

Aratana Therapeutics, Inc.

Entering Biologics and Oncology Through Vet Therapeutics Acquisition, Significantly Enhancing Long-Term Growth Opportunity

Conclusions:

- On Monday, October 14, Aratana announced it will acquire Vet Therapeutics for roughly \$53 million in a mix of cash, stock, debt, and future earnouts. The acquisition gives the company two additional late-stage assets, with a canine-specific anti-CD20 product approved for the treatment of B-cell lymphomas (Rituxan for dogs) and a CD52-targeting product filed with the USDA for the treatment of T-cell lymphomas. We note that with regard to the CD20 product, Vet Therapeutics has already entered a relationship with a large veterinary organization for domestic distribution. Aratana will gain a double-digit royalty rate over the product, which we estimate to be a midteens percentage of net sales, and also retains selling rights in several unspecified geographies. For the CD52 product, or canine Campath, Aratana will hold all marketing rights and we anticipate approval will occur over the next 12 months.

We believe this transaction is a significant step forward for the company as it results in a transition from a drug development and commercialization-focused entity into a fully integrated revenue-generating company with defensible intellectual property, drug discovery, and manufacturing capabilities. We are now projecting royalties to begin in 2014 and sales to begin in 2015 as opposed to 2016 previously. We are maintaining our anticipated breakeven point for Aratana profitability in 2017, although this acquisition increases our confidence in the long-term competitive positioning of the business model, and as a result, we reiterate our Outperform rating despite the stock's recent strength.

- Model Update Includes Royalties, Expedited Commercialization Strategy, and Larger Pipeline.** Given that Aratana has the potential to transition into a commercial stage organization pending USDA approval of the CD52 targeting therapy for T-cell lymphoma, management noted on the call that it will begin building out the commercial organization in 2014 with limited key hires (under 20), and additional members (under 15) in 2015. Given this commercial buildout and potential for royalty revenues next year based on partner sales of canine anti-CD20 (the partner was not disclosed, but we believe it to be the animal health unit of Novartis [NVS \$75.19]), we have made a number of adjustments to our model and now assume a loss of \$29 million in 2014 rather than \$20 million previously. Despite the larger burn anticipated next year with the earlier ramp-up in commercialization activities, management reiterated an expectation that current cash should be sufficient until the end of 2015 with the current portfolio.

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 osteoarthritis pain, lack of appetite, and post-surgical pain in both dogs and cats, which, if effective, could reach the market by 2016.

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Please consult pages 6-7 of this report for all disclosures.

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October 15, 2013

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

Symbol: PETX (NASDAQ)
Price: \$25.45 (52-Wk.: \$7-\$27)
Market Value (mil.): \$557
Fiscal Year End: December
Long-Term EPS Growth Rate:
Dividend/Yield: None

	2012A	2013E	2014E
Estimates			
EPS FY	\$-0.91	\$-0.84	\$-0.94
CY		\$-0.84	\$-0.94
Valuation			
FY P/E	NM	NM	NM
CY P/E		NM	NM

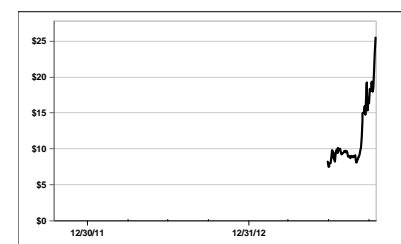
Trading Data (FactSet)

Shares Outstanding (mil.)	1
Float (mil.)	3
Average Daily Volume	71,020

Financial Data (FactSet)

Long-Term Debt/Total Capital (MRQ)	0.0
Book Value Per Share (MRQ)	-29.1
Enterprise Value (mil.)	50.0
EBITDA (TTM)	0.0
Enterprise Value/EBITDA (TTM)	0.0x
Return on Equity (TTM)	-40.6

Two-Year Price Performance Chart

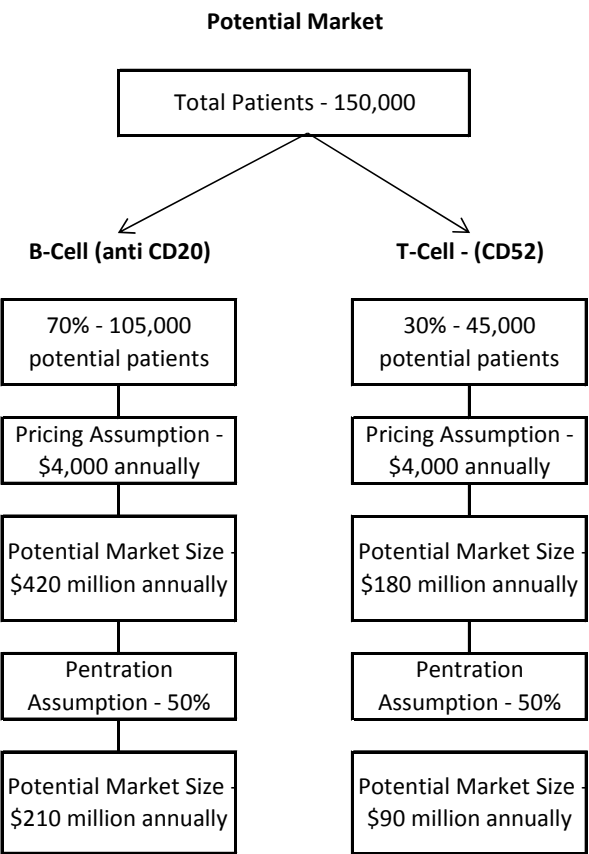


Sources: FactSet, William Blair & Company estimates

Overall, we are impressed by the continuing pipeline build at Aratana and believe this addition of a biologic platform therapy for veterinary purposes now places Aratana in a different category of companies, with five late-stage assets, a platform for additional compounds developed internally, and three products under review for licensing. In addition, should the pipeline progress according to plan, Aratana’s legacy compounds for the treatment of inappetence and pain should prove to be complementary to these cancer therapies, which often cause the aforementioned conditions as side effects.

- **Market Potential of Lymphoma Therapeutics in Dogs.** Given the trends for lymphoma, with over 150,000 dogs being treated in the United States per year and costs of chemotherapy (CHOP regimen) ranging from \$3,500 to \$10,000, we believe the potential market for the CD20 monoclonal antibody product could exceed \$400 million (assuming 100% adoption) while the CD52 product may address the one-third of the lymphoma market that would not be addressed by the CD20 product (a total combined market potential of about \$600 million). This market estimate assumes pricing of \$4,000 annually (toward the low end of the stated range for chemotherapy) and 100% adoption for sick animals. A more realistic assumption of 50% eventual penetration would yield a market potential of about \$300 million. This is a new product class and thus estimating pricing and adoption is challenging, but we are encouraged by the conditional USDA approval already in place for the CD20 product, and thus view the regulatory risk as low. We note that there was relatively little discussion of an indication for cats, thus any application of this molecule in the cat population would be incremental to our estimates. The total market for biologic-based therapies in the veterinary setting may exceed \$700 million if we apply the similar human market to veterinary market translation for chemotherapies (\$57 billion in humans, over \$2 billion in the vet setting) to the targeted cancer antibody market. Exhibit 1 illustrates our understanding of the U.S. lymphoma market opportunity in dogs.

Exhibit 1. Potential Market Opportunity



Sources: Company reports and William Blair & Company, L.L.C. estimates

- **Acquisition brings in complementary regulatory expertise.** We have been impressed with Aratana's management and what we believe is its expertise in navigating the approval process with the FDA's Center for Veterinary Medicine. We believe one of the additional key areas gained through the Vet Therapeutics acquisition is a demonstrated understanding of the regulatory process through the USDA, given the expedited path to market of the CD20 therapy through that agency. Vet Therapeutics brought the CD20 compound to market under a conditional product license, more than one year earlier than what looked to be the analogous process at the FDA. Management commented on Monday's call that the USDA may be even more amenable to the novel therapeutics business model for veterinary purposes than the FDA, and we believe this regulatory expertise acquired through the transaction should only increase the capabilities for additional biologic development.
- **Summary Thoughts.** The next product update for Aratana should be the results of a dose-ranging study of AT-001 Dog for osteoarthritis pain, which is expected in November. While we wait for the outcome from this study, we note that depending on the clarity of the data, the trial may prove registrational. However, as manufacturing is normally the gating factor, if the dose-ranging study looks registrational, we still would not anticipate a launch until 2016. In 2014, we expect pilot studies to be completed with AT-002 Cat for inappetence, and a decision to be made by management on the three option products (which came with a nine-month assessment period). Moreover, we expect management to out-license European rights for its growing portfolio sometime in 2014—providing another important source of validation for investors. Despite the significant appreciation of shares since the company's IPO (roughly fourfold), we continue to believe the opportunity for Aratana is attractive and highly differentiated versus other early-stage human therapeutics companies. We therefore reiterate our Outperform rating on Aratana. Below we summarize the numerous model adjustments we have made following Monday's announcement.

Model Changes

- **Revenue Adjustments**
 - **B-Cell (CD20) Revenue.** Our updated model assumes no revenue for 2013, with Aratana generating \$840,000 from B-cell royalty payments in 2014. We estimate Aratana will earn 20% of sales as a royalty and manufacturing payment. We estimate initial penetration rates for CD20 will be 1% in 2014, ramping up to 25% in 2020. With an estimated price of \$4,000 per course of therapy, we believe Aratana will be able to generate close to \$21 million in royalty and manufacturing payments by 2020.
 - **T-Cell (CD52) Revenue.** Our updated model assumes sales would begin in the first quarter of 2015. Similar to the B-cell drug, we estimate the price of treatment will be \$4,000 per course of therapy. We estimate initial penetration rates to be 4% in 2015, ramping up to 15.5% in 2020, translating into sales approaching \$28 million. Compared with the B-cell product, T-cell drugs in combination with chemotherapy do not show the same level of effectiveness; therefore, we estimate penetration rates will be lower.
 - **European Royalty Sales.** We estimate European B-cell and T-cell sales will lag the U.S. revenue stream by roughly two years, and ultimately generate a 10% royalty on end sales.
- **Operating Expense Adjustments**
 - **SG&A Expenses.** Because of the opportunity to generate sales within the next 12 months, management has decided to accelerate the timing of its salesforce ramp-up. We now forecast 15 new sales rep hires in 2014, and an additional 15 in 2015. With an estimated cost of \$200,000 per rep, we project that total rep cost will grow to \$6 million in 2015.
 - **R&D Expense.** As a result of the recent acquisition, Aratana is now responsible for nine drug compounds. Our previous model assumed R&D growth rates would increase by 16% annually from 2013 to 2020. Now we forecast annual increases of roughly 18%, with an R&D expense ratio of 14% in 2020.
- Exhibit 2 shows our updated revenue, operating income, and net income estimates after the acquisition, along with the differences between our old model assumptions.

Exhibit 2. Updated Model Estimates and Post-Acquisition Changes (\$000)

Updated Model	2013	2014	2015	2016	2017	2018	2019	2020
Total Revenue	\$ -	\$ 840	\$ 11,400	\$ 43,816	\$ 84,205	\$ 128,817	\$ 179,223	\$ 242,340
Operating Income	\$ (16,787)	\$ (28,395)	\$ (31,333)	\$ (13,785)	\$ 9,010	\$ 32,652	\$ 59,100	\$ 93,408
Net Income	\$ (18,089)	\$ (28,979)	\$ (31,970)	\$ (14,371)	\$ 5,384	\$ 20,544	\$ 37,529	\$ 59,568

Adjustment after Acq.	2013	2014	2015	2016	2017	2018	2019	2020
Δ in Revenue	\$ -	\$ 840	\$ 11,400	\$ 19,020	\$ 31,620	\$ 43,725	\$ 52,440	\$ 59,460
Δ in Operating Inc	\$ (562)	\$ (8,193)	\$ (7,601)	\$ (4,182)	\$ 7,813	\$ 18,683	\$ 25,606	\$ 31,733
Δ in Net Income	\$ (709)	\$ (8,980)	\$ (8,395)	\$ (4,971)	\$ 4,007	\$ 11,481	\$ 15,946	\$ 19,908

Exhibit 3. Income Statement Summary

Income Statement																		
	2011	2012	Q1A	Q2A	Q3E	Q4E	2013E	Q1E	Q2E	Q3E	Q4E	2014E	2015E	2016E	2017E	2018E	2019E	2020E
Revenues																		
AT-001						-	-	-	-	-	-	-	-	9.2	18.1	25.1	37.1	56.9
% growth (y/y)														NM	97%	39%	48%	53%
AT-002						-	-	-	-	-	-	-	-	11.1	19.3	32.4	48.6	70.5
% growth (y/y)														NM	75%	68%	50%	45%
AT-003						-	-	-	-	-	-	-	-	2.0	11.0	19.8	29.8	40.2
% growth (y/y)														NM	458%	80%	51%	35%
B-Cell Revenue						-	-	0.21	0.21	0.21	0.21	0.84	4.20	8.40	12.60	16.80	19.32	21.00
% growth (y/y)																		
T-Cell Revenue						-	-	-	-	-	-	-	7.20	11.25	16.20	21.60	25.20	27.90
% growth (y/y)																		
Total Net Product Revenues						-	-	0.21	0.21	0.21	0.21	0.84	11.40	41.85	77.20	115.72	160.03	216.42
Royalty Revenue (E.U.)						-	-	-	-	-	-	-	-	2.0	7.0	13.1	19.2	25.9
Total Net Revenues																		
% growth (y/y)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.8	11.4	43.8	84.2	128.8	179.2	242.3
														NM	92%	53%	39%	35%
Expenses																		
COGS	-	-				0	0	0	0	0	0	0	2	8	15	23	33	45
R&D expense	2.196	8.791	2.114	2.469	3.027	3.027	10.6	3.4	3.4	3.4	3.4	13.4	16.5	19.8	22.9	26.4	30.1	34.3
% growth (y/y)			20.7%	28.0%	18.5%	18.5%	21%	58.5%	35.7%	10.7%	10.7%	26%	23%	20%	16%	15%	14%	14%
SG&A expense	1.274	2.987	1.226	1.258	1.458	2.208	6.2	3.4	3.8	4.2	4.6	15.8	24.2	30.0	36.9	46.3	56.9	69.3
In-process R&D	-	-						-	-	-	-	-	-	-	-	-	-	-
	-	-						-	-	-	-	-	-	-	-	-	-	-
	-	-						-	-	-	-	-	-	-	-	-	-	-
Total Operating Expenses	3.470	11.778	3.340	3.727	4.5	5.2	16.8	6.7	7.1	7.5	7.9	29.2	42.7	57.6	75.2	96.2	120.1	148.9
Operating (loss)/profit	(3.470)	(11.778)	(3.340)	(3.7)	(4.5)	(5.2)	(16.8)	(6.5)	(6.9)	(7.3)	(7.7)	(28.4)	(31.3)	(13.8)	9	33	59	93
Interest income	0.006	0.021	0.003	0.022	0.020	0.032	0.1	0.0287	0.0267	0.0228	0.0168	0.1	0.0	0.1	0.1	0.1	0.2	0.3
Interest expense	0.000		-0.024	-0.078	(0.032)	(0.175)	(0.31)	(0.195)	(0.195)	(0.195)	(0.195)	(0.8)	(0.8)	(0.8)	(0.8)	(0.8)	(0.8)	(0.8)
Other income	0.000	0.121	0.068	0.343	0.1	0.1	0.1	0.025	0.025	0.025	0.025	0.100	0.100	0.100	0.100	0.100	0.100	0.100
Total Other Income	0.006	0.142	0.047	0.287	0.0	(0.1)	0.3	(0.141)	(0.143)	(0.147)	(0.153)	(0.584)	(0.6)	(0.6)	(0.6)	(0.6)	(0.5)	(0.3)
	-																	
Net loss and comprehensive loss	(3.464)	(11.636)	(3.293)	(3.440)	(4.45)	(5)	(17)	(7)	(7)	(7)	(8)	(29)	(32)	(14)	8	32	59	93
Modifications of Series A convertible pref. stock	(0.276)	0.000																
Unaccreted dividends on convertible pref. stock	(0.902)	(2.035)	-0.773	-0.808	-	-	(1.581)	-	-	-	-	-	-	-	-	-	-	-
Net income loss (gain) attributable to common stockholders, basic and diluted	(4.642)	(13.671)	(4.07)	(4.248)	(4.447)	(5.33)	(18.089)	(6.640)	(7.042)	(7.446)	(7.852)	(28.979)	(31.970)	(14.371)	8.413	32.099	58.638	93.075
Provision for income taxes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	12	21	34
Effective tax rate	NM	NM	0%	0%	0%	36%	9%	36%	36%	36%	36%	36%	36%	0%	36%	36%	36%	36%
Net Income (loss)	(\$4.642)	(\$13.671)	(\$4.1)	(\$4.248)	(\$4.4)	(\$5.33)	(\$18.1)	(\$7)	(\$7.0)	(\$7.4)	(\$7.9)	(\$29.0)	(\$32.0)	(\$14.4)	\$5.4	\$20.5	\$37.5	\$59.6
EPS	(\$0.31)	(\$0.91)	(\$0.27)	(\$0.23)	(\$0.21)	(\$0.24)	(\$0.95)	(\$0.29)	(\$0.31)	(\$0.33)	(\$0.34)	(\$1.28)	(\$1.36)	(\$0.57)	\$0.20	\$0.77	\$1.40	\$2.20
Weighted average shares outstanding (basic)	14,972	14,972	14,972	18,806	20,722	22,582	19,270	22,637	22,692	22,747	22,802	22,719	23,427	25,127	25,327	25,527	25,727	25,927
Weighted average shares outstanding (diluted)	14,972	14,972	14,972	19,964	21,881	23,740	20,140	23,795	23,850	23,905	23,960	23,878	24,585	26,285	26,485	26,685	26,885	27,085
MARGIN ANALYSIS:																		
Gross Profit														82%	82%	82%	82%	81%
SG&A														69%	44%	36%	32%	29%
R&D														45%	27%	20%	17%	14%
Operating Income														NA	11%	25%	33%	39%
Tax Rate														0%	36%	36%	36%	36%
Net Income														NA	6%	16%	21%	25%
GROWTH METRICS:																		
Total Revenue															92%	53%	39%	35%
Gross Profit															91%	53%	39%	35%
SG&A			146%	102%	56%	137%	106%	174%	199%	185%	106%	157%	53%	24%	23%	25%	23%	22%
R&D			21%	28%	18%	18%	21%	58%	36%	11%	11%	26%	23%	20%	16%	15%	14%	14%
Operating Income																262%	81%	58%
Net Income																282%	83%	59%
EPS																279%	81%	58%
Diluted Shares Outstanding		0%	0%	33%	46%	59%	35%	59%	19%	9%	1%	1%	3%	0%	0%	0%	0%	1%

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

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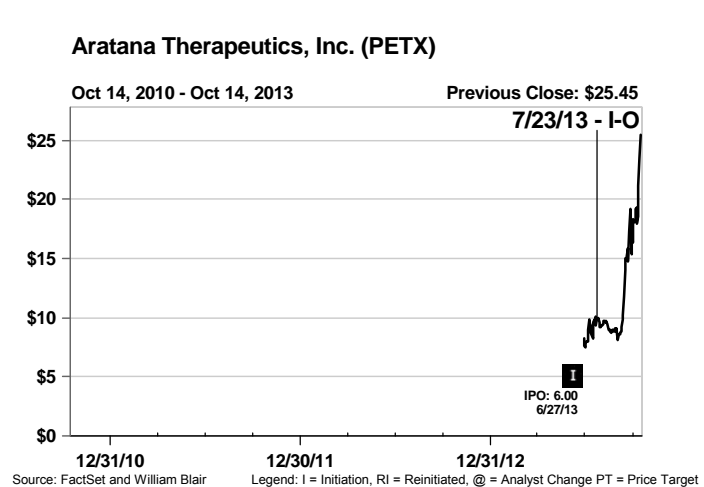
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DOW JONES: 15,301.26

S&P 500: 1,710.14

NASDAQ: 3,815.27



Current Rating Distribution (as of 09/30/13)

Coverage Universe	Percent	Inv. Banking Relationships*	Percent
Outperform (Buy)	62	Outperform (Buy)	10
Market Perform (Hold)	34	Market Perform (Hold)	2
Underperform (Sell)	1	Underperform (Sell)	0

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