William Blair

Aratana Therapeutics, Inc.

Positive Results From AT-001 Suggest Program Is on Track for 2016 Approval

Conclusion

- After markets closed on Wednesday, November 20, Aratana announced positive top-line results from a dose-ranging study for AT-001, a treatment for osteoarthritic pain in dogs. The study was conducted in over 300 client-owned animals for a period of 28 days. We were pleased to see that pain assessment scores demonstrated statistically significant improvement at a daily dose ($p<0.05$). The study tested two once per day and one twice per day dosing schedules. We expect the company to begin a pivotal trial in 2014 and continue to expect approval in 2016. Given the potential for AT-001 as a differentiated product from the current pain therapies available to veterinarians, we maintain our Outperform rating on shares of Aratana.

Additional Details

- Although only top-line data has been released, we view management's decision to take AT-001 into pivotal studies at a once per day dose as a positive. In the past, management has stated its interest in pursuing a pivotal study of AT-001 only if the profile of the compound suggested a differentiated profile from the current market leaders, which include Rimadyl. Zoetis's (ZTS $31.37) Rimadyl is one of the most successful products in the veterinary market. We note that the Rimadyl label includes the following language: "As a class, cyclooxygenase inhibitory NSAIDs may be associated with gastrointestinal, renal, and hepatic toxicity." We believe AT-001 could show improvement on this class issue of tolerability and safety.

- AT-001 should be differentiated from the existing NSAIDs, which inhibit cyclooxygenase (COX-1 and COX-2), that dominate the market. The product was designed as a selective antagonist toward the EP4 receptor, and in preclinical mice studies, binding the EP4 receptor has suggested an effect on decreasing inflammation and pain while avoiding the side effects caused by binding to other receptors such as EP1, EP2, and EP3. This increased selectivity should, in theory, lead to less gastrointestinal side effects than the market-leading COX-2 inhibitors. We also note that the COX-2 inhibitors require liver function testing, while Aratana's AT-001 should not. We believe this could be another important differentiator for the product.

Aratana is a specialty biopharmaceutical company focused solely on the companion-animal market. The company was founded in Kansas City, Kansas, in 2010 to pursue in-licensing, development, and commercialization of novel therapeutics for cats and dogs. The company has three molecules focused on osteoarthritic pain, lack of appetite, and post-surgical pain in both dogs and cats, which, if effective, could reach the market by 2016.

November 21, 2013

Stock Rating:	**Outperform**
Company Profile:	**Aggressive Growth**

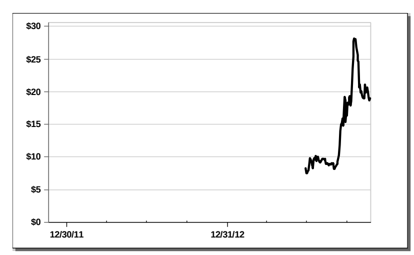
Symbol:	PETX (NASDAQ)
Price:	$18.97 (52-Wk.: $7-$29)
Market Value (mil.):	$452
Fiscal Year End:	December
Long-Term EPS Growth Rate:	
Dividend/Yield:	None

	2012A	2013E	2014E
Estimates			
EPS FY	$-0.91	$-0.95	$-1.29
CY		$-0.95	$-1.29
Valuation			
FY P/E	NM	NM	NM
CY P/E		NM	NM

Trading Data (FactSet)	
Shares Outstanding (mil.)	1
Float (mil.)	3
Average Daily Volume	72,528

Financial Data (FactSet)	
Long-Term Debt/Total Capital (MRQ)	0.1
Book Value Per Share (MRQ)	-29.1
Enterprise Value (mil.)	347.3
EBITDA (TTM)	0.0
Enterprise Value/EBITDA (TTM)	0.0x
Return on Equity (TTM)	-40.6

Two-Year Price Performance Chart



Sources: FactSet, William Blair & Company estimates

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- We believe the opportunity for novel therapies to treat osteoarthritis in the veterinary setting is significant. Osteoarthritis is common among cats and dogs that are at least nine years old, although it is known to occur in younger pets as well. Management from Aratana believes the prevalence has continued to rise over the past five years, with 13% of all geriatric dogs and 22% of giant-breed dogs diagnosed with arthritis. According to Brakke Consulting's pain management products survey for the veterinary market, the analgesic market for cats and dogs in 2011 was about $260 million, with sales of NSAIDs (a subset of the total market) exceeding $220 million in the United States. In addition, management believes the worldwide market for cat-and-dog NSAIDs is more than $450 million.

Valuation and Financials

- Aratana shares are trading at $395 million in market capitalization and an enterprise value of $347 million. This compares with human therapeutics-oriented specialty pharmaceutical peers with similar clinical progress with market caps in the $150 million to $700 million range. We believe fair value per share with the current portfolio is in the low-$20s, with upside driven by additional compound in-licensing and acquisitions. We expect modest revenue in 2014 of $840,000 and a loss per share of $1.29, and a 2013 year-end cash balance of $50.5 million.

Risks

- We view the following as key risks for Aratana in the next three to five years: 1) the several molecules under clinical development might not be successful and might thus fail to reach the market; 2) larger competitors with greater financial resources, like Zoetis, might start pursuing a similar in-licensing strategy, causing deal terms to deteriorate; and 3) the company will probably need to raise additional capital within the next two to three years since no product revenues are expected before 2016. Exhibit 1, on the following page, contains a summary of Aratana's portfolio, while exhibit 2, on page 4, shows our current unchanged model.

Exhibit 1. Program Update

Program Status for Each Program

AT-001			
Dog		**Cat**	
September	**November**	**September**	**November**
- Pivotal Field Study initiated in 2012, Topline results expected in mid-2014 - Topline results from dose-ranging study expected in November 2013 - 2016 Launch	- Pivitol study expected to be initiated in 2014 - 2016 Launch	- No update; previously expected to pursue acute pain indication	- Pursuing chronic pain indication
AT-002			
Dog		**Cat**	
September	**November**	**September**	**November**
- Pivotal Field Study expected to be initiated in late 2013, Topline results expected in early 2015 - 2016 Launch	- Agreement on Pivotal Field Study design reached; expected to be initiated in late 2013 - 2016 Launch	- Pivotal Field Study expected to be initiated in late 2014, Topline results expected in late 2015 - 2017 Launch	- 3-week treatment term and final formulation selected; further proof of concept work to be done; results expected in fist half 2014
AT-003			
Dog		**Cat**	
September	**November**	**September**	**November**
- Pivotal Field Study expected to be initiated in mid-2014, Top line results expected in mid-2015 - 2016 Launch	- Continued dose-ranging study in laboratory animals; expect further discussions in late 2013 - 2016 Launch	-Pivotal Field Study expected to be initiated in mid-2014, Top line results expected in mid-2015 - 2016 Launch	- Initiated dose-ranging study in laboratory animals
B-cell Lymphoma - dog only			
October		**November**	
- Received conditional license from USDA		- Completed submission for full license; expected within next 12-18 months	
T-cell Lymphoma - dog only			
October		**November**	
- Initial data submitted to USDA; expect conditional license in 2014 and full license in 2015		- Initial data submitted to USDA; expect conditional license in 2014 and full license in 2015	
Option Programs			
October		**November**	
- Three programs still being evaluated, company will advance at least program but likely not all following a decision in early 2014.		- Three programs still being evaluated, company will advance at least program but likely not all following a decision in early 2014.	

Source: William Blair & Company L.L.C.
Note: Shaded areas suggest updated language

Exhibit 2. Aratana Income Statement (2011 to 2020E)

Income Statement

	2,011	2012	Q1A	Q2A	Q3E	Q4E	2013E	Q1E	Q2E	Q3E	Q4E	2014E	2015E	2016E	2017E	2018E	2019E	2020E
Revenues																		
AT-001						-	-	-	-	-	-	-	-	9,174,000	18,104,320	25,105,600	37,128,000	56,867,200
% growth (y/y)																39%	48%	53%
AT-002						-	-	-	-	-	-	-	-	11,051,800	19,294,880	32,417,360	48,584,000	70,468,200
% growth (y/y)																68%	50%	45%
AT-003						-	-	-	-	-	-	-	-	1,970,000	11,000,000	19,800,000	29,800,000	40,186,000
% growth (y/y)																80%	51%	35%
B-Cell Revenue						-	-	210,000	210,000	210,000	210,000	840,000	4,200,000	8,400,000	12,600,000	16,800,000	19,320,000	21,000,000
% growth (y/y)																		
T-Cell Revenue						-	-	-	-	-	-	-	7,200,000	11,250,000	16,200,000	21,600,000	25,200,000	27,900,000
% growth (y/y)																		
Total Net Product Revenues						-	-	210,000	210,000	210,000	210,000	840,000	11,400,000	41,845,800	77,199,200	115,722,960	160,032,000	216,421,400
Royalty Revenue (E.U.)						-	-	-	-	-	-	-	-	1,970,000	7,006,250	13,093,750	19,191,413	25,918,791
Total Net Revenues	-	0.0	0.0	0.0	0.0	0.0	0	210,000	210,000	210,000	210,000	840,000	11,400,000	43,815,800	84,205,450.0	128,816,710.0	179,223,413	242,340,191
% growth (y/y)															92%	53%	39%	35%
Expenses																		
COGS	-	-				0	0	6,720	6,720	6,720	6,720	26,880	1,934,400	7,717,460	15,233,040	23,382,192	33,000,640	45,169,880
R&D expense	2,196,000	8,791,000	*2,114,000*	*2,469,000*	*3,234,000*	3,557,400	11,374,400	3,412,320	3,412,320	3,412,320	3,412,320	13,649,280	16,788,614	20,146,337	23,571,215	27,578,321	31,439,286	37,098,358
% growth (y/y)			*20.7%*	*28.0%*	*95.1%*	*3.0%*	*29%*	*61.4%*	*38.2%*	*5.5%*	*-4.1%*	*20%*	*23%*	*20%*	*17%*	*17%*	*14%*	*18%*
SG&A expense	1,274,000	2,987,000	*1,226,000*	*1,258,000*	*1,427,000*	1,455,540	5,366,540	3,929,675	3,929,675	3,929,675	3,929,675	15,718,700	23,933,367	29,558,041	36,428,488	46,313,616	57,746,795	70,197,072
In-process R&D	-						-	-	-	-	-	-	-	-	-	-	-	-
	-	-					-	-	-	-	-	-	-	-	-	-	-	-
	-	-					-	-	-	-	-	-	-	-	-	-	-	-
Total Operating Expenses	3,470,000	11,778,000	3,340,000	3,727,000	4,661,000	5,012,940	16,740,940	7,348,715	7,348,715	7,348,715	7,348,715	29,394,859.8	42,656,381.1	57,421,838	75,232,743	97,274,129	122,186,721	152,465,310
Operating (loss)/profit	(3,470,000)	(11,778,000)	(3,340,000)	(3,727,000)	(4,661,000)	(5,012,940)	(16,740,940)	(7,138,715)	(7,138,715)	(7,138,715)	(7,138,715)	(28,554,860)	(31,256,381.1)	(13,606,038)	8,972,707	31,542,581	57,036,691	89,874,881
																	32%	
Interest income	6,000	21,000	*3,000*	*22,000*	*26,000*	32,691	83,691	28,997	26,481	22,684	17,615	95,777	45,210.6	91,740	80,617	124,091	213,707	337,288
Interest expense	-		*(24,000)*	*(78,000)*	*(80,000)*	(206,250)	(388,250)	(239,814)	(239,814)	(239,814)	(239,814)	(959,255)	(959,255.0)	(959,255)	(959,255)	(959,255)	(959,255)	(959,255)
Other Income	-	121,000	*68,000*	*343,000*	*44,000*	50,000	505,000	25,000.0	25,000.0	25,000.0	25,000.0	100,000.0	100,000	100,000	100,000	100,000	100,000	100,000
Total Other Income	6,000	142,000	47,000	287,000	(10,000)	(123,559)	200,441	(185,817)	(188,332)	(192,130)	(197,199)	(763,478)	(814,044.4)	(767,515)	(778,638)	(735,163.8)	(645,548)	(521,967)
	-														-	-	-	-
Net loss and comprehensive loss	(3,464,000)	(11,636,000)	(3,293,000)	(3,440,000)	(4,671,000)	(5,136,499)	(16,540,499)	(7,324,531)	(7,327,047)	(7,330,845)	(7,335,914)	(29,318,338)	(32,070,426)	(14,373,554)	8,194,069	30,807,417	56,391,143	89,352,913
Modifications of Series A convertible pref. stock	(276,000)	-		-	-	-		-	-	-	-	-	-	-				
Unaccreted dividends on convertible pref. stock	(902,000)	(2,035,000)	*(773,000)*	*(808,000)*	-	-	(1,581,000)	-	-	-	-	-	-	-				
Net income loss (gain) attributable to common stockholders, basic and diluted	(4,642,000)	(13,671,000)	(4,066,000)	(4,248,000)	(4,671,000)	(5,136,499)	(18,121,499)	(7,324,531)	(7,327,047)	(7,330,845)	(7,335,914)	(29,318,338)	(32,070,426)	(14,373,554)	8,194,068.979	30,807,417	56,391,143	89,352,913
Provision for income taxes	-		-				-					-	-	-	2,949,865	11,090,670	20,300,812	32,167,049
Effective tax rate	*NM*	*NM*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*36%*	*36%*	*36%*	*36%*
Net Income (loss)	**(4,642,000)**	**(13,671,000)**	**(4,066,000)**	**(4,248,000)**	**(4,671,000)**	**(5,136,499)**	**(18,121,499)**	**($7,324,531)**	**($7,327,047.4)**	**($7,330,845.2)**	**($7,335,914.0)**	**(29,318,338)**	**($32,070,426)**	**($14,373,554)**	**$5,244,204**	**$19,716,747**	**$36,090,332**	**$57,185,865**
EPS	**(0.31)**	**($0.91)**	**($0.27)**	**($0.23)**	**($0.22)**	**($0.23)**	**($0.95)**	**($0.32)**	**($0.32)**	**($0.32)**	**($0.32)**	**($1.29)**	**($1.36)**	**($0.57)**	**$0.21**	**$0.77**	**$1.40**	**$2.20**
Weighted average shares outstanding (basic)	14,972,266	14,972,266	14,972,266	18,805,599	20,806,352	22,665,727	19,312,486	22,720,727	22,775,727	22,830,727	22,885,727	22,803,227	23,510,727	25,210,727	25,410,727	25,610,727	25,810,727	26,010,727
Weighted average shares outstanding (diluted)	14,972,266	14,972,266	14,972,266	19,964,402	20,806,352	22,665,727	19,602,187	22,720,727	22,775,727	22,830,727	22,885,727	22,803,227	23,510,727	25,210,727	25,410,727	25,610,727	25,810,727	26,010,727
MARGIN ANALYSIS:																		
Gross Profit														82%	82%	82%	82%	81%
SG&A														67%	43%	36%	32%	29%
R&D														46%	28%	21%	18%	15%
Operating Income														NA	11%	24%	32%	37%
Tax Rate														0%	36%	36%	36%	36%
Net Income														NA	6%	15%	20%	24%
GROWTH METRICS:																		
Total Revenue															92%	53%	39%	35%
Gross Profit															91%	53%	39%	35%
SG&A			146%	102%	34%	82%	80%	221%	212%	175%	170%	193%	52%	24%	23%	27%	25%	22%
R&D			21%	28%	95%	3%	29%	61%	38%	6%	-4%	20%	23%	20%	17%	17%	14%	18%
Operating Income																252%	81%	58%
Net Income																276%	83%	58%
EPS																273%	82%	57%
Diluted Shares Outstanding		0%	0%	33%	39%	51%	31%	52%	14%	10%	1%	1%	3%	0%	0%	0%	0%	1%

E = William Blair & Company, L.L.C estimate

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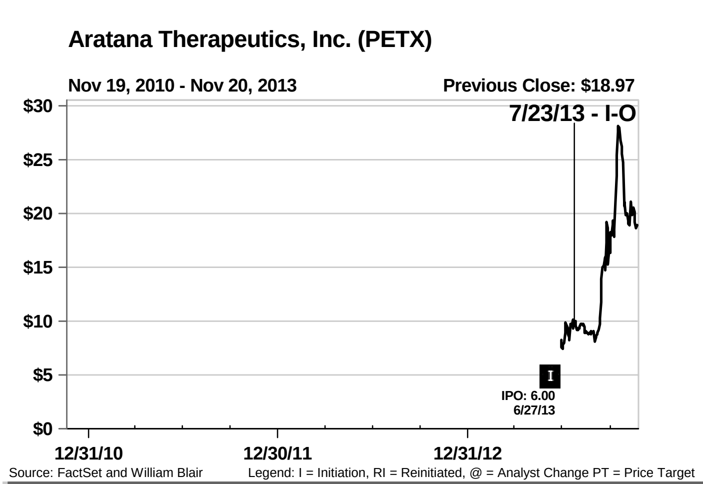
DOW JONES: 15,900.82
S&P 500: 1,781.37
NASDAQ: 3,921.27



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Outperform (Buy)	62	Outperform (Buy)	11
Market Perform (Hold)	34	Market Perform (Hold)	2
Underperform (Sell)	1	Underperform (Sell)	0

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