

Aratana Therapeutics, Inc.

Licensing of Regenerative Therapy for Osteoarthritis in Dogs Expands Pain Portfolio

Conclusion

- Last Thursday night, June 12, Aratana announced another product licensing agreement. It has agreed to an exclusive U.S. license with Vet-Stem, Inc. for an allogeneic stem cell therapy that may help regenerate cartilage in dogs with severe osteoarthritis. This agreement brings the company's total pipeline to 16 product candidates, three of which are targeted at pain (along with AT-001 and AT-003). We continue to be encouraged by the pace of Aratana's progress in assembling a broad number of novel products for companion animals. We have also been surprised that there has yet to be any attrition from the portfolio. Combine this with a 20% correction in the stock year-to-date and we reiterate our Outperform rating.

Key Points From Vet-Stem Agreement

- Vet-Stem has provided an autologous version of stem cell therapy for several years to help dogs suffering with severe arthritis. Aratana will work with Vet-Stem to test an allogeneic version that could be used on any dog (rather than only on dogs that have had donor cells harvested). Aratana is paying \$1.5 million up-front and will fund the cost of the study as well as milestones—adding up to roughly \$10 million if the product gains FDA approval. Aratana will also pay Vet-Stem a low-double-digit royalty on any eventual sales.
- The agreement gives Aratana U.S. rights, with an option to add European rights by year end. Aratana has European as well as U.S. rights for virtually all of its products, creating a meaningful opportunity to raise additional cash through out-licensing partnerships if necessary.
- We are only making minor changes to our model given the early stage of the stem cell product. Specifically, we are increasing our R&D spending assumptions by \$1.0 million in 2014 and \$1.3 million in 2015. We have also added a very minor amount of revenue for the product beginning in 2017.
- Vet-Stem and its founder Robert Harman have pioneered the use of adipose tissue for regenerative medicine in animals. The treatment has been used only as an autologous therapy in dogs and horses thus far, but is being considered for allogeneic therapy thanks to advances in the technology. A dose confirmation study is scheduled to begin later this month. Vet-Stem will remain in charge of development of the technology, but Aratana will commercialize the product if approved (not before 2016, according to company estimates).

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.

John Kreger
+1 312 364 8597
jkreger@williamblair.com

Tim Lugo
+1 415 248 2870
tlugo@williamblair.com

Roberto Fatta
+1 312 364 8797
rfatta@williamblair.com

Matt Bacso
+1 312 364 8996
mbacso@williamblair.com

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June 16, 2014

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

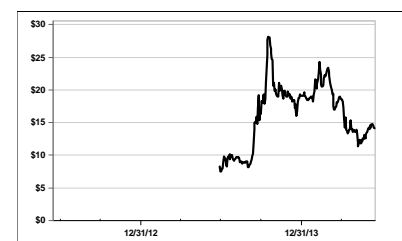
Symbol: PETX (NASDAQ)
Price: \$14.12 (52-Wk.: \$7-\$29)
Market Value (mil.): \$416
Fiscal Year End: December
Long-Term EPS Growth Rate:
Dividend/Yield: None

	2013A	2014E	2015E
Estimates			
EPS Q1	\$-0.27	A\$-0.34	NA
Q2	\$-0.23	\$-0.36	NA
Q3	\$-0.22	\$-0.45	NA
Q4	\$0.33	\$-0.44	NA
FY	\$-0.39	\$-1.59	\$-1.75
CY		\$-1.59	\$-1.75
Sales (mil.)	0	0	8
Valuation			
FY P/E	NM	NM	NM
CY P/E		NM	NM

Trading Data (FactSet)	
Shares Outstanding (mil.)	27
Float (mil.)	21
Average Daily Volume	243,344

Financial Data (FactSet)	
Long-Term Debt/Total Capital (MRQ)	0.0
Book Value Per Share (MRQ)	5.9
Return on Equity (TTM)	-6.5

Two-Year Price Performance Chart



Sources: FactSet, William Blair & Company estimates

- In terms of the potential market, we estimate there are roughly 8.3 million dogs that are candidates for osteoarthritis therapy. Stem cell regenerative therapy may be relevant for the subset of this population that is particularly severe. Assuming 10% of arthritic dogs might be appropriate for regenerative therapy, and an average treatment cost of \$200, this would imply a potential market of 800,000 dogs and \$160 million. Our revised model estimates revenue ramping up from \$870,000 in 2018 to \$1.5 million in 2020, with an associated 12% royalty cost.
- Initial costs to Aratana are fairly modest, with Aratana paying \$500,000 to license the product and reimburse the company for past development expenses and an additional \$1 million upon signing. From this point, Aratana is responsible for development costs, which are estimated to aggregate to \$3 million to \$4 million over the next few years. Total regulatory and success-related milestones can be a maximum of \$4.5 million, bringing the total potential outlay for this technology to about \$10 million. Despite this, cash outlay expectations of \$35 million to \$40 million for the year remain relatively unchanged (management now expects to be at the upper end of the range) and management continues to expect to have enough cash to fund operations through 2015. Our revised model assumes Aratana will have about \$50 million in cash on hand at year end.

Valuation

We have used two different valuation methodologies for Aratana; a net present value (NPV) calculation, and an EPS multiple-based approach, discounting 2019 earnings to 2014. While we are not formally placing a price target on shares of Aratana, both valuation exercises continue to suggest 12-month upside potential to be in the mid- to upper \$20 range.

- For our NPV analysis, we estimate revenue for the company of \$44 million in 2016, ramping up to \$342 million in 2020. Using a 10% discount rate, an EBIT margin that could reach 50% by 2020, and a terminal growth of 3% suggest a reasonable value of about \$770 million including cash, or roughly \$28.18 per share.
- We also calculated several multiple-based valuation metrics for Aratana shares using a range of forward earnings multiples between 24 and 28 times and discount rates ranging from 12% to 18%. This calculation results in a value of between \$26 per share on the low end (using a 24-times EPS multiple and a 16% discount rate) and \$33 on the high end (using a 28-times EPS multiple and a 14% discount rate). Our revised model is shown on the following page (including the Vet-Stem agreement).

Income Statement (2011-2020E)

	2011	2012	2013	Q1A	Q2E	Q3E	Q4E	2014E	2015E	2016E	2017E	2018E	2019E	2020E
Revenues														
AT-001				-	-	-	-	-	-	10,238,800	19,988,540	26,918,320	39,279,240	59,682,480
AT-002				-	-	-	-	-	-	11,629,964	20,244,546	33,740,910	50,611,365	74,023,790
AT-003				-	-	-	-	-	-	4,095,000	12,180,000	28,400,000	36,592,000	48,600,000
T-Cell Revenue				-	-	-	157,500	157,500	6,054,048	10,140,530	16,003,025	21,757,712	25,805,965	27,979,099
Feline Immunodeficiency				-	-	-	-	-	-	-	-	23,659,200	41,515,200	57,585,600
Osteosarcoma - Dogs				-	-	-	-	-	-	465,000	1,860,000	3,255,000	4,650,000	6,045,000
Vet Stern				-	-	-	-	-	-	-	124,500	871,500	1,120,500	1,494,000
% growth (y/y)				-	-	-	-	-	-	-	-	-	-	-
Total Net Product Revenues				-	-	-	157,500	157,500	6,054,048	36,569,294	70,400,611	138,602,642	199,574,270	275,409,970
B-Cell Royalty			123,000	12,000	12,000	12,000	12,000	48,000	2,177,776	4,140,717	7,766,801	10,461,284	13,310,445	16,973,987
Royalty Revenue (E.U.)				-	-	-	-	-	198,788	3,786,311	12,085,319	23,284,313	33,842,346	43,569,153
Feline Herpes Royalty				-	-	-	-	-	-	-	2,120,400	3,477,456	5,088,960	6,276,384
Other Revenue				164,000										
Total Net Revenues	-	0.0	123,000	176,000	12,000	12,000	169,500	369,500	8,430,611	44,496,321	92,373,131	175,825,695	251,816,022	342,229,493
% growth (y/y)											108%	90%	43%	36%
Expenses														
COGS	-	-	109,000	1,000	960	960	40,335	43,255	1,687,734	8,561,643	16,790,135	32,467,502	45,934,091	62,682,505
Royalty expense				17,000							14,940	104,580	134,460	179,280
R&D expense	2,196,000	8,791,000	10,925,000	3,572,000	6,172,500	8,085,000	7,770,000	25,599,500	32,511,365	37,388,070	42,248,519	46,473,371	51,120,708	56,232,779
% growth (y/y)			24%	69.0%	150.0%	150.0%	150.0%	134%	27%	15%	13%	10%	10%	10%
SG&A expense	1,274,000	2,987,000	8,952,000	4,613,000	3,645,000	4,067,500	4,138,850	16,464,350	22,191,178	26,354,119	30,964,613	37,721,074	46,525,760	56,537,091
In-process R&D	-	-	-	656,800	-	-	-	656,800	-	-	-	-	-	-
Amortization of intangibles	-	-	-	538,500	-	-	-	538,500	-	-	-	-	-	-
Total Operating Expenses	3,470,000	11,778,000	19,986,000	9,398,300	9,818,460	12,153,460	11,949,185	43,302,405	56,390,277	72,303,831	90,003,267	116,661,947	143,580,559	175,452,375
Operating (loss)/profit	(3,470,000)	(11,778,000)	(19,863,000)	(9,222,300)	(9,806,460)	(12,141,460)	(11,779,685)	(42,932,905)	(47,959,665)	(27,807,510)	2,369,864	59,163,747	108,235,463	166,777,119
Interest income	6,000	21,000	76,000	14,000	49,961	45,205	36,588	145,754	85,754	131,808	101,908	118,122	227,609	414,628
Interest expense	-	-	(432,000)	(328,000)	(240,749)	(240,749)	(240,749)	(1,050,246)	(520,940)	(520,940)	(520,940)	(520,940)	(520,940)	(520,940)
Other Income	-	121,000	478,000	33,333	33,333	33,333	33,333	100,000	100,000	100,000	100,000	100,000	100,000	100,000
Total Other Income	6,000	142,000	122,000	(557,000)	(157,455)	(162,210)	(170,827)	(1,047,492)	(335,186)	(289,132)	(319,032)	(302,818.0)	(193,331)	(6,312)
Net loss and comprehensive loss	(3,464,000)	(11,636,000)	(19,741,000)	(9,779,300)	(9,963,915)	(12,303,670)	(11,950,512)	(43,980,397)	(48,294,852)	(28,096,642)	2,050,831	58,860,929	108,042,132	166,770,807
Modifications of Series A convertible pref. stock	(276,000)	-	-	-	-	-	-	-	-	-	-	-	-	-
Unaccreted dividends on convertible pref. stock	(902,000)	(2,035,000)	(1,581,000)	-	-	-	-	-	-	-	-	-	-	-
Net income loss (gain) attributable to common stockholders, basic and diluted	(4,642,000)	(13,671,000)	(21,322,000)	(9,779,300)	(9,963,915)	(12,303,670)	(11,950,512)	(43,997,397)	(48,294,852)	(28,096,642)	2,050,831	58,756,349	107,907,672	166,591,527
Provision for income taxes	-	-	(15,455,000)	(627,000)	-	-	-	(627,000)	-	-	732,921	21,152,286	38,846,762	59,972,950
Net Income (loss)	(4,642,000)	(13,671,000)	(5,867,000)	(9,152,300)	(9,963,915)	(12,303,670)	(11,950,512)	(43,370,397)	(48,294,852)	(28,096,642)	\$1,302,970	\$37,604,064	\$69,060,910	\$106,618,577
EPS	(0.31)	(\$0.91)	(\$0.39)	(\$0.34)	(\$0.36)	(\$0.45)	(\$0.44)	(\$1.59)	(\$1.75)	(\$0.95)	\$0.04	\$1.25	\$2.28	\$3.50
Weighted average shares outstanding (basic)	14,972,266	14,972,266	18,976,248	27,295,775	27,335,775	27,375,775	27,415,775	27,355,775	27,540,775	29,690,775	29,890,775	30,090,775	30,290,775	30,490,775
Weighted average shares outstanding (diluted)	14,972,266	14,972,266	19,265,949	26,765,565	27,335,775	27,375,775	27,415,775	27,223,223	27,540,775	29,690,775	29,890,775	30,090,775	30,290,775	30,490,775
MARGIN ANALYSIS:														
Gross Profit										81%	82%	82%	82%	82%
SG&A										59%	34%	21%	18%	17%
R&D										84%	46%	26%	20%	16%
Operating Income										NA	3%	34%	43%	49%
Tax Rate										0%	36%	36%	36%	36%
Net Income										NA	1%	21%	27%	31%
GROWTH METRICS:														
Total Revenue											108%	90%	43%	36%
Gross Profit											110%	90%	44%	36%
SG&A			200%	276%	190%	185%	-18%	84%	35%	19%	17%	22%	23%	22%
R&D			24%	69%	150%	150%	150%	134%	27%	15%	13%	10%	10%	10%
Operating Income														
Net Income												2397%	83%	54%
EPS												2786%	84%	54%
Diluted Shares Outstanding		0%	29%	79%	37%	32%	29%	28%	0%	8%	0%	0%	0%	1%

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

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Within the past 12 months William Blair has provided or is providing investment banking services to or has an investment services relationship with Aratana Therapeutics, Inc.

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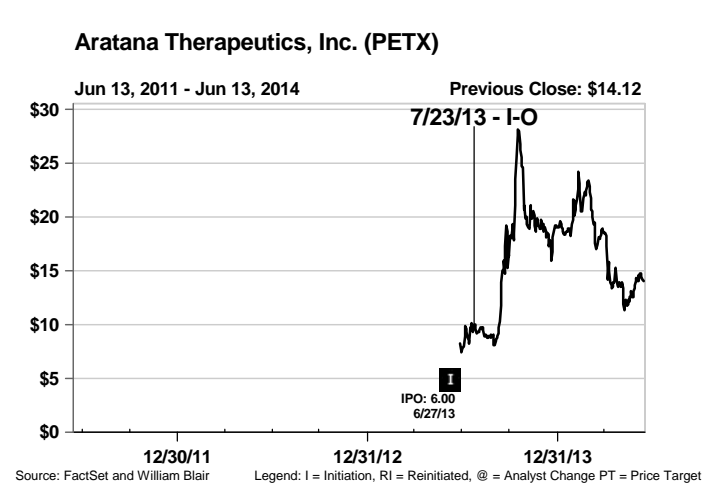
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DOW JONES: 16,775.74

S&P 500: 1,936.16

NASDAQ: 4,310.65



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Market Perform (Hold)	30	Market Perform (Hold)	2
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