

Aratana Therapeutics Inc.

Continuing to put words into action

Last week, PETX announced the addition of another pipeline asset which demonstrated the company's determination to bring innovation to companion animal health. On Friday, PETX hosted a conference call to discuss its in-licensing agreement with Vet-Stem Inc. for its novel allogeneic stem cell technology for the treatment of osteoarthritis in dogs. The in-licensed compound, AT-016, will join AT-001, a novel EP4 inhibitor, in PETX's pipeline for treating osteoarthritis. AT-016 would be the first FDA regulated off-the-shelf regenerative stem cell therapy available for such use. PETX and Vet-Stem expect to initiate a blinded, multi-center, placebo-controlled dose confirmation study later this month. FDA approval is not expected before 2016.

PETX will make an up-front payment of \$500,000 and will also be responsible for funding future development costs (\$3M-\$4M) and milestones of \$4.5M. PETX will pay Vet-Stem a low double-digit tiered royalty on net sales. PETX will have exclusive rights to development and commercialization in the US and right to negotiate expansion in the European Union through the end of 2014.

Putting words into action. Many of the leaders in the broader animal health industry have recently given greater lip service to the companion animal health market, but none seem to be pursuing the market with the same vigor as PETX. Not only has PETX established leadership in the sheer number of drug candidates, but also in its determination to deliver innovation to its targeted patient population. The stem cell technology joins PETX's antibody and immunotherapy oncology product candidates.

Differentiation will be rewarded. We recently attended the American College of Veterinarian Internal Medicine annual meeting and were impressed by the interest level expressed by veterinarians for PETX's development pipeline. We believe many investors under-estimate veterinarians' sophistication as well as their interest in treating patients with cutting-edge technology. We believe PETX has established clear leadership in this regard which should yield dividends as the end market becomes more competitive.

PETX: Quarterly and Annual EPS (USD)

	2013		2014		2015		Change y/y		
FY Dec	Actual	Old	New	Cons	Old	New	Cons	2014	2015
Q1	-2.43A	-0.34A	-0.34A	-0.34A	-0.19E	-0.19E	-0.29E	86%	44%
Q2	-4.62A	-0.26E	-0.26E	-0.36E	-0.32E	-0.32E	-0.32E	94%	-23%
Q3	-0.22A	-0.30E	-0.30E	-0.41E	-0.32E	-0.32E	-0.32E	-36%	-7%
Q4	-0.40A	-0.33E	-0.33E	-0.40E	-0.33E	-0.33E	-0.33E	18%	0%
Year	-2.43A	-1.23E	-1.23E	-1.50E	-1.17E	-1.17E	-1.57E	49%	5%
P/E	N/A		N/A			N/A			

Source: Barclays Research.

Consensus numbers are from Thomson Reuters

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PLEASE SEE ANALYST CERTIFICATION(S) AND IMPORTANT DISCLOSURES BEGINNING ON PAGE 5.

Stock Rating	OVERWEIGHT
	Unchanged
Industry View	POSITIVE
	Unchanged
Price Target	USD 30.00
	Unchanged

Price (13-Jun-2014)	USD 14.12
Potential Upside/Downside	+112%
Tickers	PETX

Market Cap (USD mn)	416
Shares Outstanding (mn)	29.45
Free Float (%)	90.03
52 Wk Avg Daily Volume (mn)	0.2
Dividend Yield (%)	N/A
Return on Equity TTM (%)	-12.98
Current BVPS (USD)	5.88

Source: Thomson Reuters

Price Performance	Exchange-Nasdaq
52 Week range	USD 29.32-6.56



[Link to Barclays Live for interactive charting](#)

U.S. Specialty Pharmaceuticals

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U.S. Specialty Pharmaceuticals

Industry View: POSITIVE

Aratana Therapeutics Inc. (PETX)

Stock Rating: OVERWEIGHT

Income statement (\$k)	2013A	2014E	2015E	2016E	CAGR
Revenue	0	656	5,920	36,324	N/A
EBITDA (adj)	-19,483	-34,931	-35,140	-20,417	N/A
EBIT (adj)	-19,863	-35,487	-35,164	-20,441	N/A
Pre-tax income (adj)	-21,322	-35,516	-34,612	-20,201	N/A
Net income (adj)	-21,322	-35,516	-34,612	-20,201	N/A
EPS (adj) (\$)	-2.43	-1.23	-1.17	-0.64	N/A
Diluted shares (k)	11,179.9	28,853.9	29,662.5	31,737.5	41.6%
DPS	N/A	N/A	N/A	N/A	N/A

Margin and return data	Average				
EBITDA (adj) margin (%)	N/A	-5,409.6	-594.0	-56.3	-2,020.0
EBIT (adj) margin (%)	N/A	-5,409.6	-594.0	-56.3	-2,020.0
Pre-tax (adj) margin (%)	N/A	-5,414.0	-584.7	-55.6	-2,018.1
Net (adj) margin (%)	N/A	-5,414.0	-584.7	-55.6	-2,018.1
ROIC (%)	N/A	N/A	N/A	N/A	N/A
ROA (%)	-17.2	-29.1	-37.6	-30.1	-28.5
ROE (%)	N/A	N/A	N/A	N/A	N/A

Balance sheet and cash flow (\$k)	CAGR				
Tangible fixed assets	98	1,200	1,300	1,400	142.6%
Intangible fixed assets	N/A	N/A	N/A	N/A	N/A
Cash and equivalents	41,084	51,000	27,605	11,164	-35.2%
Total assets	115,536	121,783	93,517	67,827	-16.3%
Short and long-term debt	N/A	N/A	N/A	N/A	N/A
Other long-term liabilities	3,284	14,928	14,928	14,928	65.7%
Total liabilities	29,495	32,902	34,912	37,485	8.3%
Net debt/(funds)	N/A	N/A	N/A	N/A	N/A
Shareholders' equity	86,041	88,881	58,606	30,342	-29.3%
Change in working capital (\$mn)	-13,291	-481	-1,020	-459	N/A
Cash flow from operations (\$mn)	-16,158	-35,191	-35,308	-20,286	N/A
Capital expenditure (\$mn)	-31,088	-546	-76	-76	N/A
Free cash flow (\$mn)	-1,671	-34,866	-36,084	-20,800	N/A

Valuation and leverage metrics	Average				
P/E (adj) (x)	N/A	N/A	N/A	N/A	N/A
EV/sales (x)	N/A	N/A	N/A	N/A	N/A
EV/EBITDA (adj) (x)	N/A	N/A	N/A	N/A	N/A
FCF yield (%)	-1,058.5	-8,557.8	-8,615.3	-4,641.4	-5,718.3
P/BV (x)	N/A	N/A	N/A	N/A	N/A
Dividend yield (%)	N/A	N/A	N/A	N/A	N/A
Total debt/capital (%)	N/A	N/A	N/A	N/A	N/A

Selected operating metrics	Average				
SG&A/sales (%)	N/A	N/A	N/A	N/A	N/A
R&D/sales (%)	N/A	N/A	N/A	N/A	N/A
R&D growth (%)	105.7	26.5	26.5	0.0	39.7
SG&A growth (%)	198.0	85.5	-3.7	60.4	85.0

Price (13-Jun-2014) USD 14.12
Price Target USD 30.00

Why Overweight? We rate PETX at Overweight since we believe it will capitalize on the growing companion animal health market with its portfolio of in-development products for osteoarthritis, inappetence, post-surgical pain, and lymphoma. We believe PETX has a differentiated model that will attract a broad investor audience.

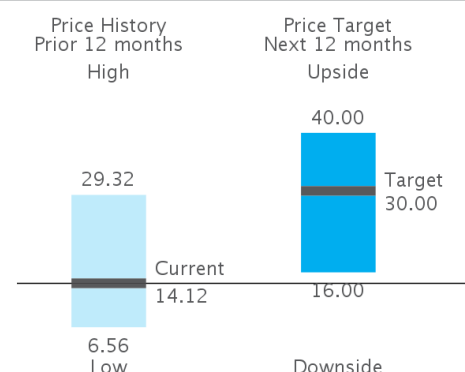
Upside case USD 40.00

We believe upside could come from additional business development which accelerates the expansion of PETX's pipeline. Additionally, we could see earlier-than-expected approvals for pipeline assets which accelerates the company's earnings ramp.

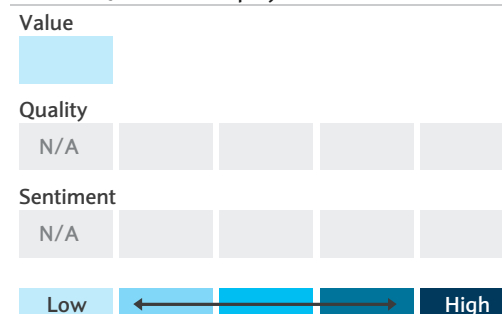
Downside case USD 16.00

Downside would come from setbacks to the company's pipeline assets. Additionally, PETX is developing treatments in many unproven markets, such as oncology, inappetence, and post-surgical pain. Those might not prove as attractive end-markets as we currently expect.

Upside/Downside scenarios



POINT® Quantitative Equity Scores



Source: POINT®. The scores are valid as of the date of this report and are independent of the fundamental analysts' views. To view the latest scores, please go to the equity company page on Barclays Live.

Key Takeaways

On Friday June 13th, Aratana hosted a conference call to discuss its in-licensing agreement with Vet-Stem Inc. for its novel allogeneic stem cell technology for the treatment of pain and inflammation from osteoarthritis in dogs. The in-licensed compound, AT-016, will join AT-001 (Grapiprant) and AT-003 (injectable bupivacaine) in Aratana's innovative companion animal pain portfolio, and represents a strategic investment in this area of high unmet need. If approved, AT-016 would be the first FDA regulated off-the-shelf regenerative stem cell therapy available for such use.

Under the terms of the agreement, Aratana will make an up-front payment of \$500,000 for reimbursement of past development expenses and will also be responsible for funding future development costs of \$3-\$4 million, as well as success based milestones that total \$4.5 million over the development period. Once commercialized, Aratana will pay Vet-Stem a low double-digit tiered royalty on net sales in the licensed territory. Aratana will have exclusive rights to development and commercialization in the United States, as well as the right to negotiate expansion in the European Union through the end of 2014. Through 2016, Aratana will have first right of refusal for all other countries, excluding Australia, New Zealand, and Singapore.

Aratana and Vet-Stem expect to initiate a blinded, multi-center, placebo-controlled dose confirmation study later this month. FDA approval is not expected before 2016.

Osteoarthritis Incidence and Multi-modal pain management:

There are an estimated 85 million dogs in the United States today, and up to 20% of dogs over the age of 8 or 9 are expected to have osteoarthritis. Currently, 4.4 million dogs are being treated for 20-40 days per year, with limited available therapies on the market. The most commonly used medications are NSAIDS and Rimadyl, but side-effects associated with these medications are common and efficacy limited.

During the call, Aratana noted that AT-016 could potentially be used as a complementary therapy, in severe cases of osteoarthritis where dogs cannot be controlled with AT-001. This type of multi-modal combination therapy is very common in pain management, and is particularly likely to be used by veterinarians if the claims for disease modifying ability and cartilage regeneration are validated. Based on this, we expect Aratana will pursue monotherapy as well as combination-therapy indications with other products in its portfolio. We believe this will facilitate commercialization, with Aratana's salesforce having a more robust offering of products and resources for veterinarians.

Vet-Stem, Inc. and Autologous vs. Allogeneic Stem Cell Therapies:

Vet-Stem is a San-Diego based company that pioneered the use of adipose tissue as a source of stem cells in veterinary regenerative medicine. The company offers an autologous stem cell therapy that has been particularly useful in horses, where adipose tissue (or fat) is harvested from the animal, sent to Vet-Stem where stem-cells are isolated and concentrated, then sent back to the veterinarian where the stem-cells can be reintroduced into the same patient. On their website, Vet-Stem includes results from surveys of dog owners that indicate greater than 80% of dogs with arthritis had improved quality of life following treatment with stem-cell therapy. They also show that greater than 33% of dogs discontinued NSAIDS completely and greater than 28% of dogs decreased their dependency on NSAIDS at 90 and 246 days after treatment.

While successfully implemented, a drawback of this autologous therapy is that the stem-cells can only be used in the original donor patient. The company has now developed a technology platform for producing allogeneic stem cell therapies, where cells isolated from

a single donor patient can be used to treat multiple patients. Aratana has licensed this allogeneic stem cell therapy for the treatment of osteoarthritis in dogs.

Cash Burn:

Aratana expects the deal will push its cash usage from operations to the higher end of the \$35-\$40 million that it indicated in its 2014 guidance, and could potentially increase cash usage by \$2-\$3 million. Aratana also reiterated that it believes it is sufficiently funded through 2015.

The company provided a brief overview of the refinancing of its \$15 million loan agreement. Under their previous agreement, the company was paying both principal and interest over 24 months starting last April. Under the new agreement, they will only be paying interest for the non-revolving loan at a fixed annual interest rate of 5.50% for two years. We believe this strategically preserves cash, and will help Aratana fund future costs associated with its pipeline including Vet-Stem.

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Primary Stocks (Ticker, Date, Price)

Aratana Therapeutics Inc. (PETX, 13-Jun-2014, USD 14.12), Overweight/Positive, A/C/D/J/L

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Overweight - The stock is expected to outperform the unweighted expected total return of the industry coverage universe over a 12-month investment horizon.

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ICON plc (ICLR)	Jazz Pharmaceuticals PLC (JAZZ)	Mallinckrodt (MNK)
Mylan Inc. (MYL)	Pacira Pharmaceuticals Inc. (PCRX)	PAREXEL International (PRXL)
Quintiles Transnational (Q)	Teva Pharmaceutical Industries (TEVA)	Zoetis Inc. (ZTS)

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Aratana Therapeutics Inc. (PETX)

USD 14.12 (13-Jun-2014)

Stock Rating

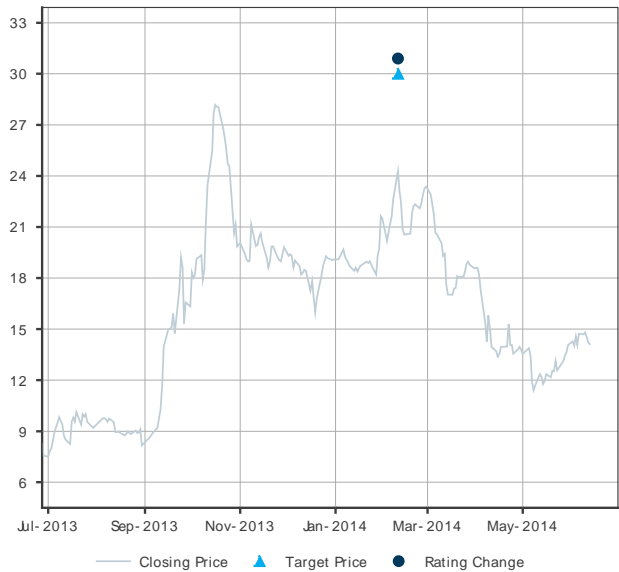
OVERWEIGHT

Industry View

POSITIVE

Rating and Price Target Chart - USD (as of 13-Jun-2014)

Currency=USD



Date	Closing Price	Rating	Adjusted Price Target
10-Feb-2014	24.28	Overweight	30.00

Source: Thomson Reuters, Barclays Research

Historical stock prices and price targets may have been adjusted for stock splits and dividends.

Source: IDC, Barclays Research

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Valuation Methodology: We base our \$30 price target on 5x our FY20 sales estimate of \$325 million discounted back to the present (8% discount rate).

Risks which May Impede the Achievement of the Barclays Research Price Target: Inability to get pipeline candidates approved by the FDA or USDA; lack of demand by consumers since pet therapeutics remains an emerging market; inability to manufacture products at a cost level which allows PETX to price products in a competitive manner.

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