misleading, or arise out of or are based in whole or in part on any inaccuracy in the representations and warranties of the Company contained in this Agreement, or any failure of the Company to perform its obligations hereunder, and will reimburse each Purchaser and each such controlling Person for any legal and other expenses reasonably incurred as such expenses are reasonably incurred by such Purchaser or such controlling Person in connection with investigating, defending, settling, compromising or paying any such loss, claim, damage, liability, expense or action; provided, however, that the Company will not be liable in any such case to the extent that any such loss, claim, damage, liability or expense arises out of or is based upon (i) an untrue statement or alleged untrue statement or omission or alleged omission made in the Registration Statement or Prospectus in reliance upon and in conformity with written information furnished to the Company by or on behalf of the Purchaser expressly for use therein, (ii) the failure of such Purchaser to comply with the covenants and agreements contained in Section 6.2 above respecting the sale of the Securities, (iii) the inaccuracy of any representations made by such Purchaser herein or (iv) any statement or omission in any Prospectus that is corrected in any subsequent Prospectus that was delivered to the Purchaser a reasonable time prior to the pertinent sale or sales by the Purchaser, and provided that the Purchaser has been notified by the Company that such earlier Prospectus should no longer be delivered by the Purchaser.
- (c) Each Purchaser will severally, and not jointly, indemnify and hold harmless the Company, each of its directors, each of its officers who signed the

Registration Statement and each Person, if any, who controls the Company within the meaning of the Securities Act, against any losses, claims, damages, liabilities or expenses to which the Company, each of its directors, each of its officers who signed the Registration Statement or controlling Person may become subject, under the Securities Act, the Exchange Act, or any other federal or state statutory law or regulation, or at common law or otherwise (including in settlement of any litigation, if such settlement is effected with the written consent of such Purchaser) insofar as such losses, claims, damages, liabilities or expenses (or actions in respect thereof as contemplated below) arise out of or are based upon (i) any failure by such Purchaser to comply with the covenants and agreements contained in Section 6.2 above respecting the sale of the Securities, (ii) the inaccuracy of any representation made by such Purchaser herein or (iii) any untrue or alleged untrue statement of any material fact contained in the Registration Statement or the Prospectus, or the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances in which they were made, not misleading, in each case to the extent, but only to the extent, that such untrue statement or alleged untrue statement or omission or alleged omission was made in the Registration Statement or Prospectus in reliance upon and in conformity with written information furnished to the Company by or on behalf of such Purchaser expressly for use therein, and will reimburse the Company, each of its directors, each of its officers who signed the Registration Statement or controlling Person for any legal and other expense reasonably incurred, as such expenses are reasonably incurred by the Company, each of its directors, each of its officers who signed the Registration Statement or controlling Person in connection with investigating, defending, settling, compromising or paying any such loss, claim, damage, liability, expense or action; provided, however, that the aggregate liability of any Purchaser hereunder shall not exceed the Purchase Price paid by such Purchaser to the Company on the Closing Date. No Purchaser shall be liable for the indemnification obligations of any other Purchaser.

(d) Promptly after receipt by an indemnified party under this Section 8 of notice of the threat or commencement of any action, such indemnified party will, if a claim in respect thereof is to be made against an indemnifying party under this Section 8, promptly notify the indemnifying party in writing thereof, but the omission so to notify the indemnifying party will not relieve it from any liability which it may have to any indemnified party hereunder or otherwise to the extent it is not prejudiced as a result of such failure. In case any such action is brought against any indemnified party and such indemnified party seeks or intends to seek indemnity from an indemnifying party, the indemnifying party will be entitled to participate in, and, to the extent that it may wish, jointly with all other indemnifying parties similarly notified, to assume the defense thereof with counsel reasonably satisfactory to such indemnified party; provided, however, if the defendants in any such action include both the indemnified party and the indemnifying party and the indemnified

party shall have reasonably concluded that there may be a conflict between the positions of the indemnifying party and the indemnified party in conducting the defense of any such action or that there may be legal defenses available to it and/or other indemnified parties which are different from or additional to those available to the indemnifying party, the indemnified party or parties shall have the right to select separate counsel to assume such legal defenses and to otherwise participate in the defense of such action on behalf of such indemnified party or parties. Upon receipt of notice from the indemnifying party to such indemnified party of its election to assume the defense of such action and approval by the indemnified party of counsel, (which approval shall not be unreasonably withheld), the indemnifying party will not be liable to such indemnified party under this Section 8 for any legal or other expenses subsequently incurred by such indemnified party in connection with the defense thereof unless (i) the indemnified party shall have employed such counsel in connection with the assumption of legal defenses in accordance with the proviso to the preceding sentence (it being understood, however, that the indemnifying party shall not be liable for the expenses of more than one separate counsel, reasonably satisfactory to the indemnifying party, representing the indemnified parties who are parties to such action) or (ii) the indemnifying party shall not have employed counsel reasonably satisfactory to the indemnified party to represent the indemnified party within a reasonable time after notice of commencement of action, in each of which cases the reasonable fees and expenses of counsel shall be at the expense of the indemnifying party. No indemnifying party, in the defense of any claim covered by this Section 8, shall, except with the prior written consent of the indemnified party, which consents shall not be unreasonably conditioned, withheld or delayed, consent to entry of any judgment or enter into any settlement which does not include as an unconditional term thereof the giving by the claimant or plaintiff to such indemnified party of a release from all liability in respect to such claim. An indemnified party shall cooperate with the indemnifying party in the defense of any claim brought against such indemnified party.

Section 9. Notices.

(a) All notices, requests, consents and other communications hereunder shall be in writing, shall be mailed by first-class registered or certified airmail, confirmed facsimile or nationally recognized overnight express courier postage prepaid, and shall be as addressed as follows:

if to the Company, to:

ADVENTRX Pharmaceuticals, Inc. 6725 Mesa Ridge Road, Suite 100, San Diego, California 92121 Attention: Evan Levine, Chief Executive Officer Telephone No.: (858) 552-0866 x227 Telecopy No.: (858) 552-0876

with a copy to:

Bingham McCutchen LLP Three Embarcadero Center San Francisco, CA 94111 Attention: Hank Evans Francis Sarena

Telephone No.: (415) 393-2000 Telecopy No.: (415) 393-2286

and if to any Purchaser, at its address as set forth in Appendix A hereto, or at such other address or addresses as may have been previously furnished to the Company in writing in accordance with this Section 9.

(b) Such notices or other communications shall be deemed delivered upon receipt, in the case of overnight delivery, personal delivery, facsimile transmission (as evidenced by the confirmation thereof), or mail.

Section 10. Miscellaneous.

- 10.1. Amendments. Any term of this Agreement may be amended and the observance of any term of this Agreement may be waived (either generally or in a particular instance and either retroactively or prospectively) only with the written consent of the Company and each Purchaser. Any amendment or waiver effected in accordance with this Section 10.1 shall be binding upon each holder of any securities purchased under this Agreement at the time outstanding (including securities into which such securities are convertible), each future holder of all such securities, and the Company.
- 10.2. Headings. The headings of the various sections of this Agreement are for convenience of reference only and shall not be deemed to be part of this Agreement.
- 10.3. Severability. In the event that any provision in this Agreement is held to be invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained herein shall not in any way be affected or impaired thereby.
- 10.4. Governing Law And Forum. This Agreement shall be governed by and construed in accordance with the laws of the State of New York

applicable to agreements made and to be fully performed therein. The parties hereto agree to submit to the exclusive jurisdiction of the federal and state courts of the State of New York with respect to the interpretation of this Agreement or for the purposes of any action arising out of or related to this Agreement.

- 10.5. Counterparts. This Agreement may be executed in two or more counterparts, each of which shall constitute an original, and all of which together shall constitute one and the same instrument. In the event that any signature is delivered via facsimile transmission, such signature shall create a valid and binding obligation of the party executing (or on whose behalf such signature is executed) the same with the same force and effect as if such facsimile signature page were an original hereof.
- 10.6. Entire Agreement. This Agreement contains the entire understanding of the parties with respect to the matters covered herein, supersedes all prior agreements and understandings with respect to such matters and executed by and among the Company and any of the Purchasers, and, except as specifically set forth herein, neither the Company nor the Purchasers make any representation, warranty, covenant or undertaking with respect to such matters.
- 10.7. Independent Nature Of Purchasers' Obligations And Rights. The obligations of each Purchaser under this Agreement are several and not joint with the obligations of any other Purchaser, and no Purchaser shall be responsible in any way for the performance of the obligations of any other Purchaser under this Agreement. Nothing contained herein and no action taken by any Purchaser pursuant thereto, shall be deemed to constitute the Purchasers as a partnership, an association, a joint venture or any other kind of entity, or create a presumption that the Purchasers are in any way acting in concert or as a group, or are deemed affiliates (as such term is defined under the Exchange Act) with respect to such obligations or the transactions contemplated by this Agreement. Each Purchaser 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 Purchaser to be joined as an additional party in any proceeding for such purpose.
- 10.8. Expenses. Each party hereto shall pay all costs and expenses incurred by it in connection with the execution and delivery of this Agreement, and all the transactions contemplated thereby, including fees of legal counsel.

IN WITNESS WHEREOF, the parties hereto have caused this Securities Purchase Agreement to be executed and delivered by their duly authorized representatives as of the day and year first above written.

ADVENTRX PHARMACEUTICALS, INC.

Ву:
Name:
Title:
ICAHN PARTNERS LP
Ву:
Name: Keith Meister Title: Authorized Signatory
ICAHN PARTNERS MASTER FUND LP
ву:
Name: Keith Meister Title: Authorized Signatory
HIGH RIVER LIMITED PARTNERSHIP
BY: HOPPER INVESTMENTS, LLC, ITS GENERAL PARTNER
BY: BARBERRY CORP., ITS SOLE MEMBER
Ву:
Name: Edward E. Mattner Title: Authorized Signatory

SIGNATURE PAGE TO SECURITIES PURCHASE AGREEMENT

VIKING GLOBAL EQUITIES LP

By:
Name:
Title:
VGE III PORTFOLIO LTD.
By:
Name:
Title:
NORTH SOUND LEGACY INSTITUTIONAL FUND LLC
ву:
Name:
Title:
NORTH SOUND LEGACY INTERNATIONAL LTD.
D
By:
Name:
Title:
ROYAL BANK OF CANADA
BY: RBC CAPITAL MARKETS CORPORATION, ITS AGENT
By:
Name:
Title:
By:
Name:
Title:

SIGNATURE PAGE TO SECURITIES PURCHASE AGREEMENT

APPENDIX A

SCHEDULE OF PURCHASERS

PURCHASER	NAME IN WHICH CERTIFICATE SHOULD BE MADE TO (IF DIFFERENT):	PURCHASER ADDRESS, TELEPHONE AND CONTACT PERSON	AGGREGATE NUMBER OF SHARES	AGGREGATE NUMBER OF WARRANT SHARES	TOTAL AGGREGATE PURCHASE PRICE	TAX ID NUMBER
Icahn Partners LP*		767 Fifth Avenue, 47th Floor New York, NY 10153 Attn: Marc Weitzen, Esq. Telephone: (212) 702-4300 Telecopy: (212) 750-5815	1,660,540	1,660,540	\$3,071,999.00	
Icahn Partners Master Fund LP*		767 Fifth Avenue, 47th Floor New York, NY 10153 Attn: Marc Weitzen, Esq. Telephone: (212) 702-4300 Telecopy: (212) 750-5815	1,798,919	1,798,919	\$3,328,000.15	
High River Limited Partnership*		767 Fifth Avenue, 47th Floor New York, NY 10153 Attn: Marc Weitzen, Esq. Telephone.: (212) 702-4300 Telecopy: (212) 750-5815	864,865	864,865	\$1,600,000.25	

^{*} These three Purchasers are affiliates as such term is defined pursuant to Rule 12b-2 promulgated under the Exchange Act and acting as a group as such term is defined under Section 13(d) of the Exchange Act.

PURCHASER	NAME IN WHICH CERTIFICATE SHOULD BE MADE TO (IF DIFFERENT):	PURCHASER ADDRESS, TELEPHONE AND CONTACT PERSON	AGGREGATE NUMBER OF SHARES	AGGREGATE NUMBER OF WARRANT SHARES	TOTAL AGGREGATE PURCHASE PRICE	TAX ID NUMBER
Viking Global Equities LP**		55 Railroad Avenue Greenwich, CT 06830 Attn: Alex Denner Telephone: (203) 863-5000 Telecopy: (203) 625-8705	1,832,483	1,832,483	\$3,390,093.55	13-4062034
VGE III Portfolio Ltd.**		55 Railroad Avenue Greenwich, CT 06830 Attn: Alex Denner Telephone: (203) 863-5000 Telecopy: (203) 625-8705	1,951,300	1,951,300	\$3,609,905.00	98-0212947
North Sound Legacy Institutional Fund LLC***		c/o North Sound Capital LLC Prior to Aug. 1, 2005: 53 Forest Avenue Old Greenwich, CT 06870 After Aug. 1, 2005: 20 Horseneck Lane Greenwich, CT 06830 Attn: Andrew B. David, Esq. Telephone: (203) 967-5784 Telecopy: (203) 340-5701	378,378	378,378	\$ 699,999.30	
North Sound Legacy International Ltd.***		c/o North Sound Capital LLC Prior to Aug. 1, 2005:	972,973	972,973	\$1,800,000.05	

^{**} These two Purchasers are affiliates as such term is defined pursuant to Rule 12b-2 promulgated under the Exchange Act and acting as a group as such term is defined under Section 13(d) of the Exchange Act.

^{***} These two Purchasers are affiliates as such term is defined pursuant to Rule 12b-2 promulgated under the Exchange Act and acting as a group as such term is defined under Section 13(d) of the Exchange Act.

NAME	IN	l Wi	HICH
CERT	ΓIF	IC/	ATE
SHOUL	D	ΒE	MADE
	7	ГО	

PURCHASER ADDRESS, (IF DIFFERENT): TELEPHONE AND CONTACT PERSON

AGGREGATE NUMBER OF WARRANT SHARES SHARES

NUMBER OF

AGGREGATE

TOTAL AGGREGATE PURCHASE PRICE TAX ID NUMBER

PURCHASER

53 Forest Avenue Old Greenwich, CT 06870 After Aug. 1, 2005: 20 Horseneck Lane Greenwich, CT 06830 Attn: Andrew B. David, Esq. Telephone: (203) 967-5784 Telecopy: (203) 340-5701

Royal Bank of Canada

1 Liberty Plaza 165 Broadway New York, NY 10006 Attn: Joe Muskatel Telephone: 212-858-7492 Telecopy: For delivery of stock certificates and warrants: c/o RBC Capital Markets 1 Liberty Plaza 165 Broadway New York, NY 10006 Attn: Mike Frommer

1,351,351 1,351,351 \$2,499,999.35

APPENDIX B

FORM OF COMPANY COUNSEL OPINION

CIBC and the Purchasers shall receive on the Closing Date from counsel for the Company, an opinion (containing the customary exceptions and assumptions), addressed to CIBC and the Purchasers and dated such Closing Date, and stating in effect that:

- (a) The Company has been duly incorporated and is validly existing as a corporation in good standing under the laws of the State of Delaware.
- (b) The Company has all requisite corporate power and authority to own, lease and operate its properties and to conduct its business as now being conducted and as described in the Memorandum and with respect to the Company to enter into and perform its obligations under the Agreement and the Rights Agreement and to issue and sell the Shares, Warrants and Warrant Shares.
- (c) The authorized capital stock of the Company consists of 100,000,000 shares of Common Stock, par value \$0.001 per share, and 1,000,000 shares of Preferred Stock, \$0.01 par value.
- (d) The Shares, Warrants and Warrant Shares to be issued and sold by the Company pursuant to the Agreement and the Warrants have been duly authorized for issuance and sale to the Purchasers pursuant to the Agreement and, when issued and delivered by the Company pursuant to the Agreement and the Warrants against payment of the consideration set forth herein, will be validly issued, fully paid and nonassessable. The Warrant Shares have been duly and validly reserved for issuance by the Company. The issuance and sale of the Shares, Warrants and Warrant Shares by the Company is not subject to any preemptive rights, rights of first refusal or any restriction upon the voting or transfer of the Common Stock pursuant to the Delaware General Corporation Law (the "DGCL"), the Company's Certificate of Incorporation as amended (including any Certificate of Designation) (the "Certificate of Incorporation"), the Company's bylaws, or any material agreement listed on Exhibit B to this opinion (the "Material Contracts"). The description of the Common Stock set forth in the Memorandum under "Description of Common Stock" fairly presents, in all material respects, the information required by Item 202 of Regulation S-K promulgated by the Securities and Exchange Commission with respect to the Common Stock. The form of certificate used to evidence the Common Stock complies in all material respects with the DGCL and any applicable requirements of the Certificate of Incorporation or bylaws of the Company.

- (e) All necessary corporate action has been duly and validly taken by the Company to authorize the execution, delivery and performance of the Agreement and the issuance and sale of the Shares, Warrants and Warrant Shares. The Agreement, the Warrants and the Rights Agreement have been duly and validly authorized, executed and delivered by the Company and constitute the legal, valid and binding obligation of the Company enforceable against the Company in accordance with its terms except as such enforceability may be limited by applicable bankruptcy, insolvency, fraudulent conveyance, reorganization, moratorium and other similar laws affecting the enforcement of creditors' rights generally and by general equitable principles.
- (f) Neither the execution, delivery and performance of the Agreement or the Rights Agreement by the Company nor the consummation of any of the transactions contemplated thereby (including, without limitation, the issuance and sale by the Company of the Shares, Warrants and Warrant Shares) will give rise to a right to terminate or accelerate the due date of any payment due under, or result in the breach of any term or provision of, or constitute a default (or any event which with notice or lapse of time, or both, would constitute a default) under, or require consent or waiver under, or result in the execution or imposition of any lien, security interest or encumbrance upon any properties or assets of the Company or any subsidiary pursuant to the terms of any Material Contract, or any order, writ, judgment, injunction, decree, determination or award which has been entered against the Company and of which we have knowledge, or the DGCL or any statute, rule or regulation of the State of California, as currently in effect, or violate any provision of the Certificate of Incorporation or bylaws of the Company or any subsidiary, as currently in effect.
- (g) No consent, approval, authorization, license, registration, filing, qualification or order of any court, governmental agency or regulatory authority of the United States of America or the State of California is required under any statute, rule or regulation of the United States of America or the State of California, as currently in effect, for the due authorization, execution, delivery or performance of the Agreement or the Rights Agreement by the Company or the issuance of the Shares and Warrants contemplated thereby, except such as have been made or obtained and such as may be required under state securities or Blue Sky laws of any state in connection with the purchase of the Shares by, or the issuance of the Warrants to, the several Purchasers and the filing of a Form D with the SEC pursuant to Regulation D under the Act.
- (h) To our knowledge, there is no any action, suit, proceeding or other investigation, before any court or administrative agency or before or by any public body or board pending or threatened against, or involving the assets, properties or businesses of, the Company which is not disclosed in the Memorandum and which

would reasonably be expected to have a material adverse effect on the Company or its subsidiaries.

- (i) The Shares and Warrant Shares have been approved for listing on the American Stock Exchange.
- (j) The Company is not, and after giving effect to the offering and sale of the Securities and application of the proceeds thereof as described under the heading "Use of Proceeds" in the Memorandum, will not be, required to register as an "investment company" as such term is defined in the Investment Company Act of 1940, as amended.
- (k) The offer and sale of the Securities are exempt from the registration requirements of the Securities Act of 1933, as amended, subject to the timely filing of a Form D pursuant to SEC Regulation D.

To the extent deemed advisable by such counsel, such counsel may rely as to matters of fact on certificates of responsible officers of the Company and public officials and on the opinions of other counsel reasonably satisfactory to CIBC as to matters which are governed by laws other than the laws of the States of California and New York, the DGCL and the Federal laws of the United States; provided that such counsel shall state that in their opinion the Purchasers and CIBC are justified in relying on such other opinions. Copies of such certificates and other opinions shall be furnished to CIBC and counsel for the Purchasers.

APPENDIX C

DISCLOSURE SCHEDULE

This Disclosure Schedule (this "Schedule") sets forth exceptions to the representations and warranties made by ADVENTRX Pharmaceuticals, Inc., a Delaware corporation (the "Company"), in the Securities Purchase Agreement, dated July 21, 2005, among the Company and the Purchasers listed on Appendix A thereto (the "Agreement"). Capitalized terms not otherwise defined in this Schedule have the meanings set forth in the Agreement.

This Schedule is arranged in separate parts corresponding to the numbered sections contained in Section 3 of the Agreement, and the information disclosed in any numbered part, as set forth herein, shall be deemed to relate to and to qualify the particular representation or warranty set forth in the corresponding numbered section in Section 3 of the Agreement.

Contracts and other documents are mentioned in this Schedule for identification purposes only, and their inclusion should not be deemed an admission by the Company that any such listed contract or document is material. Any summary or description of any such contract or document contained in this Schedule is necessarily incomplete, and the entire contract or document should be reviewed. Copies of all such contracts and other documents have been provided to the Placement Agent or counsel to the Placement Agent.

SCHEDULE 3.5

BOOKS AND RECORDS; INTERNAL CONTROLS

Under the supervision of our Chief Executive Officer and our Chief Financial Officer, the Company evaluated the effectiveness of its disclosure controls and procedures as of December 31, 2004 and March 31, 2005. Based upon that evaluation, the Company's Chief Executive Officer and Chief Financial Officer concluded that as of both dates, the Company's disclosure controls and procedures were not effective to ensure that the Company's management is alerted to material information required to be disclosed by the Company in the reports it files with the Commission and that such material information is recorded and reported within the time periods specified in the Commission's rules and forms. In connection with J.H. Cohn LLP's audit of the Company's financial statements for the fiscal year ended December 31, 2004, J.H. Cohn, the Company's independent registered public accounting firm, advised the Company's Audit Committee that it had identified material weaknesses in the Company's accounting function that need to be re-evaluated and strengthened. The material weaknesses identified by J.H. Cohn and the ineffective disclosure controls and procedures identified by the Company are as follows: (1) the Company's accounting system software has limitations that may not allow the Company to ensure prior period financial information is not changed and is limited in its ability to provide the Company with accurate costing information; and (2) the Company lacks a formal process to review and document journal entries. The Company is unaware of any instances in which any users of the Company's accounting system software made any changes to historical financial data. Since March 31, 2005, the Company has enhanced its internal accounting capability by hiring a controller, and by engaging an independent accounting firm with the appropriate level of technical tax accounting expertise. The Company has engaged a consulting firm to migrate its accounting system to a new system with fewer limitations and greater controls. The Company has also engaged service providers to design, document and implement a formal review and documentation process based on current industry best-practices.

SCHEDULE 3.8

ABSENCE OF LITIGATION

The Company received a letter dated March 28, 2005 from counsel to Sanofi-Aventis ("Sanofi"), a large pharmaceutical company, in which Sanofi asserts that the Company's use of the mark "ADVENTRX" infringes on Sanofi's "AVENTIS" trademark and demands that the Company discontinue use of the "ADVENTRX" name and mark. As of the date hereof, to the Company's knowledge Sanofi has not filed any claim or instituted any action with respect to this matter. On May 11, 2005, the Company transmitted a letter to counsel to Sanofi in response to the March 28 letter stating that the Company does not believe that its use of the word "ADVENTRX" as a trade name infringes the "AVENTIS" trademark held by Sanofi.

SCHEDULE 3.12(A)

INTELLECTUAL PROPERTY

Schedule 3.8 is incorporated herein by reference.

On July 3, 2001, Karo Bio USA, Inc. ("Karo") filed a lawsuit in the United States District Court for the District of Delaware, Civil Action No. 01-455 (RRM) (the "Karo Suit") naming the Company, formerly known as Biokeys Pharmaceuticals, Inc., as the defendant claiming that the Company's use of the name "Biokey" and "Biokeys" infringed on Karo's registered trademark BIOKEY. Karo and the Company entered into a Settlement Agreement, effective March 14, 2002, pursuant to which, among other things, the Company agreed to refrain from using the names "Biokey" and "Biokeys" in commerce, the Company and Karo agreed to dismiss the Karo Suit with prejudice and the Company and Karo each provided the other with a release of claims. A stipulation of dismissal of the Karo Suit was entered on March 26, 2002 with the United States District Court for the District of Delaware.

4

INTELLECTUAL PROPERTY

As reported in the Quarterly Report, the Company received a letter dated April 13, 2005 from the University of Texas M.D. Anderson Cancer Center and the Board of Regents of The University of Texas System (collectively, "MD Anderson") notifying the Company of MD Anderson's intent to terminate the Patent and Technology License Agreement, dated June 14 1996, as amended June 15, 2000 (the "MDA Agreement"), between the Company and MD Anderson. Pursuant to the MDA Agreement, MD Anderson licensed to the Company certain patents required for the development of the Company's pre-clinical drug Eradicaide, which the Company had planned to develop for use as a viral entry inhibitor against HIV. In the April 13 letter, MD Anderson asserted that the Company was in breach of the provisions of the MDA Agreement that require the Company to pay certain expenses of MD Anderson, provide reports to MD Anderson and commercialize the technology licensed under the MDA Agreement. Pursuant to terms of the MDA Agreement, the MDA Agreement automatically terminated 30 days after MD Anderson's notice because the Company did not cure the alleged breaches. The Company does not currently believe that it owes any expense reimbursement to MD Anderson under the MDA Agreement due to the existence of a number of potential counterclaims against MD Anderson. Nevertheless, because the Company believed that the estimated costs and technical risks of developing the technology licensed under the MDA Agreement outweighed the benefit the Company could reasonably realize if it were able to bring any of the licensed technology to market, the Company determined not to cure any of the alleged breaches and allowed the MDA Agreement to automatically terminate by its terms.

5

CAPITALIZATION

Since March 31, 2005, the Company has issued 915,349 shares of Common Stock upon the cash exercise of warrants and 67,750 shares of Common Stock upon the cashless exercise of warrants to purchase 125,635 shares of Common Stock. Each of these warrants was outstanding as of March 31, 2005. As of the date hereof, 55,122,921 shares of Common Stock were issued and outstanding and the Company was obligated to issue (i) 9,951,889 shares of Common Stock pursuant to outstanding warrants, and (ii) 2,942,000 shares of Common Stock pursuant to outstanding options to employees, directors and consultants.

APPENDIX D

ADVENTRX PHARMACEUTICALS, INC.

SELLING STOCKHOLDER QUESTIONNAIRE

Pursuant to Section 6.1 of the Securities Purchase Agreement, dated July 21, 2005 (the "Purchase Agreement"), among ADVENTRX Pharmaceuticals, Inc., a Delaware corporation (the "Company"), you and the other Purchasers named therein, the Company is required to use reasonable best efforts to prepare and file with the Securities and Exchange Commission (the "SEC") a registration statement on Form S-3 (the "Registration Statement") covering the resale of the shares of Common Stock, par value \$0.001 per share, of the Company ("Common Stock") purchased by you and the other Purchasers, and issuable upon exercise of the warrants purchased by you and the other Purchasers. Pursuant to Section 6.3 of the Purchase Agreement, it is a condition to the Company's obligations to you under Section 6.1 of the Purchase Agreement that you promptly furnish to the Company, upon request, such information regarding you as shall be reasonably necessary to effect the registration of the shares of Common Stock you purchased pursuant to the Purchase Agreement, and that are exercisable upon exercise of the Warrants purchased thereunder. To that end, the Company requests that you complete this Selling Stockholder Questionnaire (this "Questionnaire").

IF "NONE" OR "NOT APPLICABLE" IS THE APPROPRIATE RESPONSE TO ANY PARTICULAR QUESTION IN THIS QUESTIONNAIRE, PLEASE SO INDICATE RATHER THAN LEAVING THE QUESTION BLANK. If the space provided in this Questionnaire is inadequate, please state your answer on an attached sheet. All questions should be answered as of the date you sign this Questionnaire, unless otherwise specified.

, ,				
STOCKHOLDER NAME AND CONTACT INFORMATION				
Please provide your name and other contact information:				
STOCKHOLDER NAME:				
CONTACT NAME:				
ADDRESS:				
PHONE:				
FACSIMILE:				
EMAIL:				
RELATIONSHIP WITH THE COMPANY				
Within the past three years, have you held any position or office or had any other relationship (other than in connection with the Purchase Agreement) with the Company or any of its predecessors or affiliates?				
If "yes", please describe:				

2.

SECURITY OWNERSHIP

3.	(a) List below the number of shares of Common Stock you beneficially own (see Exhibit A for further information regarding beneficial ownership voting power and investment power).
NUMB	BER OF SHARES RECORD HOLDER SOLE VOTING POWER? SOLE INVESTMENT POWER?
(b)	List below each derivative security (e.g., stock options, warrants, etc.) you currently own representing the right to receive or acquire shares of Common Stock.
	SOLE OF SECURITY SOLE VOTING INVESTMENT BER OF SHARES ISSUE DATE EXERCISE PRICE POWER? POWER?
	PLAN OF DISTRIBUTION
4.	Attached as Exhibit B hereto is a draft of the "Plan of Distribution" section of the Registration Statement. Do you propose to offer or sell any shares of Common Stock to be registered on the Registration Statement ("Registered Shares") by means other than those described in Exhibit B?
	Yes [] No []
	If "yes", please describe the manner in which you propose to offer or sell such Registered Shares:

	anding, entered into or proposed to be entered into with any br
or deale	er, including any discounts or commissions to be paid to dealers
Are any	of the Registered Shares to be offered otherwise than for cash?
	Yes [] No []
If yes,	briefly describe:
	finders to be involved in the offering or sale of any of the ed Shares?
	Yes [] No []
If ves.	briefly describe:
	,

5. Do you currently have specific plans to offer any Registered Shares through

CONFIDENTIAL

BROKER-DEALER STATUS OR AFFILIATION

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Yes [] No []

(b) If you answered "yes" to question 8(a), are you registered?

Yes [] No []

(c) If you answered "yes" to question 8(b), please list you NASD registration number below?

9. (a) Are you an affiliate of a broker or a dealer?

Yes [] No []

(b) If you answered "yes" to question 9(a), did you acquire the Registered Shares in the ordinary course of business?

Yes [] No []

* * * * * * * * * *

- (1) A "broker" is any person engaged in the business of effecting transactions in securities for the account of others.
- (2) A "dealer" is any person engaged in the business of buying and selling securities for such person's own account through a broker or otherwise. The term "dealer" does not include a person that buys or sells securities for such person's own account, either individually or in a fiduciary capacity, but not as part of a regular business.

CERTIFICATION

I understand that the information in this Questionnaire is for use in connection with the filing of the Registration Statement with the SEC, and that the answers to the questions submitted will be relied on by the Company and its officers and directors in preparing and filing the Registration Statement. The information contained in this Questionnaire is true, complete and correct.

I WILL NOTIFY THE COMPANY PROMPTLY OF ANY CHANGES IN THE FOREGOING INFORMATION (PARTICULARLY WITH RESPECT TO OWNERSHIP OF THE COMPANY'S SECURITIES) THAT MAY OCCUR PRIOR TO THE ACTUAL DATE OF THE FILING WITH THE SEC.

Dated:	, 2005
Stockholder:	
	(please print)
	(signature)
Name:	
	(please print)
Title:	
	(please print)

Please return the completed and executed Questionnaire to:

BINGHAM MCCUTCHEN LLP THREE EMBARCADERO CENTER SAN FRANCISCO, CA 94111-4067 ATTENTION: FRANCIS W. SARENA, ESQ. FRANCIS.SARENA@BINGHAM.COM FAX NO. (415) 393-2286

EXHIBIT A

BENEFICIAL OWNERSHIP

Beneficial, or beneficially, as applied to the ownership of securities, has been defined by the Securities and Exchange Commission to mean the following:

A beneficial owner of a security includes any person (as defined below) who, directly or indirectly, through any contract, arrangement, understanding, relationship, or otherwise has or shares:

- (i) Voting power, which includes the power to vote, or to direct the voting of, such security, or
- (ii) Investment power, which includes the power to dispose, or to direct the disposition, of such security.

Note that more than one person may have a beneficial interest in the same securities; one may have voting power and the other may have investment power.

Even if a person, directly or indirectly, creates or uses a trust, proxy, power of attorney, pooling arrangement or any other contract, arrangement or device with the purpose or effect of divesting such person of beneficial ownership of a security or preventing the vesting of such beneficial ownership to avoid the reporting requirements of section 13(d) of the Securities Exchange Act, he will still be deemed to be the beneficial owner of such security.

A person is deemed to be the beneficial owner of a security if that person has the right to acquire beneficial ownership of such security at any time within 60 days, including but not limited to any right to acquire:

- (a) through the exercise of any option, warrant (including the warrants you purchased pursuant to the Purchase Agreement) or right;
- (b) through the conversion of a security;
- (c) pursuant to the power to revoke a trust, discretionary account, or similar arrangement; or
- (d) pursuant to the automatic termination of a trust, discretionary account or similar arrangement.

A member of a national securities exchange is not deemed to be a beneficial owner of securities held directly or indirectly by it on behalf of another person solely because such member is the record holder of such securities and, pursuant to the rules of such exchange, may direct the vote of such securities, without instruction, on other than contested matters or matters that may affect substantially the rights or privileges of the holders of the securities to be voted, but is otherwise precluded by the rules of such exchange from voting without instruction.

A person who in the ordinary course of business is a pledgee of securities pursuant to a bona fide pledge agreement will not be deemed to be the beneficial owner of such pledged securities merely because there has been a default under such an agreement, except during such time as the event of default shall remain uncured for more than 30 days or at any time before a default is cured if the power acquired by the pledgee pursuant to the default enables him to change or influence control of the issuer.

A person may also be regarded as the beneficial owner of securities held in the name of his spouse, his minor children or other relatives of his or her spouse sharing his home, or held in a trust of which he is a beneficiary or trustee, if the relationships are such that he has voting power or investment power with respect to such securities.

IF YOU HAVE ANY REASON TO BELIEVE THAT ANY INTEREST YOU HAVE, HOWEVER REMOTE, MIGHT BE DESCRIBED AS A BENEFICIAL INTEREST, PLEASE DESCRIBE SUCH INTEREST.

EXHIBIT B

PLAN OF DISTRIBUTION

We are registering the shares of common stock covered by this prospectus on behalf of the selling security holders listed in this prospectus. Sales of shares may be made by selling security holders, including their respective donees or other successors-in-interest directly to purchasers or to or through underwriters, broker-dealers or through agents. Sales may be made from time to time on the American Stock Exchange, any other exchange or market upon which our shares may trade in the future, in the over-the-counter market or otherwise, at market prices prevailing at the time of sale, at prices related to market prices, or at negotiated or fixed prices. The shares may be sold by one or more of, or a combination of, the following:

- a block trade in which the broker-dealer so engaged will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction (including crosses in which the same broker acts as agent for both sides of the transaction);
- purchases by a broker-dealer as principal and resale by such broker-dealer, including resales for its account, pursuant to this prospectus;
- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchases;
- through options, swaps or derivatives;
- - in privately negotiated transactions;
- in making short sales or in transactions to cover short sales entered into after the date of this prospectus;
- put or call option transactions relating to the shares; or
- - any other method permitted by applicable law.

The selling security holders may effect these transactions by selling shares directly to purchasers or to or through broker-dealers, which may act as agents or principals. These broker-dealers may receive compensation in the form of discounts, concessions or commissions from the selling security holders or the purchasers of shares for whom such broker-dealers may act as agents or to whom they sell as principals, or both (which compensation as to a particular broker-dealer might be in excess of customary commissions). Each of the selling security holders has advised us that they have not entered into any agreements, understandings or arrangements with any underwriters or broker-dealers regarding the sale of their securities.

Each selling security holder will act independently of us in making decisions regarding the timing, manner and size of each sale of shares of common stock covered by this registration statement.

Each of the selling security holders may enter into hedging transactions with broker-dealers or other financial institutions. In connection with those transactions, the broker-dealers or other financial institutions may engage in short sales of the shares or of securities convertible into or exchangeable for the shares in the course of hedging positions they assume with the selling security

holders. Each of the selling security holders may also enter into options or other transactions with broker-dealers or other financial institutions which require the delivery of shares offered by this prospectus to those broker-dealers or other financial institutions. The broker-dealer or other financial institution may then resell the shares pursuant to this prospectus (as amended or supplemented, if required by applicable law, to reflect those transactions).

Each of the selling security holders and any broker-dealers that act in connection with the sale of shares may be deemed to be "underwriters" within the meaning of Section 2(11) of the Securities Act of 1933, as amended (the "Securities Act"), and any commissions received by broker-dealers or any profit on the resale of the shares sold by them while acting as principals may be deemed to be underwriting discounts or commissions under the Securities Act. Each of the selling security holders may agree to indemnify any agent, dealer or broker-dealer that participates in transactions involving sales of the shares against liabilities, including liabilities arising under the Securities Act. We have agreed to indemnify each of the selling security holders and each selling security holder has agreed, severally and not jointly, to indemnify us against some liabilities in connection with the offering of the shares, including liabilities arising under the Securities Act.

Each selling security holder and any other persons participating in a distribution of the securities covered by this registration statement will be subject to the prospectus delivery requirements of the Securities Act and will be subject to applicable provisions of the Securities Exchange Act of 1934, as amended (the "Exchange Act") and the rules and regulations thereunder, including, without limitation, Regulation M, which may restrict certain activities of, and limit the timing of purchases and sales of securities by, selling security holders and other persons participating in a distribution of securities. Furthermore, under Regulation M, persons engaged in a distribution of securities are prohibited from simultaneously engaging in market making and certain other activities with respect to such securities for a specified period of time prior to the commencement of such distribution, subject to specified exceptions or exemptions. All of the foregoing may affect the marketability of the securities offered hereby.

Each of the selling security holders also may resell all or a portion of the shares in open market transactions in reliance upon Rule 144 under the Securities Act rather than under this prospectus, provided they meet the criteria and conform to the requirements of Rule 144.

Upon being notified by a selling security holder that a material arrangement has been entered into with a broker-dealer for the sale of shares through a block trade, special offering, exchange distribution or secondary distribution or a purchase by a broker or dealer, we will file a supplement to this prospectus, if required pursuant to Rule 424(b) under the Securities Act, disclosing:

- the name of each such selling security holder and of the participating broker-dealer(s);
- - the number of shares involved;
- the initial price at which the shares were sold;
- the commissions paid or discounts or concessions allowed to the broker-dealer(s), where applicable;
- - that such broker-dealer(s) did not conduct any investigation to verify the information set out or incorporated by reference in this prospectus; and
- - other facts material to the transactions.

In addition, if required under applicable law or the rules or regulations of the Commission, we will file a supplement to this prospectus when a selling security holder notifies us that a donee intends to sell more than 500 shares of common stock.

We are paying all expenses and fees customarily paid by the issuer in connection with the registration of the shares. Each of the selling security holders will bear all brokerage or underwriting discounts or commissions paid to broker-dealers and any transfer agent fees in connection with the sale of the

APPENDIX E

CERTIFICATE REGARDING RESALE OF COMMON STOCK

Prospectus (File No. 333) of A "Company"), dated, 2005 (the up to shares of Common Sto by the selling securityholders named the and warrants to and for the benefit of t and, the Company's tra of certain of the Covered Shares held by that the undersigned has sold the Resold in a manner described under the caption and that such sale complied with all app without limitation, the prospectus deliv of 1933, as amended, and Regulation M pr Act of 1934, as amended.	e "Prospectus"), covering the resale of cck of the Company (the "Covered Shares" erein, hereby certifies and represents the Company, the Company's legal counsel ansfer agent, in connection with the sale the undersigned (the "Resold Shares") I Shares pursuant to the Prospectus and "Plan of Distribution" in the Prospectus clicable securities laws, including, very requirements of the Securities Act
Stock Certificate #:	
Number of Resold Shares:	
Date of Sale:	
IN WITNESS WHEREOF, the undersigned Resale of Common Stock on	has signed this Certificate Regarding, 200
	Signature:
	Name:
	(print name of person signing) Title:
	(print title if signing on behal of an entity)

FORM OF WARRANT

APPENDIX F-2

FORM OF WARRANT

(North Sound Legacy Institutional Fund LLC and North Sound Legacy International Ltd.)

APPENDIX G

FORM OF RIGHTS AGREEMENT

RIGHTS AGREEMENT

This Rights Agreement (this "Agreement"), effective July 27, 2005, is made between Icahn Partners LP, Icahn Partners Master Fund LP, High River Limited Partnership (collectively, the "Icahn Purchasers"), Viking Global Equities LP and VGE III Portfolio Ltd. (collectively, "Viking," and collectively with the Icahn Purchasers, the "Purchasers") and ADVENTRX Pharmaceuticals, Inc., a Delaware corporation (the "Company"). Capitalized terms used but not otherwise defined in this Agreement have the meaning ascribed to them in the Securities Purchase Agreement, dated July 21, 2005 (the "Purchase Agreement"), by and among the Company, the Purchasers and the other entities listed on Appendix A thereto.

BACKGROUND

- A. Pursuant to the Purchase Agreement, at the Closing the Purchasers would purchase and the Company would issue to the Purchasers an aggregate approximately \$14,000,000 of Shares and, for no additional consideration, Warrants to purchase a number of shares of Common Stock in the aggregate equal to 100% of the number of Shares purchased at a price of \$2.26 (the "Purchaser Warrants").
- B. The Company is entering into this Agreement to induce the Purchasers to enter into and perform the Purchase Agreement.

AGREEMENT

In consideration of the mutual covenants and agreements set forth herein and for good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the parties agree as follows:

1. CONSENT RIGHT.

1.1 ADDITIONAL SHARES. The Company hereby agrees that it shall not at any time after the date of the Closing and prior to July 27, 2006, without the prior written consent of Purchasers which at the time own a majority of the Purchased Shares (as that term is defined below), issue any shares of its Common Stock other than Consent Excluded Shares in exchange for consideration, determined in accordance with the following sentences, in an amount per share less than the Exercise Price (as such term is defined in the Purchaser Warrants.) (For purposes of this Agreement, the term "issue" includes any issue or sale of Common Stock by the Company, whether of newly-issued shares or treasury shares, and the term "Purchased Shares" means on any date the sum of the number of Shares, plus the number of Warrant Shares for which the Purchaser Warrants have been exercised, that are owned in the aggregate by the Purchasers.) In the case of the issuance of shares of Common Stock for cash, the consideration received by the Company shall be deemed to be the amount of cash paid therefor after deducting any discounts, commissions or other expenses of underwriters, sales agents or brokers allowed, paid or incurred by the Company for any underwriting or otherwise in connection with the issuance thereof. In the case of the issuance of shares of Common Stock for a consideration in whole or in part other than cash, the consideration other than cash shall be valued at the fair value

- 1.2 COMMON STOCK EQUIVALENTS. The Company hereby agrees that it shall not at any time after the date of the Closing and prior to July 27, 2006, without the prior written consent of the Purchasers which at the time own a majority of the Purchased Shares, issue or sell any warrants, options or other rights to subscribe for or purchase any additional shares of Common Stock or any securities convertible into or exchangeable for shares of Common Stock (other than Consent Excluded 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.
- 1.3 CONSENT EXCLUDED SHARES. For purposes of this Agreement the term "Consent Excluded Shares" means: (i) up to 1,000,000 shares of Common Stock or Common Stock Equivalents issued or issuable after the date of Closing to officers, employees, directors or consultants of the Company, as approved by the Board under incentive plans and in addition no officer, employee, director or consultant can receive Common Stock or Common Stock Equivalents for more than an aggregate of 100,000 shares of Common Stock (ii) shares of Common Stock issuable upon exercise of warrants, options or other rights to acquire securities of the Company, in each case, outstanding on the date of the Closing; (iii) the Shares; (iv) the Warrants and the Warrant Shares; (v) up to 200,000 shares of Common Stock issued or issuable to existing licensors of technology of the Company to pay expenses, royalties or milestone payments for which the Company is or becomes obligated under any licensing or related agreement; (vi) up to 150,000 shares of Common Stock or Common Stock Equivalents issued or issuable after the Closing Date 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; (vii) shares of Common Stock issuable or issued pursuant to stock splits and stock dividends; and (viii) shares of Common Stock issued or issuable by way of dividend or other distribution on outstanding shares.
- 1.4 TERMINATION OF CONSENT RIGHTS. The consent rights of the Purchasers contained in this Section 1 shall automatically terminate and be of no further force and effect upon the earlier of (i) July 27, 2006; (ii) the date that the Purchasers' aggregate holdings of Purchased Shares (either of record or beneficially) is as a result of sales or other dispositions thereof equal to less than 50% of the aggregate number of Shares purchased by the Purchasers pursuant to the Purchase Agreement; and (iii) at the time of a Change of Control. For purposes of this Section 1.4 and without limitation, the holdings of the Purchasers will be determined on a net basis after giving effect to any sale or other disposition, contract or option to sell any shares of Common Stock, and any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of shares of Common Stock, whether such arrangement provides for settlement by delivery of securities, the payment of cash or otherwise. For purposes of this Agreement, the term "Change of Control" means (A) any acquisition of the Company (whether or not the Company is the surviving corporation) by means of merger, consolidation or other form of corporate reorganization (other than a reincorporation transaction or change of domicile) following which the holders of the outstanding voting securities of the Company immediately prior to such merger, consolidation or other reorganization do not hold (in their capacity as such) equity securities representing a majority of the voting power of the surviving or resulting entity immediately following such merger, consolidation or other reorganization or (B) a sale of all or substantially all of the assets of the Company other than to a buyer in which

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the holders of the outstanding voting securities of the Company immediately prior to such sale hold (in their capacity as such) equity securities representing a majority of the voting power immediately following such sale.

1.5 ADDITIONAL RESTRICTIONS. During the period specified in Section 1.4, the Company agrees that (i) except for the Consent Excluded Shares, it will not issue any shares of Common Stock or Common Stock Equivalents to any executive officer of the Company, and (ii) no Common Stock or Common Stock Equivalents shall be issued to Mr. Evan Levine.

2. PARTICIPATION RIGHTS.

- 2.1 RIGHT AND NOTICE. Subject to the terms and conditions specified in this Section 2, the Company grants to the Purchasers a right to participate in future sales by the Company of any Additional Securities (as hereinafter defined), and the Company shall not issue any Additional Securities unless the Company complies with the provisions of this Section 2. The term "Additional Securities" means any shares of, or securities convertible into or exercisable for any shares of, any class of its capital stock or any other securities. Each time the Company proposes to make an offer of any Additional Securities, the Company shall deliver a written notice ("Notice") to the Purchasers stating (i) its bona fide intention to offer such Additional Securities, (ii) the anticipated number of such Additional Securities to be offered, and (iii) the anticipated price and terms, if any, upon which it proposes to offer such Additional Securities. The Company will not issue any Additional Securities for non-cash consideration unless prior thereto the Company and the Purchasers which at the time own a majority of the Purchased Shares agree on the value thereof and the Purchasers can exercise their rights under this Section 2 by the payment of cash. The participation rights of the Purchasers under this Section 2 shall, in the absence of agreement among themselves, be on a pro rata basis with respect to the number of Purchased Shares at the time owned by each Purchaser; and provided, however, that if any Purchaser does not participate in its full pro rata share of Additional Securities, then the other Purchasers can participate in the sale of such remaining Additional Securities on the same pro rata basis until such Purchasers participate in the entire amount of such Additional Securities or such lesser amount in which they decide to participate.
- 2.2 PUBLIC OFFERING. In any issuance of Additional Securities that is being registered for sale to the public, the Purchasers shall have the right to purchase, in the aggregate, up to (i) 50% of the Additional Securities decided by the Company to be sold in such public offering if the offering price of the stock is equal to or below \$8.00 per share, and (ii) 20% of the Additional Securities decided by the Company to be sold in such public offering if the offering price of the stock is above \$8.00 per share, in each case on the same terms and conditions (including the same price, but after subtracting any underwriting discount or commission) as the other initial public purchasers in such offering. The Company shall have the right to disclose in any prospectus the name of the Purchasers participating therein and the amount Additional Securities to be purchased by them. For purposes of calculating the amount of Additional Securities the Purchasers may purchase under this Section 2, it will be assumed that the underwriters have fully exercised (or will fully exercise) any over-allotment option.
- 2.3 PRIVATE OFFERING. In any issuance of Additional Securities that is not being registered for sale to the public (which shall include a PIPE financing), the Purchasers shall have

the right to purchase, in the aggregate, up to 50% of the amount of Additional Securities finally agreed by the Company to be sold in such private offering to all parties (including the Purchasers) on the same terms and conditions (including the same price and registration rights) as the other purchasers in such offering. In addition to the other provisions of this Section 2.3, the Purchasers desiring to exercise their rights under this Section 2.3 must make the same representations and warranties as the other purchasers under this Section 2.3 to establish an exemption from registration under the Securities

- 2.4 NOTICE AND INTENTION TO PURCHASE. The Company shall deliver the Notice to the Purchasers at least 15 days but not later than 30 days prior to the sale of the Additional Securities, and each Purchaser shall give the Company notice that it may participate in purchasing, up to that portion of such Additional Securities to which it is entitled hereunder by giving notice to the Company of its intention to do the same within 10 days after its receipt of the Notice. Thereafter, in connection with any offering under Section 2.2 or Section 2.3 for which a notice to participate is given under Section 2.4, the Purchasers must agree and affirm to the Company on the day of pricing of the Additional Securities (but immediately following the actual pricing of the Additional Securities) that it or they are committed to purchase the amount of the Additional Securities selected by them, at the final price and terms for the offering, in which event it or they will have the right and obligation to participate in such offering.
- 2.5 NON-ELECTION. If the Purchasers elect not to purchase any Additional Securities or do not give notice of participation in accordance with this Section 2, the Company may, during the 45-day period following the expiration of the period provided in Section 2.4, offer the Additional Securities to any person or persons at a price not less than, of a quantity not more than and upon terms no more favorable to the offeree than those specified in the Notice. Thereafter, the right provided hereunder shall be deemed to be revived and Additional Securities shall not be offered unless first offered to the Purchasers in accordance herewith.
- 2.6 PARTICIPATION EXCLUDED SHARES. The rights granted in this Section 2 shall not be applicable to the issuance or sale of any Participation Excluded Shares. For purposes of this Agreement the term "Participation Excluded Shares" means: (i) the Consent Excluded Shares covered by sections (ii), (iii), (iv), (vii) and (viii) of Section 1.3 hereof; (ii) up to 4,500,000 shares in the aggrégate of Common Stock or Common Stock Equivalents issued or issuable after the date of Closing to officers, employees, directors or consultants of the Company, as approved by the Board under incentive plans; (iii) up to 1,500,000 shares in the aggregate of Common Stock issued or issuable to existing licensors of technology of the Company to pay expenses, royalties or milestone payments for which the Company is or becomes obligated under any licensing or related agreement; and (iv) up to 1,000,000 shares in the aggregate of Common Stock or Common Stock Equivalents issued or issuable after the Closing Date 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. Furthermore, with respect to the Common Stock and Common Stock Equivalents covered by sections (ii), (iii) and (iv) of the preceding sentence, no more than 20% of the amount of such Common Stock or Common Stock Equivalents may be issued in any twelve-month period commencing on the date hereof.

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- 2.7 TERMINATION OF PARTICIPATION RIGHTS. The participation rights of the Purchasers contained in this Section 2 shall automatically terminate and be of no further force and effect upon the earlier of (i) July 27, 2012; (ii) the date that the Purchasers' aggregate holdings of Purchased Shares (either of record or beneficially) is as a result of sales or other dispositions thereof equal to less than 50% of the aggregate number of Shares purchased by the Purchasers pursuant to the Purchase Agreement; and (iii) at the time of a Change of Control. For purposes of this Section 2.7 and without limitation, the holdings of the Purchasers will be determined on a net basis after giving effect to any sale or other disposition, contract or option to sell any shares of Common Stock, and any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of shares of Common Stock, Whether such arrangement provides for settlement by delivery of securities, the payment of cash or otherwise.
- 3. CHANGE OF CONTROL PROVISIONS. At any time that the Company makes, receives or considers any proposal for a transaction which, if consummated, would constitute a Change of Control and the Board of Directors has decided to approve such transaction and, if required, recommend the stockholders vote to approve such transaction, then the Company agrees that (a) no binding or definitive agreement with respect thereto shall contain any break-up fee provisions or similar types of provisions, except that the Company may agree to reimburse reasonable out-of-pocket due diligence expenses, and (b) it shall not consummate such Change of Control unless the Company shall call a stockholders' meeting or conduct a consent solicitation for approval by the stockholders of the Change of Control, in which meeting or solicitation the approval of the holders of the number of shares required by the Delaware General Corporation Law and/or any stock exchange to approve the Change of Control is obtained or, if no such approval is required, the approval of the holders of a majority of the outstanding shares of stock entitled to vote in attendance at a meeting at which a quorum is present is obtained.
- 4. BOARD OF DIRECTORS. Effective promptly after the Closing, the Company shall set the authorized number of Board directors at six and the Company shall appoint a person suggested by the Purchasers which at the time own a majority of the Purchased Shares to the vacancy so created; provided that such person, if anyone other than Mr. Carl Icahn, would not subject the Company to making any disclosures under Item 401(f) of SEC Regulation S-K in any proxy statement (the "Criteria"). Prior to any appointment of such person, he or she will provide all of the information required by the Form 8-K which will need to be filed with respect thereto. Thereafter, as long as the Purchasers have any participation rights under Section 2 hereof, the Company shall cause the Board of Directors to nominate a Board nominee selected by the Purchasers in the manner set forth above as long as such person, if anyone other than Mr. Carl Icahn, satisfies the Criteria.

5. RIGHTS PLAN AND CLASSIFIED BOARD.

5.1 RIGHTS PLAN. The Company agrees that as long as the Purchasers have any participation rights under Section 2 hereof, it shall not adopt any rights plan. For purposes of this Agreement, a "rights plan" shall include any plan, agreement or other device adopted by the Board of Directors designed to prevent a hostile takeover by increasing the takeover cost either through the issuance of new rights, common or preferred shares or any other security or device that are issued to shareholders of the Company other than all shareholders of the Company that carry severe redemption provisions, favorable purchase provisions or otherwise.

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- 5.2 CLASSIFIED BOARD. The Company hereby agrees that as long as the Purchasers have any participation rights under Section 2 hereof, it shall not adopt a classified Board, nor change the authorized number of Board directors as set forth in Section 4.
- 5.3 CHARTER AMENDMENTS. In furtherance of Sections 5.1 and 5.2, the Company agrees that it shall hold a meeting of its stockholders, or conduct a written consent solicitation of stockholders, to propose amendments to its charter documents to expressly prohibit the adoption of a rights plan and the adoption of a classified board (the "Proposals"). The Company agrees that the Board of Directors shall recommend the Proposals and the Company shall use its best efforts to procure stockholder approval of the Proposals. The Company shall hold said stockholders' meeting, or complete the written consent solicitation, no later than November 15, 2005, and shall set the record date for such meeting or solicitation after the date of the Closing. However, if for any reason the Board of Directors of the Company breaches this Agreement by adopting a rights plan or implementing a classified Board of Directors, then within 30 days thereafter any or all of the Purchasers can elect to rescind its purchase of any of (i) the Shares purchased by it and Warrant Shares exercised by it which in each case have not been sold or otherwise disposed of, and (ii) the Warrants. The rescission price for any such Shares and Warrant Shares shall equal the greater of \$2.50 or the average of the closing prices of the Common Stock for the 10 business days before any such notice is given (the "Average Price"). The rescission price for any unexercised Warrant shall be the number of shares for which the Warrant has not been exercised multiplied by the difference between the Average Price minus the \$1.85. The Company shall also reimburse the Purchasers for its costs in the negotiation of the Purchase Agreement, the Purchaser Warrants and this Agreement.
- 5.4 VOTING. At the Closing, the Company shall present the Purchasers with the written binding agreement of the beneficial owners of not less than an aggregate of 9,000,000 shares of Common Stock to vote such shares owned by them at the time of the meeting or solicitation for the adoption of such amendments. The Purchasers agree to vote all shares of Common Stock owned by them at the time of such meeting or solicitation in favor of such amendments.

6. MISCELLANEOUS.

6.1 NOTICES.

(A) All notices, requests, consents and other communications hereunder shall be in writing, shall be mailed by first-class registered or certified airmail, confirmed facsimile or nationally recognized overnight express courier postage prepaid, and shall be as addressed as follows:

if to the Company, to:

ADVENTRX Pharmaceuticals, Inc. 6725 Mesa Ridge Road, Suite 100 San Diego, California 92121 Attention: Chief Executive Officer Telephone No.: (858) 552-0866 Telecopy No.: (858) 552-0876

with a copy to (not to constitute notice):

Bingham McCutchen LLP Three Embarcadero Center San Francisco, CA 94111 Attention: Hank Evans Francis Sarena

Telephone No.: (415) 393-2000 Telecopy No.: (415) 393-2286

if to any Icahn Purchaser, to such Purchaser at:

767 Fifth Avenue 47th Floor New York, NY 10153

Arth Floor New York, NY 10153 Attention: Marc Weitzen, Esq. Telephone No.: (212) 702-4300 Telecopy No.: (212) 750-5815

if to Viking:

55 Railroad Avenue Greenwich, CT 06830 Attention: Alex Denner

Telephone No.: (203) 863-5000 Telecopy No.: (203) 625-8705

or at such other address or addresses as may have been previously furnished to the other party in writing in accordance with this Section 6.1.

- (B) Such notices or other communications shall be deemed delivered upon receipt, in the case of overnight delivery, personal delivery, facsimile transmission (as evidenced by the confirmation thereof), or mail.
- 6.2 AMENDMENTS. Any term of this Agreement may be amended and the observance of any term of this Agreement may be waived (either generally or in a particular instance and either retroactively or prospectively) only with the written consent of the Company and Icahn.

- 6.3 HEADINGS. The headings of the various sections of this Agreement are for convenience of reference only and shall not be deemed to be part of this Agreement.
- 6.4 SEVERABILITY. In the event that any provision in this Agreement is held to be invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained herein shall not in any way be affected or impaired thereby.
- 6.5 INJUNCTIVE RELIEF. Notwithstanding any other provisions of this Agreement, a breach of any of the provisions of this Agreement by the Company will cause the Purchasers irreparable damage for which recovery of money damages shall be inadequate, and the Purchasers shall therefore be entitled to obtain injunctive relief (without any requirement to post any bond) and specific performance to protect their rights and enforce the terms and provisions under this Agreement in addition to any and all remedies available to them at law or in equity.
- 6.6 GOVERNING LAW AND FORUM. This Agreement shall be governed by and construed in accordance with the laws of the State of New York applicable to agreements made and to be fully performed therein. The parties hereto agree to submit to the exclusive jurisdiction of the federal and state courts of the State of New York with respect to the interpretation of this Agreement or for the purposes of any action arising out of or related to this Agreement.
- 6.7 COUNTERPARTS. This Agreement may be executed in counterparts, each of which shall constitute an original, and all of which together shall constitute one and the same instrument. In the event that any signature is delivered via facsimile transmission, such signature shall create a valid and binding obligation of the party executing (or on whose behalf such signature is executed) the same with the same force and effect as if such facsimile signature page were an original hereof.
- 6.8 ENTIRE AGREEMENT. This Agreement contains the entire understanding of the parties with respect to the matters covered herein, supersedes all prior agreements and understandings with respect to such matters and executed by and between the Company and Icahn.
- 6.9 EXPENSES. Each party shall pay all costs and expenses incurred by it in connection with the execution and delivery of this Agreement, and all the transactions contemplated thereby, including fees of legal counsel.

[Remainder of page intentionally blank; signature page follows.]

ADVENTRX PHARMACEUTICALS, INC.

Ву:
Name:
Title:
ICAHN PARTNERS LP
By:
Name: Keith Meister Title: Authorized Signatory
ICAHN PARTNERS MASTER FUND LP
Ву:
Name: Keith Meister Title: Authorized Signatory
HIGH RIVER LIMITED PARTNERSHIP
By: Hopper Investments, LLC, its general partner
By: Barberry Corp., its sole member
By:
Name: Edward E. Mattner Title: Authorized Signatory
VIKING GLOBAL EQUITIES LP
Ву:
Name:
Title:
VGE III PORTFOLIO LTD.
Ву:
Name:
Title:

SIGNATURE PAGE TO RIGHTS AGREEMENT

Dated: July ___, 2005

NEITHER THIS SECURITY NOR THE SECURITIES INTO WHICH THIS SECURITY IS EXERCISABLE HAVE BEEN REGISTERED WITH THE SECURITIES AND EXCHANGE COMMISSION OR THE SECURITIES COMMISSION OF ANY STATE IN RELIANCE UPON AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), AND, ACCORDINGLY, MAY NOT BE OFFERED OR SOLD EXCEPT PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OR PURSUANT TO AN AVAILABLE EXEMPTION FROM THE REGISTRATION REQUIREMENTS THEREUNDER AND IN COMPLIANCE WITH APPLICABLE STATE SECURITIES OR BLUE SKY LAWS AS EVIDENCED BY A LEGAL OPINION OF COUNSEL TO THE TRANSFEROR TO SUCH EFFECT, THE SUBSTANCE OF WHICH SHALL BE REASONABLY ACCEPTABLE TO THE COMPANY.

ADVENTRX PHARMACEUTICALS, INC.

COMMON STOCK WARRANT

ADVENTRX Pharmaceuticals, Inc., a Delaware corporation (the "Company"),
hereby certifies that, for value received, or its
registered assigns ("Holder"), is entitled, subject to the terms set forth
below, to purchase from the Company up to a total ()(1) shares of
common stock, \$0.001 par value per share (the "Common Stock"), of the Company
(each such share, a "Warrant Share" and all such shares, the "Warrant Shares")
at an exercise price per share equal to Two Dollars Twenty-Six Cents (\$2.26) (a
such exercise price may be adjusted from time to time as provided in Section 9,
the "Exercise Price"), at any time and from time to time from and after January
, 2006 and through and including the Expiration Date (as such term is defined
in Section 14)

This Warrant is being issued pursuant to the terms of that certain Securities Purchase Agreement, dated July 21, 2005, by and among the Company, the Holder and the other entities listed on Appendix A thereto (the "Purchase Agreement"). All capitalized terms not otherwise defined herein shall have the meaning given to them in the Purchase Agreement. This Warrant is subject to the following terms and conditions:

- 1. Registration of Warrant. The Company shall register this Warrant, upon records to be maintained by the Company for that purpose (the "Warrant Register"), in the name of the record Holder from time to time. The Company may deem and treat the registered Holder of this Warrant as the absolute owner hereof for the purpose of any exercise hereof or any distribution to the Holder, and for all other purposes, and the Company shall not be affected by notice to the contrary.
- 2. Registration of Transfers and Exchanges.

Warrant No. __

(a) The Company shall register the transfer, subject to compliance with applicable federal and state securities laws, of any portion of this Warrant in the Warrant Register, upon surrender of this

⁽¹⁾ The number of Warrant Shares equals 100% of the number of shares of Common Stock purchased by the Holder pursuant to the Purchase Agreement.

Warrant, with the Form of Assignment attached hereto duly completed and signed, to the Warrant Agent (as defined in Section 13) or to the Company at its address for notice set forth in Section 12. Upon any such registration or transfer, a new warrant to purchase Common Stock, in substantially the form of this Warrant (any such new warrant, a "New Warrant"), evidencing the portion of this Warrant so transferred shall be issued to the transferee and a New Warrant evidencing the remaining portion of this Warrant not so transferred, if any, shall be issued to the transferring Holder. The acceptance of the New Warrant by the transferee thereof shall be deemed the acceptance of such transferee of all of the rights and obligations of a holder of a Warrant.

- (b) This Warrant is exchangeable, upon the surrender hereof by the Holder to the office of the Company at its address for notice set forth in Section 12 for one or more New Warrants, evidencing in the aggregate the right to purchase the number of Warrant Shares which may then be purchased hereunder.
- 3. Duration and Exercise of Warrants.
- (a) This Warrant shall be exercisable by the registered Holder on any business day before 5:00 P.M. (Pacific Time) at any time and from time to time on or after January __, 2006 to and including the Expiration Date. At 5:00 P.M. (Pacific Time) on the Expiration Date, the portion of this Warrant not exercised prior thereto shall expire and become void and of no value. Prior to the Expiration Date, the Company may not call or otherwise redeem this Warrant.
- (b) Subject to Section 10, upon delivery of an executed Form of Election to Purchase, together with the grid attached hereto as Annex A duly completed and signed, to the Company at its address for notice set forth in Section 12 and upon payment of the Exercise Price multiplied by the number of Warrant Shares that the Holder intends to purchase hereunder, in the manner provided hereunder, all as specified by the Holder in the Form of Election to Purchase, the Company shall promptly (but in no event later than 5 business days after the Date of Exercise (as defined herein)) issue or cause to be issued and cause to be delivered to or upon the written order of the Holder and in such name or names as the Holder may designate, a certificate for the Warrant Shares issuable upon such exercise, which may bear a restrictive legend as set forth in Section 7. To effect an exercise hereunder, the Holder shall not be required to physically surrender this Warrant to the Company unless all the Warrant Shares have been exercised. Exercises hereunder shall have the effect of lowering the number of Warrant Shares in an amount equal to the applicable exercise, which shall be evidenced by entries set forth on the attached Annex A. The Holder and the Company shall maintain records showing the number of Warrant Shares exercised and the date of such exercises. The Holder and any assignee, by acceptance of this Warrant, acknowledge and agree that, by reason of the provisions of this paragraph, following exercise of a portion of this Warrant, the number of shares issuable upon exercise of this Warrant may be less than the amount stated on the face hereof.
- (c) A "Date of Exercise" means the date on which the Company shall have received the Form of Election to Purchase completed and duly signed.
- (d) This Warrant shall be exercisable, either in its entirety or, from time to time, for a portion of the number of Warrant Shares.
- 4. Payment of Taxes. The Company will pay all documentary stamp taxes attributable to the issuance of Warrant Shares upon the exercise of this Warrant; provided, however, that the Company shall not be required to pay any tax which may be payable in respect of any transfer involved in the registration of any certificates for Warrant Shares or Warrants in a name other than that of the Holder. The Holder

shall be responsible for all other tax liability that may arise as a result of holding or transferring this Warrant or receiving Warrant Shares upon exercise bereof

- 5. Replacement of Warrant. If this Warrant is mutilated, lost, stolen or destroyed, the Company shall issue or cause to be issued in exchange and substitution for and upon cancellation hereof, or in lieu of and substitution for this Warrant, a New Warrant, but only upon receipt of evidence reasonably satisfactory to the Company of such loss, theft or destruction and indemnity.
- 6. Reservation of Warrant Shares. The Company covenants that it will at all times reserve and keep available at all times out of the aggregate of its authorized but unissued Common Stock, solely for the purpose of enabling it to issue Warrant Shares upon exercise of this Warrant as herein provided, the number of Warrant Shares which are then issuable and deliverable upon the exercise of this entire Warrant, free from preemptive rights or any other actual contingent purchase rights of persons other than the Holder (taking into account the adjustments and restrictions of Section 9). The Company covenants that all Warrant Shares that shall be so issuable and deliverable shall, upon issuance and receipt of the payment of the applicable Exercise Price in accordance with the terms hereof, be duly and validly authorized, issued and fully paid and nonassessable.
- 7. Acquisition of Warrant for Personal Account. Holder understands that neither this Warrant nor any of the Warrant Shares have been registered under the Securities Act of 1933, as amended (the "Securities Act"). Holder also understands that this Warrant and the Warrant Shares are being offered and sold pursuant to an exemption from registration contained in the Securities Act based in part upon Holder's representations contained herein and in the Purchase Agreement. Holder represents and warrants as follows:
- (a) Holder is an accredited investor within the meaning of Rule 501 of Regulation D promulgated under the Securities Act, is knowledgeable, sophisticated and experienced in making, and is qualified to make, decisions with respect to investments in securities representing an investment decision like that involved in the purchase of this Warrant and the Warrant Shares.
- (b) Holder is acquiring this Warrant and, if this Warrant is exercised, will acquire the Warrant Shares for its own account for investment only. Holder has no intention of selling or distributing this Warrant or any Warrant Shares or any arrangement or understanding with any other Persons regarding the sale or distribution of this Warrant or any of the Warrant Shares except in accordance with the provisions of Section 6 of the Purchase Agreement. Holder will not, directly or indirectly, offer, sell, pledge, transfer or otherwise dispose of (or solicit any offers to buy, purchase or otherwise acquire or take a pledge of) this Warrant or any of the Warrant Shares except in accordance with the provisions of Section 6 of the Purchase Agreement with respect to the Warrant Shares or pursuant to and in accordance with the Securities Act.
- (c) Holder has received and reviewed the Memorandum and has requested, received, reviewed and considered all other information Holder deems relevant in making an informed decision to purchase this Warrant and the Warrant Shares. Holder has had an opportunity to discuss the Company's business, management and financial affairs with its management and also had an opportunity to ask questions of officers and employees of the Company that were answered to Holder's satisfaction.
- (d) Holder recognizes that an investment in this Warrant and the Warrant Shares involves a high degree of risk, including a risk of total loss of Holder's investment. Holder is able to bear the economic risk of holding this Warrant and the Warrant Shares for an indefinite period, and has knowledge and experience in the financial and business matters such that it is capable of evaluating the risks of the investment in this Warrant and the Warrant Shares.

- (e) Holder has, in connection with Holder's decision to purchase this Warrant and, if this Warrant is exercised, the Warrant Shares, not relied upon any representations or other information (whether oral or written) other than as set forth in the representations and warranties of the Company contained herein or the Memorandum. Holder has, with respect to all matters relating to this Warrant and the offer and sale of the Warrant Shares, relied solely upon the advice of Holder's own counsel and has not relied upon or consulted any counsel to the Placement Agent or counsel to the Company.
- (f) Holder understands and acknowledges that nothing in the Memorandum, this Warrant, any other materials presented to Holder or any communications between Holder and the Placement Agent in connection with the purchase and sale of this Warrant and the Warrant Shares constitutes legal, tax or investment advice. Holder has consulted such legal, tax and investment advisors as it, in its sole discretion, has deemed necessary or appropriate in connection with its purchase of Warrant Shares.
- (g) Holder acknowledges that the Placement Agent has acted solely as placement agent for the Company in connection with the offering of this Warrant and the Warrant Shares by the Company, that the information and data provided to Holder in connection with the transactions contemplated hereby have not been subjected to independent verification by the Placement Agent, and that the Placement Agent makes no representation or warranty with respect to the accuracy or completeness of such information, data or other related disclosure material. Holder further acknowledges that in making its decision to enter into this Warrant and to purchase Warrant Shares that it has relied on its own examination of the Company and the terms of, and consequences, of holding this Warrant and the Warrant Shares. Each Holder further acknowledges that the provisions of this Section 7(g) are also for the benefit of, and may also be enforced by, the Placement Agent.
- (h) Holder understands that this Warrant and the Warrant Shares 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. Holder understands that it may resell the Warrant Shares pursuant to Rule 144 only after the satisfaction of certain requirements, including the requirement that the Warrant Shares be held for at least one year prior to resale.
- (i) Holder acknowledges and agrees that this Warrant and Warrant Shares are subject to certain restrictions as to resale or transfer under the federal and state securities laws. Holder agrees and understands that stop transfer instructions will be given to the transfer agent for the Warrant Shares, and each certificate delivered on transfer of or in substitution for any such certificate, and each certificate representing the Warrant Shares shall have affixed a legend in substantially the following form:

"THE SHARES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR ANY STATE SECURITIES LAWS. EXCEPT AS SPECIFIED IN THIS LEGEND, SUCH SHARES MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED OR HYPOTHECATED, OR OTHERWISE TRANSFERRED IN THE ABSENCE OF A REGISTRATION STATEMENT IN EFFECT WITH RESPECT THERETO UNDER SUCH ACT UNLESS SOLD PURSUANT TO RULE 144 OF SUCH ACT OR UNLESS SUCH SALE, PLEDGE, HYPOTHECATION OR TRANSFER IS OTHERWISE EXEMPT FROM REGISTRATION AND ANY APPLICABLE STATE SECURITIES LAWS. THE COMPANY MAY REQUEST A WRITTEN OPINION OF COUNSEL, REASONABLY SATISFACTORY TO THE COMPANY, TO THE EFFECT

THAT REGISTRATION IS NOT REQUIRED IN CONNECTION WITH SUCH SALE OR OTHER TRANSFER "

- (j) Holder understands that the Company is relying on the statements contained herein to establish an exemption from registration under federal and state securities laws. Holder will promptly notify the Company of any changes in the information set forth in the Registration Statement (as defined in Section 6.1(a)(i) of the Purchase Agreement) regarding Holder.
- (k) Holder: (i) is, to its knowledge and except as disclosed in the Purchase Agreement, not an affiliate (as such term is defined pursuant to Rule 12b-2 promulgated under the Securities Exchange Act of 1934, as amended (the "Exchange Act")) of any other Holder, (ii) is not constituted as a partnership, association, joint venture or any other type of joint entity with any other Holder, and (iii) to its knowledge and except as disclosed in the Purchase Agreement, is not acting as part of a group (as such term is defined under Section 13(d) of the Exchange Act) with any other Holder. If at any time after the date of this Warrant (the "Warrant Date") Holder becomes an affiliate (as defined herein) of any other Holder, Holder will provide prompt written notice to the Company.
- 8. Obligation to Register Securities. The Company is not obligated to register this Warrant or the Warrant Shares for resale under the Securities Act, except as provided in the Purchase Agreement, and the Holder of this Warrant (or any assignee hereof) is entitled to the registration rights in respect of the Warrant Shares as only set forth in the Purchase Agreement.
- 9. Certain Adjustments. The Exercise Price and number of Warrant Shares issuable upon exercise of this Warrant are subject to adjustment from time to time as set forth in this Section 9. Upon each such adjustment of the Exercise Price pursuant to this Section 9, the Holder shall thereafter prior to the Expiration Date be entitled to purchase, at the Exercise Price resulting from such adjustment, the number of Warrant Shares obtained by multiplying (x) the Exercise Price in effect immediately prior to such adjustment by (y) the number of Warrant Shares issuable upon exercise of this Warrant immediately prior to such adjustment and dividing the product thereof by (z) the Exercise Price resulting from such adjustment.
- (a) If the Company, at any time while this Warrant is outstanding, (i) shall pay a stock dividend (except scheduled dividends paid on outstanding preferred stock as of the Warrant Date which contain a stated dividend rate) or otherwise make a distribution or distributions of capital stock to all the holders of Common Stock or on any other class of capital stock payable in shares of Common Stock, (ii) subdivide outstanding shares of Common Stock into a larger number of shares or (iii) combine outstanding shares of Common Stock into a smaller number of shares, the Exercise Price shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock (excluding treasury shares, if any) outstanding before such event and of which the denominator shall be the number of shares of Common Stock (excluding treasury shares, if any) outstanding after such event. In such event, the number of Warrant shares issuable under this Warrant shall be equitably adjusted to reflect such event (i.e., in the event of 2:1 stock split of the Common Stock, the number of Warrant shares shall be increased to twice the number available for purchase prior to the record date for such stock split). Any adjustment made pursuant to this Section shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision or combination, and shall apply to successive subdivisions and combinations.
- (b) In case of any reclassification of the Common Stock or any compulsory share exchange pursuant to which the Common Stock is converted into other securities, cash or property, then the Holder shall have the right thereafter to exercise this Warrant only into the shares of stock and other securities

and property receivable upon or deemed to be held by holders of Common Stock following such reclassification or share exchange, and the Holder shall be entitled upon such event to receive such amount of securities or property equal to the amount of Warrant Shares such Holder would have been entitled to had such Holder exercised this Warrant immediately prior to such reclassification or share exchange. The terms of any such reclassification or share exchange shall include such terms so as to continue to give to the Holder the right to receive the securities or property set forth in this Section 9(b) upon any exercise following any such reclassification or share exchange.

- (c) If while this Warrant, or any portion thereof, remains outstanding and unexpired, the holders of shares of Common Stock shall receive, or, on or after the record date fixed for the determination of eligible stockholders, shall have become entitled to receive, without payment therefor, property (including cash) of the Company by way of dividend, then and in each case, this Warrant shall represent the right to acquire, in addition to the number of Warrant Shares then exercisable, such property (including cash) of the Company such Holder would have been entitled to had such Holder exercised this Warrant immediately prior to the record date for such payment.
- (i) Record Date. In case the Company shall take a record of the holders of its Common Stock for the purpose of entitling them (A) to receive a dividend or other distribution payable in Common Stock or in securities convertible or exchangeable into shares of Common Stock, or (B) to subscribe for or purchase Common Stock or securities convertible or exchangeable into shares of Common Stock, then such record date shall be deemed to be the date of the issue or sale of the shares of Common Stock deemed to have been issued or sold upon the declaration of such dividend or the making of such other distribution or the date of the granting of such right of subscription or purchase, as the case may be.
- (ii) Treasury Shares. The number of shares of Common Stock outstanding at any given time shall not include shares owned or held by or for the account of the Company, and the disposition of any such shares shall be considered an issue or sale of Common Stock.
- (e) All calculations under this Section 9 shall be made to the nearest cent or the nearest 1/100th of a share, as the case may be.

(f) If:

- (i) the Company shall declare a dividend (or any other distribution) on its Common Stock; or
- (ii) the Company shall declare a special nonrecurring cash dividend on or a redemption of its Common Stock; or
- (iii) the Company shall authorize the granting to all holders of the Common Stock rights or warrants to subscribe for or purchase any shares of capital stock of any class or of any rights; or
- (iv) the approval of any stockholders of the Company shall be required in connection with any reclassification of the Common Stock, any consolidation or merger to which the Company is a party, any sale or transfer of all or substantially all of the assets of the Company, or any compulsory share exchange whereby the Common Stock is converted into other securities, cash or property;
- (v) the Company shall authorize the voluntary dissolution, liquidation or winding up of the affairs of the Company, $\,$

then the Company shall cause to be mailed to each Holder at their last addresses as they shall appear upon the Warrant Register, at least ten calendar days prior to the applicable record or effective date hereinafter specified, a notice stating (x) the date on which a record is to be taken for the purpose of such dividend, distribution, redemption, rights or warrants, or if a record is not to be taken, the date as of which the holders of Common Stock of record to be entitled to such dividend, distributions, redemption, rights or warrants are to be determined or (y) the date on which such reclassification, consolidation, merger, sale, transfer or share exchange is expected to become effective or close, and the date as of which it is expected that holders of Common Stock of record shall be entitled to exchange their shares of Common Stock for securities, cash or other property deliverable upon such reclassification, consolidation, merger, sale, transfer, share exchange, dissolution, liquidation or winding up, provided, that the failure to mail such notice or any defect therein or in the mailing thereof shall not affect the validity of the corporate action required to be specified in such notice.

- 10. Payment of Exercise Price. Upon exercise of this Warrant, the Holder shall pay the aggregate Exercise Price payable with respect to the Warrant Shares for which this Warrant is exercised by cash or by certified or official bank check payable to the order of the Company, or by wire transfer of immediately available funds to an account to be designated by the Company.
- 11. Fractional Shares. The Company shall not be required to issue or cause to be issued fractional Warrant Shares on the exercise of this Warrant. The number of full Warrant Shares which shall be issuable upon the exercise of this Warrant shall be computed on the basis of the aggregate number of Warrant Shares purchasable on exercise of this Warrant so presented. If any fraction of a Warrant Share would, except for the provisions of this Section, be issuable on the exercise of this Warrant, the Company shall pay an amount in cash equal to the Exercise Price multiplied by such fraction.
- 12. Notices. Any and all notices or other communications or deliveries hereunder shall be in writing and shall be deemed given and effective on the earliest of (i) the date of transmission, if such notice or communication is delivered via facsimile at the facsimile telephone number specified in this Section prior to 5:00 p.m. (Pacific Time) on a business day, (ii) the business day after the date of transmission, if such notice or communication is delivered via facsimile at the facsimile telephone number specified in this Section later than 5:00 p.m. (Pacific Time) on any date and earlier than 11:59 p.m. (Pacific Time) on such date, (iii) the business day following the date of mailing, if sent by nationally recognized overnight courier service, or (iv) upon actual receipt by the party to whom such notice is required to be given. The addresses for such communications shall be: (i) if to the Company, to 6725 Mesa Ridge Road, Suite 100, San Diego, California 92121, facsimile (858) 552-0876, attention: Chief Financial Officer, or (ii) if to the Holder, to the Holder at the address or facsimile number appearing on the Warrant Register or such other address or facsimile number as the Holder may provide to the Company in accordance with this Section.
- 13. Warrant Agent. The Company shall serve as warrant agent (the "Warrant Agent") under this Warrant. Upon prior written notice to the Holder, the Company may appoint a new Warrant Agent. Any corporation into which the Company or any new warrant agent may be merged or any corporation resulting from any consolidation to which the Company or any new Warrant Agent shall be a party or any corporation to which the Company or any new Warrant Agent transfers substantially all of its corporate trust or shareholders services business shall be a successor Warrant Agent under this Warrant without any further act. Any such successor Warrant Agent shall promptly cause notice of its succession as Warrant Agent to be mailed (by first class mail, postage prepaid) to the Holder at the Holder's last address as shown on the Warrant Register.

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14. Expiration of Warrant. This Warrant shall expire and no longer be exercisable as of the date (the "Expiration Date") that is the earlier of (i) the seven-year anniversary of the Warrant Date; or (ii) immediately prior to the consummation of either (A) any acquisition of the Company by means of merger, consolidation or other form of corporate reorganization (other than a reincorporation transaction or change of domicile) following which the holders of the outstanding voting securities of the Company immediately prior to such merger, consolidation or other reorganization do not hold (in their capacity as such) equity securities representing a majority of the voting power of the surviving or resulting entity immediately following such merger, consolidation or other reorganization or (B) a sale of all or substantially all of the assets of the Company other than to a buyer in which the holders of the outstanding voting securities of the Company immediately prior to such sale hold (in their capacity as such) equity securities representing a majority of the voting power immediately following such sale (any of such events being referred to herein as an "Acquisition"), in which the consideration to the stockholders of the Company for their shares of stock consists entirely of cash; provided, however, that if the amount of cash per share to be paid to the stockholders of the Company in such Acquisition (the "Per Share Price") is greater than the Exercise Price, the Company shall be obligated to pay to the Holder, upon consummation of the Acquisition, an amount for each Warrant Share for which the Holder has not exercised this Warrant by such date equal to the difference between the Per Share Price and the Exercise Price.

15. Non-Cash Acquisition.

- (a) In the event of the occurrence of an Acquisition in which the consideration does not consist entirely of cash, then as part of such Acquisition, the Company shall make lawful provision such that the Holder shall thereafter be entitled to receive, upon exercise of this Warrant, prior to the Expiration Date and upon payment of the Exercise Price, the number of shares of stock or other securities or property of the corporation or other entity resulting from the Acquisition (or which purchases the assets of the Company) that the Holder would have been entitled to receive in the Acquisition if this Warrant had been exercised immediately before the Acquisition. In all events, appropriate adjustments (as determined in good faith by the Company's Board of Directors) shall be made in the application of the provisions of this Warrant with respect to the rights and interests of the Holder after the Acquisition, to the extent that the provisions of this Warrant shall be applicable after that event, as near as reasonably may be, in relation to any shares or other property deliverable after the Acquisition upon exercise of this Warrant.
- (b) Notwithstanding the provisions of Section 15(a), in the event of an Acquisition covered by the terms of Section 15(a), then at the Company's option, this Warrant shall be automatically cancelled (and the Holder will promptly surrender this Warrant to the Company for cancellation) if, upon consummation of the Acquisition, the Holder is paid the following amount:
- (i) if the consideration per share to be paid to the stockholders of the Company in the Acquisition (the "Consideration Per Share") is less than the Exercise Price, then the Holder shall be paid an amount equal to the value of the unexercised portion of the Warrant, with such value being based on application of the Black-Scholes model to the unexercised portion of the Warrant (as applied by Company's Board of Directors in good faith) using the closing price of a share of common stock of the Company on the business day prior to the announcement of the Acquisition;
- (ii) if the Consideration Per Share is greater than the Exercise Price but equal to or less than \$12.26 per share, then the Holder shall be paid an amount equal to the product of (A) the Consideration Per Share minus the Exercise Price (the "Delta"), multiplied by (B) the number of Warrant Shares for which the Holder has not exercised this Warrant by such date (the "Unexercised Warrant Shares"), and multiplied by (C) 1.40;

- (iii) if the Consideration Per Share is greater than \$12.26 per share but equal to or less than \$22.26 per share, then the Holder shall be paid an amount equal to the product of (A) the Delta, multiplied by (B) the Unexercised Warrant Shares, and multiplied by (C) 1.30; and
- (iv) if the Consideration Per Share is \$22.26 or greater, then the Holder shall be paid an amount equal to the product of (A) the Delta, multiplied by (B) the Unexercised Warrant Shares, and multiplied by (C) 1.20.
- (c) The value of the consideration in an Acquisition covered by this Section 15(b) shall be determined in good by the Company's Board of Directors. Upon any adjustment of the Exercise Price pursuant to the terms hereof, the price ranges in subsections 15(b)(i), (ii), and (iii) hereof shall be similarly adjusted.

16. Miscellaneous.

- (a) This Warrant shall be binding on and inure to the benefit of the parties hereto and their respective permitted successors and assigns. This Warrant may be amended only in writing signed by the Company and the Holder and their permitted successors and assigns.
- (b) Subject to Section 16(a), above, nothing in this Warrant shall be construed to give to any person or corporation other than the Company and the Holder any legal or equitable right, remedy or cause under this Warrant. This Warrant shall inure to the sole and exclusive benefit of the Company and the Holder.
- (c) This Agreement shall be governed by and construed under the laws of the State of New York as applied to agreements among New York residents, made and to be performed entirely within the State of New York. Each of the Company and the Holder hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by receiving a copy thereof sent to the Company at the address in effect for notices to it under this instrument and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. Each party irrevocably waives, to the fullest extent permitted by applicable law, any and all right to trial by jury in any legal proceeding arising out of or relating to this Agreement or the transactions contemplated hereby. If either party shall commence an action or proceeding to enforce any provisions of this Warrant, then the prevailing party in such action or proceeding shall be reimbursed by the other party for its attorneys fees and other costs and expenses incurred with the investigation, preparation and prosecution of such action or proceeding.
- (d) The headings herein are for convenience only, do not constitute a part of this Warrant and shall not be deemed to limit or affect any of the provisions hereof.
- (e) In case any one or more of the provisions of this Warrant shall be invalid or unenforceable in any respect, the validity and enforceability of the remaining terms and provisions of this Warrant shall not in any way be affected or impaired thereby and the parties will attempt in good faith to agree upon a valid and enforceable provision which shall be a commercially reasonable substitute therefor, and upon so agreeing, shall incorporate such substitute provision in this Warrant.
- (f) This Warrant is being issued pursuant to the Purchase Agreement and any provisions hereof may be amended, waived or modified in accordance with the amendment and modification provision set forth in the Purchase Agreement.

(g) Receipt of this Warrant by the Holder shall constitute acceptance of and agreement to all of the terms and conditions contained herein.

17. No Rights as a Stockholder. Holder shall not, by virtue hereof, be entitled to any rights of stockholder of the Company, either at law or equity, and the rights of Holder are limited to those expressed in this Warrant. Nothing contained in this Warrant shall be construed as conferring upon the Holder the right to vote or to consent or to receive notice as a stockholder of the Company on any matters or with respect to any rights whatsoever as a stockholder of the Company. No dividends or interest shall be payable or accrued in respect of this Warrant or the interest represented hereby of the Warrant Shares purchasable hereunder until, and only to the extent that, this Warrant shall have been exercised in accordance with its terms.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the Company has caused this COMMON STOCK WARRANT to be duly executed by its authorized officer as of the date first indicated above.

ADVENTRX PHARMACEUTICALS, INC.

By:							
	E	·					
	Evan Levi	1e					
	President	and	Chief	Execut	ive	0ff	icer

FORM OF ELECTION TO PURCHASE

(To be executed by the Holder to exercise the right to purchase shares of Common Stock under the Warrant to which this form applies, issued by ADVENTRX Pharmaceuticals, Inc. (the "Company"))

To ADVENTRX Pharmaceuticals, Inc.:

The undersigned hereby irrevocably elects to purchase shares of common stock, \$0.001 value, of the Company (the "Common Stock") and encloses herewith \$____ in cash, certified or official bank check or checks, which sum represents the aggregate Exercise Price (as defined in the Warrant) for the number of shares of Common Stock to which this Form of Election to Purchase relates, together with any applicable taxes payable by the undersigned pursuant to the Warrant.

together Warrant.	with any applicable taxes payable by the undersigned pursuant to the
Stock of herewith	The undersigned hereby elects to purchase shares of the Common the Company pursuant to the terms of the attached Warrant, and tenders payment of the exercise price in full, together with all applicable taxes, if any.
	The undersigned requests that certificates for the shares of Common suable upon this exercise be issued in the name of:
(Pleas	e print name, address and social security or tax identification number)
Dated: _	
Name of	Holder:
	(Print)
	(By:)
	(Name:)
	(Title:)

(Signature must conform in all respects to name of holder as specified on the face of the Warrant) $\,$

FORM OF ASSIGNMENT

[To be completed and signed only upon transfer of Warrant]

transfers unto the within Warrant to purchase ADVENTRX Pharmaceuticals, Inc. to appoints attorne	rsigned hereby sells, assigns and the right represented by shares of Common Stock of which the within Warrant relates and y to transfer said right on the books of th full power of substitution in the
Dated:,	
	(Signature must conform in all respects to name of holder as specified on the face of the Warrant)
	Address of Transferee
In the presence of:	

Number of Warrant Shares

Date Available to be Exercised Shares Exercised Remaining to be Exercised

Dated: July ___, 2005

NEITHER THIS SECURITY NOR THE SECURITIES INTO WHICH THIS SECURITY IS EXERCISABLE HAVE BEEN REGISTERED WITH THE SECURITIES AND EXCHANGE COMMISSION OR THE SECURITIES COMMISSION OF ANY STATE IN RELIANCE UPON AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), AND, ACCORDINGLY, MAY NOT BE OFFERED OR SOLD EXCEPT PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OR PURSUANT TO AN AVAILABLE EXEMPTION FROM THE REGISTRATION REQUIREMENTS THEREUNDER AND IN COMPLIANCE WITH APPLICABLE STATE SECURITIES OR BLUE SKY LAWS AS EVIDENCED BY A LEGAL OPINION OF COUNSEL TO THE TRANSFEROR TO SUCH EFFECT, THE SUBSTANCE OF WHICH SHALL BE REASONABLY ACCEPTABLE TO THE COMPANY.

ADVENTRX PHARMACEUTICALS, INC.

COMMON STOCK WARRANT

ADVENTRX Pharmaceuticals, Inc., a Delaware corporation (the "Company"),
hereby certifies that, for value received, or its
registered assigns ("Holder"), is entitled, subject to the terms set forth
below, to purchase from the Company up to a total ()(1) shares of
common stock, \$0.001 par value per share (the "Common Stock"), of the Company
(each such share, a "Warrant Share" and all such shares, the "Warrant Shares")
at an exercise price per share equal to Two Dollars Twenty-Six Cents (\$2.26) (as
such exercise price may be adjusted from time to time as provided in Section 9,
the "Exercise Price"), at any time and from time to time from and after January
, 2006 and through and including the Expiration Date (as such term is defined
in Section 14)

This Warrant is being issued pursuant to the terms of that certain Securities Purchase Agreement, dated July 21, 2005, by and among the Company, the Holder and the other entities listed on Appendix A thereto (the "Purchase Agreement"). All capitalized terms not otherwise defined herein shall have the meaning given to them in the Purchase Agreement. This Warrant is subject to the following terms and conditions:

- 1. Registration of Warrant. The Company shall register this Warrant, upon records to be maintained by the Company for that purpose (the "Warrant Register"), in the name of the record Holder from time to time. The Company may deem and treat the registered Holder of this Warrant as the absolute owner hereof for the purpose of any exercise hereof or any distribution to the Holder, and for all other purposes, and the Company shall not be affected by notice to the contrary.
- 2. Registration of Transfers and Exchanges.

Warrant No. __

(a) The Company shall register the transfer, subject to compliance with applicable federal and state securities laws, of any portion of this Warrant in the Warrant Register, upon surrender of this

⁽¹⁾ The number of Warrant Shares equals 100% of the number of shares of Common Stock purchased by the Holder pursuant to the Purchase Agreement.

Warrant, with the Form of Assignment attached hereto duly completed and signed, to the Warrant Agent (as defined in Section 13) or to the Company at its address for notice set forth in Section 12. Upon any such registration or transfer, a new warrant to purchase Common Stock, in substantially the form of this Warrant (any such new warrant, a "New Warrant"), evidencing the portion of this Warrant so transferred shall be issued to the transferee and a New Warrant evidencing the remaining portion of this Warrant not so transferred, if any, shall be issued to the transferring Holder. The acceptance of the New Warrant by the transferee thereof shall be deemed the acceptance of such transferee of all of the rights and obligations of a holder of a Warrant.

- (b) This Warrant is exchangeable, upon the surrender hereof by the Holder to the office of the Company at its address for notice set forth in Section 12 for one or more New Warrants, evidencing in the aggregate the right to purchase the number of Warrant Shares which may then be purchased hereunder.
- 3. Duration and Exercise of Warrants.
- (a) This Warrant shall be exercisable by the registered Holder on any business day before 5:00 P.M. (Pacific Time) at any time and from time to time on or after January __, 2006 to and including the Expiration Date. At 5:00 P.M. (Pacific Time) on the Expiration Date, the portion of this Warrant not exercised prior thereto shall expire and become void and of no value. Prior to the Expiration Date, the Company may not call or otherwise redeem this Warrant.
- (b) Subject to Section 10, upon delivery of an executed Form of Election to Purchase, together with the grid attached hereto as Annex A duly completed and signed, to the Company at its address for notice set forth in Section 12 and upon payment of the Exercise Price multiplied by the number of Warrant Shares that the Holder intends to purchase hereunder, in the manner provided hereunder, all as specified by the Holder in the Form of Election to Purchase, the Company shall promptly (but in no event later than 5 business days after the Date of Exercise (as defined herein)) issue or cause to be issued and cause to be delivered to or upon the written order of the Holder and in such name or names as the Holder may designate, a certificate for the Warrant Shares issuable upon such exercise, which may bear a restrictive legend as set forth in Section 7. To effect an exercise hereunder, the Holder shall not be required to physically surrender this Warrant to the Company unless all the Warrant Shares have been exercised. Exercises hereunder shall have the effect of lowering the number of Warrant Shares in an amount equal to the applicable exercise, which shall be evidenced by entries set forth on the attached Annex A. The Holder and the Company shall maintain records showing the number of Warrant Shares exercised and the date of such exercises. The Holder and any assignee, by acceptance of this Warrant, acknowledge and agree that, by reason of the provisions of this paragraph, following exercise of a portion of this Warrant, the number of shares issuable upon exercise of this Warrant may be less than the amount stated on the face hereof.
- (c) A "Date of Exercise" means the date on which the Company shall have received the Form of Election to Purchase completed and duly signed.
- (d) This Warrant shall be exercisable, either in its entirety or, from time to time, for a portion of the number of Warrant Shares.
- (e) Notwithstanding anything in this Warrant to the contrary, the Holder shall have no right to exercise this Warrant to the extent that upon such exercise the Holder would beneficially hold more than 4.9% of the total number of shares of Common Stock then issued and outstanding (determined in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended); provided, however, that the Holder may provide the Company with sixty-one (61) days notice (pursuant to Section 12) (the

"Waiver Notice") of the Holder's waiver of this Section 3(e) with regard to any or all Warrant Shares and this Section 3(e) will be of no force or effect with regard to all or such portion of the Warrant Shares as referenced in the Waiver Notice on and after the date that is 61 days after such Waiver Notice. Each delivery of an election to purchase by the Holder will constitute a representation and warranty by the Holder that it has evaluated the limitation set forth in this Section and determined, based on the stated number of shares of issued and outstanding Common Stock set forth in the Company's most recent public filings with the Securities and Exchange Commission, that the exercise of this Warrant pursuant to such election to purchase will not result in the limitation stated in this Section 3(e) being exceeded.

- 4. Payment of Taxes. The Company will pay all documentary stamp taxes attributable to the issuance of Warrant Shares upon the exercise of this Warrant; provided, however, that the Company shall not be required to pay any tax which may be payable in respect of any transfer involved in the registration of any certificates for Warrant Shares or Warrants in a name other than that of the Holder. The Holder shall be responsible for all other tax liability that may arise as a result of holding or transferring this Warrant or receiving Warrant Shares upon exercise hereof.
- 5. Replacement of Warrant. If this Warrant is mutilated, lost, stolen or destroyed, the Company shall issue or cause to be issued in exchange and substitution for and upon cancellation hereof, or in lieu of and substitution for this Warrant, a New Warrant, but only upon receipt of evidence reasonably satisfactory to the Company of such loss, theft or destruction and indemnity.
- 6. Reservation of Warrant Shares. The Company covenants that it will at all times reserve and keep available at all times out of the aggregate of its authorized but unissued Common Stock, solely for the purpose of enabling it to issue Warrant Shares upon exercise of this Warrant as herein provided, the number of Warrant Shares which are then issuable and deliverable upon the exercise of this entire Warrant, free from preemptive rights or any other actual contingent purchase rights of persons other than the Holder (taking into account the adjustments and restrictions of Section 9). The Company covenants that all Warrant Shares that shall be so issuable and deliverable shall, upon issuance and receipt of the payment of the applicable Exercise Price in accordance with the terms hereof, be duly and validly authorized, issued and fully paid and nonassessable.
- 7. Acquisition of Warrant for Personal Account. Holder understands that neither this Warrant nor any of the Warrant Shares have been registered under the Securities Act of 1933, as amended (the "Securities Act"). Holder also understands that this Warrant and the Warrant Shares are being offered and sold pursuant to an exemption from registration contained in the Securities Act based in part upon Holder's representations contained herein and in the Purchase Agreement. Holder represents and warrants as follows:
- (a) Holder is an accredited investor within the meaning of Rule 501 of Regulation D promulgated under the Securities Act, is knowledgeable, sophisticated and experienced in making, and is qualified to make, decisions with respect to investments in securities representing an investment decision like that involved in the purchase of this Warrant and the Warrant Shares.
- (b) Holder is acquiring this Warrant and, if this Warrant is exercised, will acquire the Warrant Shares for its own account for investment only. Holder has no intention of selling or distributing this Warrant or any Warrant Shares or any arrangement or understanding with any other Persons regarding the sale or distribution of this Warrant or any of the Warrant Shares except in accordance with the provisions of Section 6 of the Purchase Agreement. Holder will not, directly or indirectly, offer, sell, pledge, transfer or otherwise dispose of (or solicit any offers to buy, purchase or otherwise acquire or take a pledge of) this Warrant or any of the Warrant Shares except in accordance with the provisions of

Section 6 of the Purchase Agreement with respect to the Warrant Shares or pursuant to and in accordance with the Securities ${\sf Act.}$

- (c) Holder has received and reviewed the Memorandum and has requested, received, reviewed and considered all other information Holder deems relevant in making an informed decision to purchase this Warrant and the Warrant Shares. Holder has had an opportunity to discuss the Company's business, management and financial affairs with its management and also had an opportunity to ask questions of officers and employees of the Company that were answered to Holder's satisfaction.
- (d) Holder recognizes that an investment in this Warrant and the Warrant Shares involves a high degree of risk, including a risk of total loss of Holder's investment. Holder is able to bear the economic risk of holding this Warrant and the Warrant Shares for an indefinite period, and has knowledge and experience in the financial and business matters such that it is capable of evaluating the risks of the investment in this Warrant and the Warrant Shares.
- (e) Holder has, in connection with Holder's decision to purchase this Warrant and, if this Warrant is exercised, the Warrant Shares, not relied upon any representations or other information (whether oral or written) other than as set forth in the representations and warranties of the Company contained herein or the Memorandum. Holder has, with respect to all matters relating to this Warrant and the offer and sale of the Warrant Shares, relied solely upon the advice of Holder's own counsel and has not relied upon or consulted any counsel to the Placement Agent or counsel to the Company.
- (f) Holder understands and acknowledges that nothing in the Memorandum, this Warrant, any other materials presented to Holder or any communications between Holder and the Placement Agent in connection with the purchase and sale of this Warrant and the Warrant Shares constitutes legal, tax or investment advice. Holder has consulted such legal, tax and investment advisors as it, in its sole discretion, has deemed necessary or appropriate in connection with its purchase of Warrant Shares.
- (g) Holder acknowledges that the Placement Agent has acted solely as placement agent for the Company in connection with the offering of this Warrant and the Warrant Shares by the Company, that the information and data provided to Holder in connection with the transactions contemplated hereby have not been subjected to independent verification by the Placement Agent, and that the Placement Agent makes no representation or warranty with respect to the accuracy or completeness of such information, data or other related disclosure material. Holder further acknowledges that in making its decision to enter into this Warrant and to purchase Warrant Shares that it has relied on its own examination of the Company and the terms of, and consequences, of holding this Warrant and the Warrant Shares. Each Holder further acknowledges that the provisions of this Section 7(g) are also for the benefit of, and may also be enforced by, the Placement Agent.
- (h) Holder understands that this Warrant and the Warrant Shares 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. Holder understands that it may resell the Warrant Shares pursuant to Rule 144 only after the satisfaction of certain requirements, including the requirement that the Warrant Shares be held for at least one year prior to resale.
- (i) Holder acknowledges and agrees that this Warrant and Warrant Shares are subject to certain restrictions as to resale or transfer under the federal and state securities laws. Holder agrees and understands that stop transfer instructions will be given to the transfer agent for the Warrant Shares, and

each certificate delivered on transfer of or in substitution for any such certificate, and each certificate representing the Warrant Shares shall have affixed a legend in substantially the following form:

"THE SHARES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR ANY STATE SECURITIES LAWS. EXCEPT AS SPECIFIED IN THIS LEGEND, SUCH SHARES MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED OR HYPOTHECATED, OR OTHERWISE TRANSFERRED IN THE ABSENCE OF A REGISTRATION STATEMENT IN EFFECT WITH RESPECT THERETO UNDER SUCH ACT UNLESS SOLD PURSUANT TO RULE 144 OF SUCH ACT OR UNLESS SUCH SALE, PLEDGE, HYPOTHECATION OR TRANSFER IS OTHERWISE EXEMPT FROM REGISTRATION AND ANY APPLICABLE STATE SECURITIES LAWS. THE COMPANY MAY REQUEST A WRITTEN OPINION OF COUNSEL, REASONABLY SATISFACTORY TO THE COMPANY, TO THE EFFECT THAT REGISTRATION IS NOT REQUIRED IN CONNECTION WITH SUCH SALE OR OTHER TRANSFER "

- (j) Holder understands that the Company is relying on the statements contained herein to establish an exemption from registration under federal and state securities laws. Holder will promptly notify the Company of any changes in the information set forth in the Registration Statement (as defined in Section 6.1(a)(i) of the Purchase Agreement) regarding Holder.
- (k) Holder: (i) is, to its knowledge and except as disclosed in the Purchase Agreement, not an affiliate (as such term is defined pursuant to Rule 12b-2 promulgated under the Securities Exchange Act of 1934, as amended (the "Exchange Act")) of any other Holder, (ii) is not constituted as a partnership, association, joint venture or any other type of joint entity with any other Holder, and (iii) to its knowledge and except as disclosed in the Purchase Agreement, is not acting as part of a group (as such term is defined under Section 13(d) of the Exchange Act) with any other Holder. If at any time after the date of this Warrant (the "Warrant Date") Holder becomes an affiliate (as defined herein) of any other Holder, Holder will provide prompt written notice to the Company.
- 8. Obligation to Register Securities. The Company is not obligated to register this Warrant or the Warrant Shares for resale under the Securities Act, except as provided in the Purchase Agreement, and the Holder of this Warrant (or any assignee hereof) is entitled to the registration rights in respect of the Warrant Shares as only set forth in the Purchase Agreement.
- 9. Certain Adjustments. The Exercise Price and number of Warrant Shares issuable upon exercise of this Warrant are subject to adjustment from time to time as set forth in this Section 9. Upon each such adjustment of the Exercise Price pursuant to this Section 9, the Holder shall thereafter prior to the Expiration Date be entitled to purchase, at the Exercise Price resulting from such adjustment, the number of Warrant Shares obtained by multiplying (x) the Exercise Price in effect immediately prior to such adjustment by (y) the number of Warrant Shares issuable upon exercise of this Warrant immediately prior to such adjustment and dividing the product thereof by (z) the Exercise Price resulting from such adjustment.
- (a) If the Company, at any time while this Warrant is outstanding, (i) shall pay a stock dividend (except scheduled dividends paid on outstanding preferred stock as of the Warrant Date which contain a stated dividend rate) or otherwise make a distribution or distributions of capital stock to all the holders of Common Stock or on any other class of capital stock payable in shares of Common Stock, (ii) subdivide outstanding shares of Common Stock into a larger number of shares or (iii) combine

outstanding shares of Common Stock into a smaller number of shares, the Exercise Price shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock (excluding treasury shares, if any) outstanding before such event and of which the denominator shall be the number of shares of Common Stock (excluding treasury shares, if any) outstanding after such event. In such event, the number of Warrant shares issuable under this Warrant shall be equitably adjusted to reflect such event (i.e., in the event of 2:1 stock split of the Common Stock, the number of Warrant shares shall be increased to twice the number available for purchase prior to the record date for such stock split). Any adjustment made pursuant to this Section shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision or combination, and shall apply to successive subdivisions and combinations.

- (b) In case of any reclassification of the Common Stock or any compulsory share exchange pursuant to which the Common Stock is converted into other securities, cash or property, then the Holder shall have the right thereafter to exercise this Warrant only into the shares of stock and other securities and property receivable upon or deemed to be held by holders of Common Stock following such reclassification or share exchange, and the Holder shall be entitled upon such event to receive such amount of securities or property equal to the amount of Warrant Shares such Holder would have been entitled to had such Holder exercised this Warrant immediately prior to such reclassification or share exchange. The terms of any such reclassification or share exchange shall include such terms so as to continue to give to the Holder the right to receive the securities or property set forth in this Section 9(b) upon any exercise following any such reclassification or share exchange.
- (c) If while this Warrant, or any portion thereof, remains outstanding and unexpired, the holders of shares of Common Stock shall receive, or, on or after the record date fixed for the determination of eligible stockholders, shall have become entitled to receive, without payment therefor, property (including cash) of the Company by way of dividend, then and in each case, this Warrant shall represent the right to acquire, in addition to the number of Warrant Shares then exercisable, such property (including cash) of the Company such Holder would have been entitled to had such Holder exercised this Warrant immediately prior to the record date for such payment.
- (i) Record Date. In case the Company shall take a record of the holders of its Common Stock for the purpose of entitling them (A) to receive a dividend or other distribution payable in Common Stock or in securities convertible or exchangeable into shares of Common Stock, or (B) to subscribe for or purchase Common Stock or securities convertible or exchangeable into shares of Common Stock, then such record date shall be deemed to be the date of the issue or sale of the shares of Common Stock deemed to have been issued or sold upon the declaration of such dividend or the making of such other distribution or the date of the granting of such right of subscription or purchase, as the case may be.
- (ii) Treasury Shares. The number of shares of Common Stock outstanding at any given time shall not include shares owned or held by or for the account of the Company, and the disposition of any such shares shall be considered an issue or sale of Common Stock.
- (e) All calculations under this Section 9 shall be made to the nearest cent or the nearest 1/100th of a share, as the case may be.

(f) If:

- (i) the Company shall declare a dividend (or any other distribution) on its Common Stock; or
- (ii) the Company shall declare a special nonrecurring cash dividend on or a redemption of its Common Stock; or
- (iii) the Company shall authorize the granting to all holders of the Common Stock rights or warrants to subscribe for or purchase any shares of capital stock of any class or of any rights; or
- (iv) the approval of any stockholders of the Company shall be required in connection with any reclassification of the Common Stock, any consolidation or merger to which the Company is a party, any sale or transfer of all or substantially all of the assets of the Company, or any compulsory share exchange whereby the Common Stock is converted into other securities, cash or property; or
- (v) the Company shall authorize the voluntary dissolution, liquidation or winding up of the affairs of the Company,

then the Company shall cause to be mailed to each Holder at their last addresses as they shall appear upon the Warrant Register, at least ten calendar days prior to the applicable record or effective date hereinafter specified, a notice stating (x) the date on which a record is to be taken for the purpose of such dividend, distribution, redemption, rights or warrants, or if a record is not to be taken, the date as of which the holders of Common Stock of record to be entitled to such dividend, distributions, redemption, rights or warrants are to be determined or (y) the date on which such reclassification, consolidation, merger, sale, transfer or share exchange is expected to become effective or close, and the date as of which it is expected that holders of Common Stock of record shall be entitled to exchange their shares of Common Stock for securities, cash or other property deliverable upon such reclassification, consolidation, merger, sale, transfer, share exchange, dissolution, liquidation or winding up, provided, that the failure to mail such notice or any defect therein or in the mailing thereof shall not affect the validity of the corporate action required to be specified in such notice.

- 10. Payment of Exercise Price. Upon exercise of this Warrant, the Holder shall pay the aggregate Exercise Price payable with respect to the Warrant Shares for which this Warrant is exercised by cash or by certified or official bank check payable to the order of the Company, or by wire transfer of immediately available funds to an account to be designated by the Company.
- 11. Fractional Shares. The Company shall not be required to issue or cause to be issued fractional Warrant Shares on the exercise of this Warrant. The number of full Warrant Shares which shall be issuable upon the exercise of this Warrant shall be computed on the basis of the aggregate number of Warrant Shares purchasable on exercise of this Warrant so presented. If any fraction of a Warrant Share would, except for the provisions of this Section, be issuable on the exercise of this Warrant, the Company shall pay an amount in cash equal to the Exercise Price multiplied by such fraction.
- 12. Notices. Any and all notices or other communications or deliveries hereunder shall be in writing and shall be deemed given and effective on the earliest of (i) the date of transmission, if such notice or communication is delivered via facsimile at the facsimile telephone number specified in this Section prior to 5:00 p.m. (Pacific Time) on a business day, (ii) the business day after the date of transmission, if such notice or communication is delivered via facsimile at the facsimile telephone number specified in this Section later than 5:00 p.m. (Pacific Time) on any date and earlier than 11:59 p.m. (Pacific Time) on such date, (iii) the business day following the date of mailing, if sent by nationally recognized overnight courier service, or (iv) upon actual receipt by the party to whom such notice is required to be given. The addresses for such communications shall be: (i) if to the Company, to 6725 Mesa Ridge Road, Suite 100,

San Diego, California 92121, facsimile (858) 552-0876, attention: Chief Financial Officer, or (ii) if to the Holder, to the Holder at the address or facsimile number appearing on the Warrant Register or such other address or facsimile number as the Holder may provide to the Company in accordance with this Section.

- 13. Warrant Agent. The Company shall serve as warrant agent (the "Warrant Agent") under this Warrant. Upon prior written notice to the Holder, the Company may appoint a new Warrant Agent. Any corporation into which the Company or any new warrant agent may be merged or any corporation resulting from any consolidation to which the Company or any new Warrant Agent shall be a party or any corporation to which the Company or any new Warrant Agent transfers substantially all of its corporate trust or shareholders services business shall be a successor Warrant Agent under this Warrant without any further act. Any such successor Warrant Agent shall promptly cause notice of its succession as Warrant Agent to be mailed (by first class mail, postage prepaid) to the Holder at the Holder's last address as shown on the Warrant Register.
- 14. Expiration of Warrant. This Warrant shall expire and no longer be exercisable as of the date (the "Expiration Date") that is the earlier of (i) the seven-year anniversary of the Warrant Date; or (ii) immediately prior to the consummation of either (A) any acquisition of the Company by means of merger, consolidation or other form of corporate reorganization (other than a reincorporation transaction or change of domicile) following which the holders of the outstanding voting securities of the Company immediately prior to such merger, consolidation or other reorganization do not hold (in their capacity as such) equity securities representing a majority of the voting power of the surviving or resulting entity immediately following such merger, consolidation or other reorganization or (B) a sale of all or substantially all of the assets of the Company other than to a buyer in which the holders of the outstanding voting securities of the Company immediately prior to such sale hold (in their capacity as such) equity securities representing a majority of the voting power immediately following such sale (any of such events being referred to herein as an "Acquisition"), in which the consideration to the stockholders of the Company for their shares of stock consists entirely of cash; provided, however, that if the amount of cash per share to be paid to the stockholders of the Company in such Acquisition (the "Per Share Price") is greater than the Exercise Price, the Company shall be obligated to pay to the Holder, upon consummation of the Acquisition, an amount for each Warrant Share for which the Holder has not exercised this Warrant by such date equal to the difference between the Per Share Price and the Exercise Price.

15. Non-Cash Acquisition.

- (a) In the event of the occurrence of an Acquisition in which the consideration does not consist entirely of cash, then as part of such Acquisition, the Company shall make lawful provision such that the Holder shall thereafter be entitled to receive, upon exercise of this Warrant, prior to the Expiration Date and upon payment of the Exercise Price, the number of shares of stock or other securities or property of the corporation or other entity resulting from the Acquisition (or which purchases the assets of the Company) that the Holder would have been entitled to receive in the Acquisition if this Warrant had been exercised immediately before the Acquisition. In all events, appropriate adjustments (as determined in good faith by the Company's Board of Directors) shall be made in the application of the provisions of this Warrant with respect to the rights and interests of the Holder after the Acquisition, to the extent that the provisions of this Warrant shall be applicable after that event, as near as reasonably may be, in relation to any shares or other property deliverable after the Acquisition upon exercise of this Warrant.
- (b) Notwithstanding the provisions of Section 15(a), in the event of an Acquisition covered by the terms of Section 15(a), then at the Company's option, this Warrant shall be automatically cancelled (and the Holder will promptly surrender this Warrant to the Company for cancellation) if, upon consummation of the Acquisition, the Holder is paid the following amount:

- (i) if the consideration per share to be paid to the stockholders of the Company in the Acquisition (the "Consideration Per Share") is less than the Exercise Price, then the Holder shall be paid an amount equal to the value of the unexercised portion of the Warrant, with such value being based on application of the Black-Scholes model to the unexercised portion of the Warrant (as applied by Company's Board of Directors in good faith) using the closing price of a share of common stock of the Company on the business day prior to the announcement of the Acquisition;
- (ii) if the Consideration Per Share is greater than the Exercise Price but equal to or less than \$12.26 per share, then the Holder shall be paid an amount equal to the product of (A) the Consideration Per Share minus the Exercise Price (the "Delta"), multiplied by (B) the number of Warrant Shares for which the Holder has not exercised this Warrant by such date (the "Unexercised Warrant Shares"), and multiplied by (C) 1.40;
- (iii) if the Consideration Per Share is greater than \$12.26 per share but equal to or less than \$22.26 per share, then the Holder shall be paid an amount equal to the product of (A) the Delta, multiplied by (B) the Unexercised Warrant Shares, and multiplied by (C) 1.30; and
- (iv) if the Consideration Per Share is 22.26 or greater, then the Holder shall be paid an amount equal to the product of (A) the Delta, multiplied by (B) the Unexercised Warrant Shares, and multiplied by (C) 1.20.
- (c) The value of the consideration in an Acquisition covered by this Section 15(b) shall be determined in good by the Company's Board of Directors. Upon any adjustment of the Exercise Price pursuant to the terms hereof, the price ranges in subsections 15(b)(i), (ii), and (iii) hereof shall be similarly adjusted.

16. Miscellaneous.

- (a) This Warrant shall be binding on and inure to the benefit of the parties hereto and their respective permitted successors and assigns. This Warrant may be amended only in writing signed by the Company and the Holder and their permitted successors and assigns.
- (b) Subject to Section 16(a), above, nothing in this Warrant shall be construed to give to any person or corporation other than the Company and the Holder any legal or equitable right, remedy or cause under this Warrant. This Warrant shall inure to the sole and exclusive benefit of the Company and the Holder.
- (c) This Agreement shall be governed by and construed under the laws of the State of New York as applied to agreements among New York residents, made and to be performed entirely within the State of New York. Each of the Company and the Holder hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by receiving a copy thereof sent to the Company at the address in effect for notices to it under this instrument and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. Each party irrevocably waives, to the fullest extent permitted by applicable law, any and all right to trial by jury in any legal proceeding arising out of or relating to this Agreement or the transactions contemplated hereby. If either party shall commence an action or proceeding to enforce any provisions of this Warrant, then the prevailing party in such action or proceeding shall be reimbursed by the other party for its attorneys fees and other costs and expenses incurred with the investigation, preparation and prosecution of such action or proceeding.

- (d) The headings herein are for convenience only, do not constitute a part of this Warrant and shall not be deemed to limit or affect any of the provisions hereof.
- (e) In case any one or more of the provisions of this Warrant shall be invalid or unenforceable in any respect, the validity and enforceability of the remaining terms and provisions of this Warrant shall not in any way be affected or impaired thereby and the parties will attempt in good faith to agree upon a valid and enforceable provision which shall be a commercially reasonable substitute therefor, and upon so agreeing, shall incorporate such substitute provision in this Warrant.
- (f) This Warrant is being issued pursuant to the Purchase Agreement and any provisions hereof may be amended, waived or modified in accordance with the amendment and modification provision set forth in the Purchase Agreement.
- (g) Receipt of this Warrant by the Holder shall constitute acceptance of and agreement to all of the terms and conditions contained herein.
- 17. No Rights as a Stockholder. Holder shall not, by virtue hereof, be entitled to any rights of stockholder of the Company, either at law or equity, and the rights of Holder are limited to those expressed in this Warrant. Nothing contained in this Warrant shall be construed as conferring upon the Holder the right to vote or to consent or to receive notice as a stockholder of the Company on any matters or with respect to any rights whatsoever as a stockholder of the Company. No dividends or interest shall be payable or accrued in respect of this Warrant or the interest represented hereby of the Warrant Shares purchasable hereunder until, and only to the extent that, this Warrant shall have been exercised in accordance with its terms.

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IN WITNESS WHEREOF, the Company has caused this COMMON STOCK WARRANT to be duly executed by its authorized officer as of the date first indicated above.

ADVENTRX PHARMACEUTICALS, INC.

y: -----

Evan Levine President and Chief Executive Officer

FORM OF ELECTION TO PURCHASE

(To be executed by the Holder to exercise the right to purchase shares of Common Stock under the Warrant to which this form applies, issued by ADVENTRX Pharmaceuticals, Inc. (the "Company"))

To ADVENTRX Pharmaceuticals, Inc.:

The undersigned hereby irrevocably elects to purchase shares of common stock, \$0.001 value, of the Company (the "Common Stock") and encloses herewith \$___ in cash, certified or official bank check or checks, which sum represents the aggregate Exercise Price (as defined in the Warrant) for the number of shares of Common Stock to which this Form of Election to Purchase relates, together with any applicable taxes payable by the undersigned pursuant to the Warrant.

Warrant.	ny appireante taxes payante by the undersigned pursuant to the
Stock of the Co	dersigned hereby elects to purchase shares of the Common mpany pursuant to the terms of the attached Warrant, and tenders t of the exercise price in full, together with all applicable if any.
	dersigned requests that certificates for the shares of Common upon this exercise be issued in the name of:
(Please print	name, address and social security or tax identification number)
Dated:	_, 200
Name of Holder:	
	(Print)
	(By:)
	(Name:)
	(Title:)
	(Signature must conform in all respects to name of holder as specified on the face of the Warrant)

FORM OF ASSIGNMENT

[To be completed and signed only upon transfer of Warrant]

transfers unto the within Warrant to purchase ADVENTRX Pharmaceuticals, Inc. to appoints attorney	signed hereby sells, assigns and the right represented by shares of Common Stock of which the within Warrant relates and to transfer said right on the books of h full power of substitution in the
Dated:	
	(Signature must conform in all respects to name of holder as specified on the face of the Warrant)
	Address of Transferee
In the presence of:	

Number of Warrant Shares Number of Warrant Shares Number of Warrant Shares

Date Available to be Exercised Exercised Remaining to be Exercised

May [15], 2005

PERSONAL AND CONFIDENTIAL

ADVENTRX Pharmaceuticals, Inc. 6725 Mesa Ridge Rd., Suite 100 San Diego, CA 92121

Dear Evan:

This letter agreement (this "Agreement") will confirm the understanding and agreement between CIBC World Markets Corp. ("CIBC World Markets") and ADVENTRX Pharmaceuticals, Inc. (the "Company") as follows:

1. ENGAGEMENT: The Company hereby engages CIBC World Markets as its lead private placement agent and book-runner in the private placement of one or more classes or series of securities of the Company to a limited number of sophisticated, accredited investors (the "Investors"). Such securities (the "Securities") may take the form of preferred or common stock of the Company or other equity-linked securities of the Company. Such placement shall be referred to as the "Transaction."

The selection of each of the Investors from a list of potential Investors and the number of shares sold to each of such Investors shall be mutually agreed to by the Company and CIBC World Markets. The number and price of the Securities the Company shall ultimately agree to sell, pursuant to the Purchase Agreements (defined below), are entirely within the Company's discretion.

- CIBC WORLD MARKETS' ROLE: CIBC World Markets hereby accepts the engagement described herein and, in that connection, agrees to:
 - (a) assist in preparing a private placement memorandum or other similar or related documents (the "Placement Documents") describing the Company, the Securities and the Transaction;
 - (b) review with the Company a list of the Investors to whom the Placement Documents may be provided;
 - (c) assist in the preparation of other communications to be used in placing the Securities, whether in the form of letter, circular, notice or otherwise;
 - (d) assist and advise the Company with respect to the negotiation of the sale of the Securities to the Investors in the Transaction; and
 - (e) use reasonable efforts to form and manage a syndicate of private placements agents, which shall include CIBC World Markets and another agent or other agents (the "Additional Agents") chosen by the Company and agreed to by CIBC, subject to the approval of the appropriate committees at CIBC World Markets.
- 3. DUE DILIGENCE: It is understood that CIBC World Markets' assistance in the Transaction will be subject to the satisfactory completion of such reasonable investigation and inquiry into the affairs of the Company as CIBC World Markets deems appropriate under the circumstances (such investigation hereinafter to be referred to as "Due Diligence") and the approval of CIBC World Markets' Commitment and Due Diligence Committees. CIBC World Markets shall have the right in its sole

discretion to terminate this Agreement if the outcome of the Due Diligence is not satisfactory to CIBC World Markets or if approval of the Commitment and Due Diligence Committees is not obtained ("Early Termination").

TERM; EXCLUSIVITY: This engagement will commence on the date hereof and terminate on the earlier to occur of (i) Early Termination, (ii) the Closing (as defined below) or (iii) the date on which a party receives written notice from the other party of termination of this engagement. During CIBC World Markets' engagement hereunder: (i) the Company will not, and will not permit its representatives to, other than in coordination with CIBC World Markets, contact or solicit institutions, corporations or other entities as potential purchasers of the Securities and (ii) the Company will not pursue any equity or debt financing transaction which would be in lieu of a Transaction. Furthermore, the Company agrees that during CIBC World Markets' engagement hereunder, all inquiries, whether direct or indirect, from prospective Investors will be referred to CIBC World Markets and will be deemed to have been contacted by CIBC World Markets in connection with the Transaction. The Company may reject any potential Investor if in its discretion, the Company believes that the inclusion of such Investor in the Company would be incompatible with the best interests of the Company. The Company shall not be obligated to sell the Securities or to accept any offer thereof, and the terms of such Securities and the final decision to issue the same shall be subject to the discretionary approval of the Company. Notwithstanding the foregoing or anything else to the contrary in this Agreement, the Company shall not be prohibited from (a) contacting or corresponding with any of its warrantholders or optionholders with respect to the exercise of warrants or options to purchase shares of common stock of the Company ("Derivative Exercises") and (b) negotiating or entering into any transaction pursuant to which the Company may sell, license to or otherwise transfer or assign rights to any of its real or intangible properties to or agree to develop any products, technology or intellectual property for or with a third party (a "Strategic Transaction"). CIBC World Markets agrees that no Derivative Exercise and no Strategic Transaction shall be deemed a "Transaction" for purposes of this Agreement and no "Transaction Fee" shall be payable with respect to any Derivative Exercise or Strategic

Either party may terminate this Agreement at any time. Upon any termination of this Agreement, the Company shall pay to CIBC World Markets, on behalf of the syndicate, all fees earned and reimburse CIBC World Markets for all reasonable expenses incurred, in accordance with Paragraphs 8 and 9 hereof, respectively. The Company agrees to pay CIBC World Markets any fees specified in Paragraph 8. Any obligation pursuant to this Paragraph 4 shall survive the termination of this Agreement.

No offers or sales of any securities of the same or similar class as the Securities will be made by the Company or any affiliate during the six-month period after the completion of the offering of the Securities in each case except in compliance with the registration requirements of the Securities Act of 1933, as amended (the "Securities Act"), or an exemption therefrom.

- 5. BEST EFFORTS: It is understood that CIBC World Markets' involvement in the Transaction is strictly on a best efforts basis and that the consummation of the Transaction will be subject to, among other things, market conditions
- INFORMATION: The Company shall furnish, or cause to be furnished, to CIBC World Markets all information requested by CIBC World Markets that is reasonably necessary for the purpose of rendering services hereunder (all such information being the "Information"). In addition, the Company agrees to make available to CIBC World Markets upon request from time to time the officers, directors, accountants, counsel and other advisors of the Company. The Company recognizes and confirms that CIBC World Markets (a) will use and rely on the Information, including the Placement Documents, and on information available from generally recognized public sources in performing the services contemplated by this Agreement without having independently verified the

same; (b) does not assume responsibility for the accuracy or completeness of the Placement Documents or the Information and such other information; and (c) will not make an appraisal of any of the assets or liabilities of the Company.

The Company represents and warrants to CIBC World Markets that: (i) all such Information, including the Placement Documents, any documents attached as exhibits thereto and/or incorporated by reference therein, and any communications prepared pursuant to paragraph 2(c) above will be true and accurate in all material respects and does not and will not contain any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements made, in the light of the circumstances under which they were made, not misleading; and (ii) any projected financial information or other forward-looking information which the Company provides to CIBC World Markets will be made by the Company in good faith, based on management's best estimates then available and based on facts and assumptions which the Company believes to be reasonable. Upon reasonable request, the Company will meet with CIBC World Markets or its representatives to discuss all information relevant for disclosure in the Placement Documents and will cooperate in any investigation undertaken by CIBC World Markets thereof, including any document included or incorporated by reference therein. CIBC World Markets agrees that it shall Incorporated by reference therein. CIBC world Markets agrees that it shall not distribute any Information or Placement Documents to any potential Investor without the approval of the Company to distribute such Information or Placement Documents. The Company agrees that if any Information furnished by it to CIBC World Markets in connection with this Agreement shall, in whole or in part, become materially inaccurate, misleading or incomplete during the term of CIBC World Markets' engagement hereunder, the Company shall promptly so advise CIBC World Markets in writing and correct any such inaccuracy or omission.

7. RESPONSIBILITIES, REPRESENTATIONS AND WARRANTIES:

- (a) The sale of Securities to any Investor will be made pursuant to a purchase agreement ("Purchase Agreement") between the Company and such Investor in substantially the form attached hereto as Exhibit A. Prior to the signing of any Purchase Agreement, officers of the Company with responsibility for financial affairs will be available to answer inquiries from prospective investors.
- (b) The selling price of the Securities to be issued and sold by the Company pursuant to the Purchase Agreements will be specified in writing by CIBC World Markets on behalf of the Company to the prospective investors prior to the execution of the Purchase Agreements, subject to the Company's approval.
- (c) Subsequent to the full execution of a Purchase Agreement, the Company shall perform its obligations under such Purchase Agreement. The Purchase Agreements will require the Company to file, promptly, and in any event within 45 days, after the closing of the sale of the Securities contemplated by the Purchase Agreements, (the "Closing") a registration statement with the Securities and Exchange Commission (the "SEC") for the resale from time to time of the Securities to be issued pursuant to such Purchase Agreements (the "Registration Statement"), and to use reasonable best efforts to have such registration statement declared effective by the SEC within 90 days of the Closing.
- (d) The Company (i) represents and warrants that the representations and warranties contained in the Purchase Agreements will be true and correct in all respects on the date of such Purchase Agreements and on the Closing date and (ii) agrees that CIBC World Markets shall be entitled to rely on such representations and warranties as if they were made directly to CIBC World Markets.
- (e) The Company agrees that the Company shall have sole responsibility for ensuring that the sale

of Securities contemplated by this Agreement shall be exempt from the registration requirements of the Securities Act, and will otherwise comply with the securities laws of any applicable country or other jurisdiction; provided, that CIBC World Markets shall have received the Company's advance approval, not to be unreasonably withheld, of all jurisdictions in which CIBC World Markets intends to offer or sell the Securities. The Company shall not take any action or permit to be taken any action on its behalf that would cause such sale of Securities to fail to (i) qualify for such an exemption, or (ii) otherwise comply with such securities laws. Each of Company and CIBC World Markets hereby represent, warrant and covenant to the other that the it has not, and agrees that it will not, directly or indirectly, engage in any form of general solicitation, general advertising or directed selling efforts in connection with the Transaction.

- (f) At the Closing, the Company will cause its independent public accountants to address and deliver to the Company and CIBC World Markets a letter or letters (which letters are frequently referred to as "Comfort Letters") dated as of the Closing, which letter or letters shall be in the form reasonably satisfactory to CIBC World Markets.
- (g) At the Closing, the Company will cause its counsel to address and deliver to the Company and CIBC World Markets an opinion reasonably satisfactory to CIBC World Markets dated as of the Closing, and substantially in the form attached hereto as Exhibit B with respect to such matters as are customarily opined to in transactions similar to the Transaction which CIBC World Markets and its counsel shall reasonably request, including an opinion that the offering and sale of the Securities are not required to be registered under the Securities Act. In rendering such opinion, such counsel may rely upon the representations and warranties of the purchasers contained in the Purchase Agreements and upon certificates from officers of the Company as to factual matters.
- (h) The Company acknowledges that the Purchase Agreements will require the Company's counsel to deliver one or more opinions to the Investors. The Company agrees that CIBC World Markets shall be entitled to rely on any opinions delivered to the Investors in connection with the Transaction and resale of the Securities under the Registration Statement.
- (i) For a period of ninety (90) days from the effective date of the Registration Statement, the Company will not, without the prior written consent of CIBC World Markets, sell, contract to sell or otherwise dispose of or issue any securities of the Company, except pursuant to previously issued options, any agreements providing for anti-dilution or other stock purchase or share issuance rights in existence on the date hereof, any employee benefit or similar plan of the Company in existence on the date hereof or duly adopted hereafter, or any technology license agreement, strategic alliance or joint venture in existence on the date hereof or which the Company may enter into hereafter.
- (j) Each director and executive officer of the Company and each stockholder of the Company listed on Exhibit C-1 shall, prior to the Closing, have delivered to CIBC World Markets his or her enforceable written lock-up agreement in the form attached hereto as Exhibit C-2.
- (k) At the Closing, CIBC World Markets shall receive a certificate, addressed to it and dated the Closing date, of the chief executive or chief operating officer and the chief financial officer of the Company to the effect that: (i) the representations, warranties and agreements of the Company in the Purchase Agreement were true and correct when made and are true and correct as of the Closing date; (ii) the Company has performed all covenants and agreements and satisfied all conditions contained in the Purchase Agreement; (iii) they have carefully examined the Placement Documents and, in their opinion (A) the Placement Documents did not include any untrue statement of a material fact

and did not omit to state a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading, and (B) no event has occurred which should have been set forth in a supplement or otherwise required an amendment to the Placement Documents; and (iv) no stop order suspending the effectiveness of any registration statement of the Company has been issued and, to their knowledge, no proceedings for that purpose have been instituted or are pending under the Securities Act.

- (1) The Company shall furnish or cause to be furnished to CIBC World Markets at Closing copies of such additional certificates, opinions and other documents as CIBC World Markets shall reasonably request.
- (m) The Company agrees it will not consummate the sale of the Securities unless it delivers or causes to be delivered the terms described in paragraphs (f), (g), (j), (k) and (l) above to CIBC World Markets at the Closing.
- FEES: As compensation for the services to be rendered by CIBC World Markets hereunder, the Company will pay CIBC World Markets, at the Closing or any other closing of the sale of any securities during the term of this agreement other than pursuant to a Derivative Exercise or a Strategic Transaction, from the proceeds of the sale of the Securities, a transaction fee (the "Transaction Fee") equal to 7.0% of the gross proceeds raised from the sale of the Securities; provided, however, that CIBC World Markets shall pay 20% of the Transaction Fee to the Additional Agents (in accordance with standard syndicate settlement procedures) allocated amongst the Additional Agents pursuant to written instructions from the Company to CIBC World Markets, which allocation shall be determined at the discretion of the Company. Further, the Company will pay CIBC World Markets the Transaction Fee (a "Tail Fee"), if within twelve months after the termination of this Agreement, the Company reaches an agreement for the sale of the Securities to any Investors which CIBC World Markets previously solicited or sought to solicit (but were not permitted to do so due to the Company's rejection of such proposed Investors pursuant to Section 4 hereof) on its behalf, provided, however, that if Early Termination occurs or if the Closing shall not have occurred and the Company terminates this Agreement after December 31, 2005, then the Company shall have no obligation to pay CIBC World Markets a Tail Fee with respect to any sale of Securities after such termination. Upon the Company's request, at the termination of this Agreement, CIBC World Markets will supply the Company with a list of Investors which CIBC World Markets has solicited including any Investors which first contacted the Company or sought to solicit (but were not permitted to do so due to the Company's rejection of such proposed Investors pursuant to Section 4 hereof) on its behalf. The Company's obligations hereunder shall survive the termination of this Agreement.
- 9. EXPENSE REIMBURSEMENT: The Company agrees to reimburse CIBC World Markets for all of its reasonable out-of-pocket expenses in connection with the performance of its activities under the terms of this Agreement. Reasonable out-of-pocket expenses include, but are not limited to, costs such as printing, telephone, telex, courier service, direct computer expenses, accommodations and travel. The Company will reimburse CIBC World Markets for fees and expenses of legal counsel employed by and for CIBC World Markets, if any, in connection with this Agreement. All such fees, expenses and costs shall be payable at the earlier of termination of this Agreement or Closing. The parties' obligations under this paragraph shall survive the termination of this Agreement.
- 10. INDEMNITY: In addition to the fees and reimbursement of expenses provided for above, the parties agree to the indemnification and contribution provisions set forth as Annex A hereto, which are incorporated herein by reference as if fully set forth below. The parties' obligations under this paragraph shall survive the termination of this Agreement.
- 11. GOVERNING LAWS: This Agreement will be governed by and construed in accordance with the laws of the State of New York applicable to agreements made and to be fully performed therein. The

Company irrevocably submits to the jurisdiction of any court of the State of New York located in the City and County of New York or in the United States District Court for the Southern District of New York for the purpose of any suit, action or other proceeding arising out of this Agreement or our engagement hereunder.

Each of the Company and CIBC World Markets hereby waives any right it may have to a trial by jury in respect of any claim brought by or on behalf of either party based upon, arising out of or in connection with this Agreement, our engagement hereunder or the transactions contemplated hereby.

- RIGHT OF FIRST REFUSAL: In consideration for CIBC World Markets' agreement 12. to act as lead placement agent in connection with the Transaction, the Company hereby grants CIBC World Markets a right of first refusal to serve as the Company's exclusive financial advisor and investment banker if in connection with any M&A and/or other financial transaction (other than customary commercial bank lending) the Company shall determine, in its sole discretion, to engage a financial advisor or investment banker to provide services in connection with such transaction. Such right of first refusal shall expire 12 months after the Closing. In the event the Company advises CIBC World Markets that it desires to engage a financial advisor or an investment banker in connection with any M&A and/or other financial transaction (other than customary commercial bank lending), the Company and CIBC World Markets will negotiate in good faith the terms of CIBC World Markets' engagement in a separate agreement, which agreement would set forth, among other matters, compensation for CIBC World Markets based upon customary fees for the services provided. The Company's obligation under this Paragraph 12 shall become effective only if Closings shall occur pursuant to which the Company shall receive aggregate gross proceeds of at least \$15,000,000 and shall survive the termination of this Agreement.
- 13. CONFIDENTIALITY: Except as required by law, this Agreement and the services and advice to be provided by CIBC World Markets hereunder, shall not be disclosed to third parties without CIBC World Markets' prior written permission. Notwithstanding the foregoing, but subject to the reasonable approval of the Company, CIBC World Markets shall be permitted to advertise the services it provided in connection with the private placement subsequent to the consummation of the private placement. Such expense shall not be reimbursable under paragraph 9 hereof.
- 14. NO BROKERS: The Company represents and warrants to CIBC World Markets that other than the Additional Agents there are no brokers, representatives or other persons which have an interest in compensation due to CIBC World Markets from any transaction contemplated herein or which would otherwise be due any fee, commission or remuneration upon consummation of any Transaction.
- 15. AUTHORIZATION: The Company and CIBC World Markets represent and warrant that each has all requisite power and authority to enter into and carry out the terms and provisions of this Agreement and the execution, delivery and performance of this Agreement does not breach or conflict with any agreement, document or instrument to which it is a party or bound, and each such party, with respect only to itself, further represents and warrants that this Agreement has been duly and validly authorized, executed and delivered by and constitutes and will constitute legal, valid and binding obligations enforceable against itself in accordance with the terms hereof, except as the enforceability thereof may be limited by bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting the enforcement of creditors' rights generally and by general equitable principles.
- 16. ANTI-MONEY LAUNDERING: To help the United States government fight the funding of terrorism and money laundering activities, the federal law of the United States requires all financial institutions to obtain, verify and record information that identifies each person with whom they do business. This means we must ask you for certain identifying information, including a government-issued identification number (e.g., a U.S. taxpayer identification number) and such other information or documents that we consider appropriate to verify your identity, such as certified articles of

incorporation, a government-issued business license, a partnership agreement or a trust instrument.

- 17. NO FIDUCIARY RELATIONSHIP; BENEFICIARIES: It is understood that CIBC World Markets is engaged hereunder solely to provide the services described above to the Company and that CIBC World Markets is not acting as an agent or a fiduciary of, and shall have no duties or liabilities to, the equity or debt holders of the Company or any third party in connection with its engagement hereunder, all of which are expressly waived. No one other than the Company is authorized to rely upon the engagement of CIBC World Markets hereunder or any statements, advice, opinions or conduct by CIBC World Markets. The Company acknowledges and agrees that CIBC World Markets has no authority to bind the Company. The Company further acknowledges and agrees that CIBC World Markets is not engaged hereunder to underwrite or purchase any securities or otherwise provide any financing.
- 18. MISCELLANEOUS: This Agreement constitutes the entire understanding and agreement between the Company and CIBC World Markets with respect to the subject matter hereof and supersedes all prior understanding or agreements between the parties with respect thereto, whether oral or written, express or implied. Any amendments or modifications must be executed in writing by both parties. It is understood and agreed that CIBC World Markets' services hereunder will not include providing any tax advice or developing any tax strategies for the Company. This Agreement and all rights, liabilities and obligations hereunder shall be binding upon and inure to the benefit of each party's successors but may not be assigned without the prior written approval of the other party. This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original, but such counterparts shall, together, constitute only one instrument. The descriptive headings of the Paragraphs of this Agreement are inserted for convenience only, do not constitute a part of this Agreement and shall not affect in anyway the meaning or interpretation of this Agreement.

If all the foregoing is acceptable to you, please so indicate by signing in the space provided below and returning a signed copy of this letter to us for our records.

CIBC World Markets is delighted to accept this engagement and looks forward to working with you. Please confirm that the foregoing correctly sets forth our agreement by signing the enclosed duplicate of this letter in the space provided and returning it, whereupon this letter shall constitute a binding agreement as of the date first above written.

Very truly yours,

CIBC World Markets Corp.

BY:

dichael Brinkman

Michael Brinkman Managing Director

ACCEPTED AND AGREED TO AS OF THE ABOVE DATE:

ADVENTRX Pharmaceuticals, Inc.

BY:

Evan M. Levine

President & CEO

The Company agrees to indemnify and hold harmless CIBC World Markets and its affiliates and their respective present and former directors, officers, employees, agents and controlling persons (each such person, including CIBC World Markets, an "Indemnified Party") to the extent fully permitted by law from and against any losses, claims, damages and liabilities, joint or several (collectively, the "Damages"), to which such Indemnified Party may become subject in connection with or otherwise relating to or arising from (i) any transaction contemplated by this letter agreement or the engagement of or performance of services by an Indemnified Party thereunder or (ii) an untrue statement or an alleged untrue statement of a material fact or the omission or alleged omission to state a material fact necessary in order to make a statement not misleading in light of the circumstances under which it was made, and will reimburse each Indemnified Party for all fees and expenses (including the reasonable fees and expenses of counsel) (collectively, "Expenses") as incurred in connection with investigating, preparing, pursuing or defending any threatened or pending claim, action, proceeding or investigation (collectively, the "Proceedings") arising therefrom, whether or not such Indemnified Party is a formal party to such Proceeding, and in enforcing this letter agreement; provided, that the Company will not be liable to any such Indemnified Party to the extent that any Damages are found in a final judgment of a court of competent jurisdiction (which judgment is not appealed or is not appealable) to have resulted primarily from the gross negligence or willful misconduct of the Indemnified Party seeking indemnification hereunder. The Company also agrees that no Indemnified Party will have any liability (whether direct or indirect, in contract, tort or otherwise) to the Company or any person asserting claims on behalf of the Company arising out of or in connection with any transactions contemplated by this letter agreement or the engagement of or performance of services by any Indemnified Party thereunder except to the extent that any Damages are found in a final judgment of a court of competent jurisdiction (which judgment is not appealed or is not appealable) to have resulted primarily from the gross negligence or willful misconduct of the Indemnified Party.

If for any reason other than in accordance with this letter agreement, the foregoing indemnity is unavailable to an Indemnified Party or insufficient to hold an Indemnified Party harmless, then the Company will contribute to the amount paid or payable by an Indemnified Party as a result of such Damages (including all Expenses incurred) in such proportion as is appropriate to reflect the relative benefits to the Company and/or its stockholders on the one hand, and CIBC World Markets on the other hand, in connection with the matters covered by this letter agreement or, if the foregoing allocation is not permitted by applicable law, not only such relative benefits but also the relative faults of such parties as well as any relevant equitable considerations; provided, that the Company will not be liable to contribute to the amount paid or payable by any such Indemnified Party to the extent that any Damages are found in a final judgment of a court of competent jurisdiction (which judgment is not appealed or is not appealable) to have resulted primarily from the gross negligence or willful misconduct of the Indemnified Party seeking contribution hereunder. The Company agrees that for purposes of this paragraph the relative benefits to the Company and/or its stockholders and CIBC World Markets in connection with the matters covered by this letter agreement will be deemed to be in the same proportion that the total value paid or received or to be paid or received by the Company and/or its stockholders in connection with the Transactions contemplated by to this letter agreement, whether or not consummated, bears to the fees paid to CIBC World Markets under this letter agreement; provided, that in no event will the total contribution of all Indemnified Parties to all such Damages exceed the amount of fees actually received and retained by CIBC World Markets under this letter agreement (excluding any amounts received by CIBC World Markets as reimbursement of expenses). Relative fault shall be determined by reference to, among other things, whether any untrue statement or omission or any conduct relates to information provided by the Company or other conduct by the Company (or its employees or other agents) on the one hand, or by CIBC World Markets, on the

The Company agrees not to enter into any waiver, release or settlement of any Proceeding (whether or not CIBC World Markets or any other Indemnified Party is a formal party to such Proceeding) in respect of which indemnification may be sought hereunder without the prior written consent of CIBC World Markets (which consent will not be unreasonably withheld), unless such waiver, release or settlement (i) includes an unconditional release of CIBC World Markets and each Indemnified Party from all liability arising out of such Proceeding and (ii) does not contain any factual or legal admission by or with respect to any Indemnified Party or any adverse statement with respect to the character, professionalism, expertise or reputation of any Indemnified Party or any action or inaction of any Indemnified Party.

The indemnity, reimbursement and contribution obligations of the Company hereunder will be in addition to any liability which the Company may have at common law or otherwise to any Indemnified Party and will be binding upon and inure to the benefit of any successors, assigns, heirs and personal representatives of the Company or an Indemnified Party. The provisions of this Annex will survive the modification or termination of this letter agreement.

EXHIBIT C-1 PERSONS PROVIDING LOCK-UP AGREEMENTS

Evan Levine
M. Ross Johnson, Ph.D.
Carrie E. Carlander
Joan M. Robbins
Brian Culley
Cellia Habita
Michael M. Goldberg, M.D.
Mark J. Pykett, V.M.D., Ph.D.
Mark Bagnall, CPA

CERTIFICATION PURSUANT TO RULES 13A-14(A) AND 15D-14(A) UNDER THE SECURITIES EXCHANGE ACT OF 1934 AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

- I, Evan Levine, certify that:
- 1. I have reviewed this quarterly report on Form 10-Q of ADVENTRX
 Pharmaceuticals, Inc. (the "Company");
- 2. Based on my knowledge, this 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 report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this 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 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-15(e) and 15d-15(e)) 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 report is being prepared;
 - b. Evaluated the effectiveness of the Company's disclosure controls and procedures and presented in this 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
 - c. Disclosed in this report any change in the Company's internal control over financial reporting that occurred during the Company's most recent fiscal quarter (the Company's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting; and
- 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 the Company's board of directors (or persons performing the equivalent functions):
 - a. All significant deficiencies and material weaknesses in the design or operation of internal controls 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.

Date: August 12, 2005

/s/ EVAN LEVINE
-----Evan Levine
Chief Executive Officer and President

CERTIFICATION PURSUANT TO RULES 13A-14(A) AND 15D-14(A) UNDER THE SECURITIES EXCHANGE ACT OF 1934 AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

- I, Carrie Carlander, certify that:
- 1. I have reviewed this quarterly report on Form 10-Q of ADVENTRX
 Pharmaceuticals, Inc. (the "Company");
- 2. Based on my knowledge, this 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 report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this 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 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-15(e) and 15d-15(e)) 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 report is being prepared;
 - b. Evaluated the effectiveness of the Company's disclosure controls and procedures and presented in this 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
 - c. Disclosed in this report any change in the Company's internal control over financial reporting that occurred during the Company's most recent fiscal quarter (the Company's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting; and
- 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 the Company's board of directors (or persons performing the equivalent functions):
 - a. All significant deficiencies and material weaknesses in the design or operation of internal controls 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.

Date: August 12, 2005

CERTIFICATION OF CEO AND CFO FURNISHED PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-Q of ADVENTRX Pharmaceuticals, Inc. (the "Company") for the quarterly period ended June 30, 2005 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), each of Evan Levine, Chief Executive Officer and President of the Company, and Carrie Carlander, Chief Financial Officer, Treasurer and Vice President, Finance, 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.

Date: August 12, 2005 /s/ EVAN LEVINE

Evan Levine

Chief Executive Officer and President

Date: August 12, 2005 /s/ CARRIE CARLANDER

. . . .

Carrie Carlander Chief Financial Officer, Treasurer and Vice President, Finance

This certification accompanies this Report pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 and shall not, except to the extent required by the Sarbanes-Oxley Act of 2002, or otherwise required, be deemed filed by the Company for purposes of Section 18 of the Securities Exchange Act of 1934, as amended.