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ARENA PHARMACEUTICALS, INC. (ARNA; \$3.64)

AFFIRM "BUY" RATING ON COMMON STOCK, NEW ONE-YEAR \$8 DILUTED PRICE TARGET

Arena Pharmaceuticals Submits Lorcaserin's NDA

Arena Pharmaceuticals has submitted a new drug application (NDA) to the FDA, seeking approval for its lead compound, Lorcaserin, in the treatment of obesity. This is an important milestone for Arena. Two of the three Phase III Lorcaserin trials – BLOOM and BLOSSOM – serve as the primary data for the NDA submission. A third clinical trial – BLOOM-DM – is expected to be completed in 2H10, with its results to be filed as a supplement to the primary NDA. We continue to believe that Lorcaserin is strongly grounded in basic science, and the available clinical trial data are robust. We expect the FDA will ultimately approve Lorcaserin in late 2010 for the treatment of obesity, allowing its launch and commercialization thereafter. Lorcaserin remains un-partnered.

Some investors have wondered if the BLOOM data show strong enough weight loss effects to allow FDA approval; we believe this will be so. BLOOM demonstrated a 4.8% weight loss difference between Lorcaserin users (52 weeks) and placebo. BLOSSOM confirmed that Lorcaserin led to >5% weight loss in 63% of treated patients. Furthermore, those patients who were most overweight appeared to respond most aggressively, with an average 16% weight loss. Together, the entire Phase III clinical trial program will allow the FDA to view data from 18 trials and more than over 8,500 patients treated of whom more than 7,200 have been treated and followed for two years. This is an impressive application, and in our opinion, shows consistent weight loss effects among Lorcaserin users. Finally, we expect the BLOOM-DM data (with a focus on diabetic patients), when presented, to be similarly effective. Diabetic patients routinely also suffer from obesity, hypertension and abnormal lipid profiles. It is our expectation that the weight loss induced by Lorcaserin in the BLOOM-DM trial will show highly positive effects on these secondary factors beyond simply weight reduction. And, while BLOOM-DM is a supplement to the primary FDA application, we expect the BLOOM-DM data to be of particular physician focus.

Safety was long the primary concern for Lorcaserin during early Phase I and II studies. Would Lorcaserin cause heart valve abnormalities? This last year has put the 'safety' questions to rest – with many fewer investors or physicians now expressing concern in this regard. We find that the data support Lorcaserin as "safe." Rates of valvulopathy have proven similar to that observed in placebo treated patients, and the scientific rationale for why valvulopathy should not occur is now fully supported by clinical data. Interesting, we are quick to reflect back five years ago and remind investors that efficacy was largely "assumed to be the case", given Lorcaserin's similarity to blockbuster drugs fenfluramine and dexfenfluramine. How times have changed--safety is no longer of primary focus, now being on efficacy.

We encourage investors to look broadly at all Arena has accomplished, as we believe the weight of positive data is impressive and that Lorcaserin will be approved by the FDA in late 2010.

Capitalization:	Market ⁽¹⁾	
	Price	Value
Long-Term Financing Obligations		\$ 77.6
Siegried Note ⁽¹⁾		9.1
Deerfield Note ⁽²⁾		<u>90.0</u>
Total Debt Obligations		176.7
Common Stock ⁽³⁾	\$ 3.64	337.5
Cash, Equiv. & Mrkt'ble Securities		<u>(143.5)</u>
Current Enterprise Value		<u>\$ 514.2</u>

(1) Reflects manufacturing relationship.
(2) Carried on balance sheet as \$44 million plus \$46 million debt discount. Deerfield received 28 million warrants exercisable at \$5.42/share, may elect until June 17, 2011 to loan an additional \$20 million to Arena and has an amortization Schedule of \$20 million in July 2011, \$30 million in July 2012 and \$40 million in June 2013.
(3) 52-week ARNA High/Low: \$7.42, \$2.26. Excludes Deerfield and two Series B warrants: 1.2mm exercisable at \$6.98/share and 0.9 mm exercisable at \$14.03/share.

Please find important disclosures on the final page of this document.



Most certainly many on the Street had anticipated that Arena would have partnered Lorcasearin prior to this point. It is our belief that Arena has many big-pharma companies expressing interest in Lorcasearin, and discussions are ongoing. We believe that a partnership is by no means assured prior to the FDA decision ahead – with many potential partners more likely to wait for a ‘sure thing’ prior to deal making—and with the tension being the level of economics retained by Arena. Arena has previously confirmed they are willing to launch Lorcasearin themselves, if an “acceptable” partnering terms are not negotiated. We would strongly prefer to see Arena partner the commercial launch of Lorcasearin. Despite a Q3 2009 capital raise, we would anticipate a cash shortfall in late 2010 in the event that a commercial partnership has not been formed. At the same time, we do not view liquidity to be a meaningful risk factor whether or not Arena partners Lorcasearin, expecting the Company to continue to have access to the capital markets ahead of the FDA approval decision.

Lorcasearin remains, in our mind, the full story over the coming year, and our future valuation remains based principally on our assessment of Lorcasearin. Arena’s share price recently was pressured on the announcement that Merck and Co., the development partner for MK-1903 (a niacin receptor agonist) being studied for the treatment of dyslipidemia, plans to discontinue the effort. Merck specifically stated that safety was not the issue underlying the decision. This program was the second most mature one (at Phase 2a) in Arena’s pipeline.

CRT PROJECTIONS - FUTURE ENTERPRISE VALUATION

(Amounts in millions, except per share data)

	Peak Sales ⁽¹⁾	ARNA Ownership	Peak ARNA Sales	Peak Year	Multiple	Discount	Value at 12/31/10
Lorcasearin	\$ 1,000	100%	\$ 1,000	2015	4.0 x	30%	\$ 1,077.3
Early Stage Programs							25.0
							1,102.3
						Projected Cash Shortfall to Approval	(75.0)
						Cash from Theoretical Exercise of Warrants and Options	165.1
						Total Enterprise Value	\$ 1,192.4
						Estimated Lease Oblig. and Debt	\$ 176.7
						Projected Diluted Shares ⁽²⁾	123.2
						Price Target	\$8.00

(1) For Lorcasearin, assumes monthly pricing in the US and EU of \$175 and \$140, respectively, at 2011 launch, with prices to grow at a rate of 5% / year. We assume patients will be treated for an average of 7 months. Peak patients treated estimate is 0.5 million in the US and 0.3 million in the EU.

(2) Projected future shares outstanding includes balance of 92.7 million shares at 11/5/09, plus 30.4 million from dilutive options and warrants.

In summary, our view of available clinical trial data suggests Lorcasearin is an impressive product and, we believe, will ultimately be approved by the FDA. We continue to echo our initial beliefs expressed over three years ago when our research coverage was initiated. The market for effective and safe weight loss drugs is clearly enormous – it remains our belief that Arena’s Lorcasearin will prove to be a strong competitor in that market.

SUMMARY HISTORICAL OPERATING DATA ⁽¹⁾

(Amounts in millions, except per share data)

Operating Summary	Fiscal Years Ended					Three Months Ended												
	12/31/04	12/31/05	12/31/06	12/31/07	12/31/08	9/30/06	12/31/06	3/31/07	6/30/07	9/30/07	12/31/07	3/31/08	6/30/08	9/30/08	12/31/08	3/31/09	6/30/09	9/30/09
Collaborative Agrmt Revenue	\$ 13.7	\$ 23.2	\$ 30.6	\$ 19.3	\$ 2.4	\$ 4.4	\$ 4.7	\$ 4.9	\$ 4.8	\$ 5.0	\$ 4.6	\$ 0.6	\$ 0.6	\$ 0.4	\$ 0.7	\$ 1.2	\$ 0.9	\$ 0.9
Contract Research & Mfg. Services Rev.	-	-	-	-	7.4	-	-	-	-	-	-	2.0	2.0	1.4	2.0	1.4	1.5	1.7
Total Revenue	13.7	23.2	30.6	19.3	9.8	4.4	4.7	4.9	4.8	5.0	4.6	2.6	2.7	1.9	2.7	2.7	2.4	2.6
Cost of Manufacturing Services	-	-	-	-	8.5	-	-	-	-	-	-	-	-	1.7	2.2	1.4	1.6	1.7
Cost of Contract Revenue	-	-	-	-	-	-	-	-	-	-	-	2.3	2.3	-	-	-	-	-
Research & Development Exp.	57.7	79.5	103.4	149.5	204.3	22.7	38.1	35.8	40.9	32.2	40.7	47.6	56.4	47.7	53.3	42.6	24.2	22.1
General and Admin. Exp.	10.4	12.9	18.5	26.6	30.5	3.9	5.2	4.9	6.8	7.9	6.9	8.9	7.2	5.9	8.6	7.6	5.7	5.4
Amortization of Acquired Technology	3.3	2.0	1.5	1.5	2.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.6	0.6	0.6	0.6
Total Operating Expenses	71.5	94.4	123.4	177.6	245.7	27.0	43.7	41.1	48.1	40.5	48.0	59.1	66.2	55.7	64.6	52.2	32.1	29.9
EBIT	(57.8)	(71.1)	(92.8)	(158.3)	(235.9)	(22.6)	(39.0)	(36.2)	(43.3)	(35.4)	(43.4)	(56.5)	(63.6)	(53.9)	(61.9)	(49.5)	(29.7)	(27.2)
Interest Income	2.4	4.4	12.7	18.9	-	3.3	15.5	4.8	4.8	4.7	3.0	3.4	1.8	1.3	-	0.2	-	0.1
Interest Expense	(1.9)	(1.8)	(1.8)	(3.7)	(1.6)	(0.5)	(3.3)	(0.5)	(0.2)	(1.6)	-	(1.5)	(1.5)	(1.4)	(0.3)	(1.7)	(5.0)	(7.3)
Loss / (Gain) on Sale of Investments	0.1	(0.0)	(0.0)	(0.1)	-	-	(0.1)	-	-	-	-	-	-	-	-	0.4	-	2.5
Other Income (Expense)	(0.8)	0.7	(4.3)	0.1	-	(0.0)	(9.0)	(0.1)	(0.0)	0.1	-	0.1	(1.9)	(1.7)	-	0.1	(3.3)	(2.8)
Total Other Income/(Expense)	(0.2)	3.2	6.6	15.1	(1.6)	2.9	3.1	4.3	4.7	3.2	3.0	2.1	(1.7)	(1.8)	(0.3)	(1.1)	(8.3)	(7.6)
Net Income/(Loss)	(58.0)	(67.9)	(86.2)	(143.2)	(237.5)	(19.7)	(35.9)	(31.9)	(38.6)	(32.3)	(40.4)	(54.5)	(65.3)	(55.6)	(62.2)	(50.6)	(38.0)	(34.8)
Div. on Redeemable Conv. Pref. Stk.	(1.4)	(1.8)	(2.0)	(2.1)	(1.9)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.5)	(0.6)	(0.3)	-	-	-
Accretion of Discount on Pfd. Stk.	(1.9)	(7.4)	-	-	-	(0.0)	-	-	-	-	-	-	-	-	-	-	-	-
Net Income/(Loss)	\$ (61.3)	\$ (77.1)	\$ (88.3)	\$ (145.3)	\$ (239.5)	\$ (20.3)	\$ (36.4)	\$ (32.4)	\$ (39.1)	\$ (32.8)	\$ (40.9)	\$ (55.0)	\$ (65.8)	\$ (56.2)	\$ (62.5)	\$ (50.6)	\$ (38.0)	\$ (34.8)
Diluted Shares Outstanding	25.5	34.4	46.8	62.8	73.8	47.2	48.1	60.7	60.9	61.0	68.4	73.6	73.8	73.9	74.0	74.2	79.2	91.0
Diluted EPS	\$ (2.40)	\$ (2.24)	\$ (1.89)	\$ (2.31)	\$ (3.24)	\$ (0.43)	\$ (0.76)	\$ (0.53)	\$ (0.64)	\$ (0.54)	\$ (0.60)	\$ (0.75)	\$ (0.89)	\$ (0.76)	\$ (0.84)	\$ (0.68)	\$ (0.48)	\$ (0.38)
Free Cash Flow																		
EBIT	\$ (57.8)	\$ (71.1)	\$ (92.8)	\$ (158.3)	\$ (235.9)	\$ (22.6)	\$ (39.0)	\$ (36.2)	\$ (43.3)	\$ (35.4)	\$ (43.4)	\$ (56.5)	\$ (63.6)	\$ (53.9)	\$ (61.9)	\$ (49.5)	\$ (29.7)	\$ (27.2)
+ Deprec. & Amort. Exp.	9.0	8.4	8.9	9.4	14.0	2.3	2.3	2.0	2.8	2.3	2.3	3.4	3.5	3.5	3.5	3.4	3.3	3.3
EBITDA	(48.8)	(62.8)	(83.9)	(148.9)	(221.9)	(20.3)	(36.7)	(34.2)	(40.5)	(33.1)	(41.1)	(53.1)	(60.1)	(50.4)	(58.4)	(46.1)	(26.3)	(23.9)
Stock-based Compensation	1.5	0.4	5.1	8.8	8.5	1.4	1.3	1.9	2.2	2.9	1.8	2.4	1.9	1.7	2.4	2.0	1.7	1.6
- Capital Expenditures, net	(4.4)	(3.6)	(14.2)	(17.4)	(42.8)	(3.2)	(2.9)	(2.2)	(2.2)	(3.7)	(9.3)	(24.0)	(9.2)	(5.5)	(4.0)	(2.3)	(0.0)	(1.2)
Free Cash Flow	(51.8)	(65.9)	(93.1)	(157.5)	(256.2)	(22.1)	(38.3)	(34.5)	(40.4)	(34.0)	(48.6)	(74.7)	(67.4)	(54.2)	(59.9)	(46.4)	(24.6)	(23.5)
Est. Net Cash Interest Inc. / (Exp.)	0.5	2.6	10.9	15.1	(1.6)	2.9	12.2	4.3	4.7	3.1	3.0	2.0	0.2	(0.1)	(0.3)	(1.5)	(5.0)	(3.5)
Change in Inven., Rec's & Payables	(20.2)	25.3	8.4	6.9	18.5	2.7	10.1	(2.9)	5.9	2.5	1.5	7.9	4.1	(6.2)	12.7	(6.2)	(15.7)	(6.4)
Equity Issuance ⁽²⁾	4.1	49.3	336.9	106.7	1.7	0.5	165.9	1.3	0.7	0.8	103.9	0.5	0.4	0.5	0.3	0.3	14.9	50.0
Debt Issuance/(Repayment), Net	(0.0)	-	-	48.0	(0.2)	-	-	-	48.0	(0.0)	-	(0.0)	0.9	(0.1)	(0.1)	14.8	(0.1)	86.7
Proceeds from Warrants & Pfd. Stk.	-	11.5	8.3	-	(55.8)	-	-	-	-	-	-	-	-	-	(55.8)	-	-	-
Change in Deferred Revenue	26.1	(9.5)	(11.1)	(9.0)	-	(2.4)	(3.8)	(0.9)	(2.6)	(3.4)	(2.1)	-	-	-	-	-	-	-
Other	0.6	1.2	15.2	(0.9)	5.6	0.7	1.3	(9.2)	(1.6)	(0.9)	1.3	(0.2)	0.2	-	1.1	(0.8)	(0.1)	0.7
Change in Cash & Equivs.	\$ (40.7)	\$ 14.6	\$ 275.5	\$ 9.4	\$ (288.1)	\$ (17.7)	\$ 147.4	\$ (41.9)	\$ 14.7	\$ (31.9)	\$ 59.1	\$ (64.5)	\$ (61.5)	\$ (60.1)	\$ (102.0)	\$ (39.9)	\$ (30.7)	\$ 103.9
Begin. Cash, Equiv. & ST Inv.	\$ 154.0	\$ 113.3	\$ 113.3	\$ 388.8	\$ 398.2	\$ 268.5	\$ 250.8	\$ 398.2	\$ 356.3	\$ 371.0	\$ 339.1	\$ 398.2	\$ 333.6	\$ 272.2	\$ 212.1	\$ 110.1	\$ 70.3	\$ 39.6
Ending Cash, Equiv. & ST Inv.	113.3	127.9	388.8	398.2	110.1	250.8	398.2	356.3	371.0	339.1	398.2	333.6	272.2	212.1	110.1	70.3	39.6	143.5

(1) Numbers may not foot due to rounding. Italicized numbers are estimates.

(2) 1/27/06 (10.6 million shares for net \$169 million); 12/13/06 (13.2 million shares for net \$165 million); In 11/2007, sold 11.0 million shares at \$9.91 per share for net \$103 million.

SUMMARY HISTORICAL BALANCE SHEET DATA^(*)

(\$'s in millions)

Balance Sheet @	12/31/05	3/31/06	6/30/06	9/30/06	12/31/06	3/31/07	6/30/07	9/30/07	12/31/07	3/31/08	6/30/08	9/30/08	12/31/08	3/31/09	6/30/09	9/30/09
<i>Assets:</i>																
Cash & Equivalents	\$ 73.8	\$ 235.7	\$ 212.9	\$ 194.9	\$ 373.0	\$ 325.5	\$ 328.7	\$ 303.9	\$ 387.0	\$ 301.4	\$ 229.5	\$ 167.1	\$ 73.3	\$ 62.5	\$ 39.6	\$ 122.0
ST investments, available-for-sale	54.2	55.4	55.6	55.9	15.8	30.8	42.3	35.3	11.2	32.3	42.7	45.1	36.8	7.8	-	21.5
Accounts Receivable	0.8	2.0	1.6	1.5	0.3	0.4	0.8	0.8	1.9	2.4	2.5	1.6	1.8	1.8	1.7	1.6
Other Current Assets	5.7	7.7	8.0	9.8	10.6	11.3	9.9	12.7	9.2	8.9	8.6	5.5	5.0	3.9	4.7	4.0
Total Current Assets	134.5	300.9	278.1	262.1	399.7	368.0	381.7	352.6	409.2	345.0	283.3	219.3	117.0	76.0	45.9	149.1
Land, Property & Equipment, Net	49.6	49.0	54.2	55.5	56.5	56.6	56.8	58.5	65.9	92.7	98.3	98.9	102.7	99.0	97.1	96.7
Acquired Technology	7.9	7.6	7.2	6.8	6.4	6.0	7.5	5.3	4.9	19.0	18.0	16.2	16.3	14.9	20.5	15.0
Other Noncurrent Assets	6.0	7.2	7.2	6.8	5.9	6.1	6.1	8.9	7.4	7.8	7.6	5.7	5.3	5.6	-	6.5
Total Assets	\$ 198.1	\$ 364.6	\$ 346.8	\$ 331.2	\$ 468.5	\$ 436.8	\$ 452.1	\$ 425.3	\$ 487.5	\$ 464.5	\$ 407.2	\$ 340.1	\$ 241.3	\$ 195.5	\$ 163.5	\$ 267.3
<i>Liab. and Shareholders' Equity:</i>																
Accounts Payable & Accrued Exp.	\$ 8.3	\$ 10.8	\$ 7.3	\$ 11.9	\$ 20.8	\$ 19.1	\$ 23.7	\$ 29.3	\$ 26.9	\$ 35.6	\$ 41.4	\$ 29.0	\$ 43.0	\$ 39.8	\$ 26.8	\$ 13.9
Accrued Compensation	2.0	1.4	1.5	1.4	2.2	1.8	2.0	2.0	3.1	2.7	2.9	2.9	3.8	-	-	3.0
Deferred Revenue	15.2	15.1	15.1	15.1	13.1	12.1	9.6	6.1	-	-	-	-	-	-	-	4.0
Total Current Liabilities	25.4	27.3	23.9	28.3	36.0	33.0	35.3	37.4	30.1	38.3	44.2	32.0	46.8	39.8	26.8	20.9
Financing Oblig'ns, incl'dg def'd int.	13.5	13.5	13.6	13.6	13.7	13.7	62.4	62.9	63.1	71.3	72.0	71.3	71.6	85.4	87.8	142.3
Deferred Revenue	9.0	6.6	4.2	1.8	-	-	-	-	4.0	4.0	4.0	4.0	4.0	4.0	4.0	-
Deferred Rent	0.9	0.9	0.9	0.9	0.9	0.9	0.8	-	-	0.8	0.7	0.7	0.7	0.7	-	0.6
Other	-	-	-	-	-	-	-	-	-	-	-	-	0.5	0.5	-	0.9
Total Liabilities	48.8	48.3	42.6	44.7	50.5	47.6	98.5	100.3	97.2	114.5	121.0	108.0	123.7	130.5	118.6	164.8
Redeemable Conv. Preferred Stock	49.8	50.3	50.8	51.3	51.8	52.3	52.8	53.4	53.9	54.5	55.0	55.6	-	-	-	-
Shareholders' Equity	99.5	266.0	253.4	235.3	366.1	336.9	300.7	271.6	336.4	295.6	231.2	176.6	117.6	65.0	44.9	102.6
Total Liabilities & Equity	\$ 198.1	\$ 364.6	\$ 346.8	\$ 331.2	\$ 468.5	\$ 436.8	\$ 452.1	\$ 425.3	\$ 487.5	\$ 464.5	\$ 407.2	\$ 340.1	\$ 241.3	\$ 195.5	\$ 163.5	\$ 267.3

(*) Numbers may not foot due to rounding.

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Rating	Meaning
Buy	Expected rate of return on investment at current price levels is above that rate required, in CRT's view, to undertake the attendant risks perceived – positive risk/reward investment balance.
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As of September 30, 2009	As of September 30, 2009
Buy 49%	0%
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Sell 11%	0%

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