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Piper Jaffray & Co.

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Reason for Report:

Earnings Announcement

Changes	Previous	Current
Rating	--	Overweight
Price Tgt	--	\$9.00
FY11E Rev (mil)	--	\$0.0
FY12E Rev (mil)	--	\$0.0
FY11E EPS	--	(\$1.44)
FY12E EPS	--	(\$1.60)

Price:	\$5.21
52 Week High:	\$8.55
52 Week Low:	\$2.82
12-Month Price Target:	\$9.00

Proj EV of \$288M + mid'11E cash

Shares Out (mil):	32.8
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Shares out includes recent PIPE

Market Cap. (mil):	\$170.9
Avg Daily Vol (000):	67
Book Value/Share:	\$1.74
Net Cash Per Share:	\$1.96
Debt to Total Capital:	0%
Est LT EPS Growth:	NA
P/E to LT EPS Growth (FY11):	NA
Est Next Rep Date:	05/01/2011
Fiscal Year End:	Dec

Rev (mil)	2010A	2011E	2012E
Mar	\$0.0A	\$0.0E	\$0.0E
Jun	\$0.0A	\$0.0E	\$0.0E
Sep	\$0.0A	\$0.0E	\$0.0E
Dec	\$0.0A	\$0.0E	\$0.0E
FY	\$0.0A	\$0.0E	\$0.0E
CY	\$0.0A	\$0.0E	\$0.0E

FY RM	NM	NM	NM
CY RM	NM	NM	NM

EPS	2010A	2011E	2012E
Mar	(\$0.83)A	(\$0.42)E	NA
Jun	(\$0.36)A	(\$0.36)E	NA
Sep	(\$0.36)A	(\$0.30)E	NA
Dec	(\$0.40)A	(\$0.36)E	NA
FY	(\$1.76)A	(\$1.44)E	(\$1.60)E
CY	(\$1.76)A	(\$1.44)E	(\$1.60)E

FY P/E	NM	NM	NM
CY P/E	NM	NM	NM

Quarterly EPS does not add to full year result

Anthera Pharmaceuticals (ANTH - \$5.21) Overweight

Ends 2010 with \$64 Million in Cash to Reach Top-Line VISTA-16 and PEARL-SC Data

CONCLUSION:

Anthera ended 2010 with \$64 million in cash, which we forecast will last through top-line PEARL and VISTA-16 data in 2012. The PEARL-SC lupus trial resumed patient screening last month. Anthera is bringing on additional sites and geographies, so still expects to complete enrollment on schedule. The VISTA-16 study is on track for a biomarker futility analysis of the first 1,000 patients likely in April and we expect final data in early 2012.

- **Cash to Reach Value Driving Data.** Anthera ended 2010 with cash of \$64 million, which we forecast should last into 2012. By this time Anthera should report top-line VISTA-16 and PEARL-SC data.
- **PEARL-SC Trial Resumed.** Last month, Anthera resumed patient screening in the Phase IIb PEARL-SC lupus trial of A-623. The study was suspended in November due to vial cracking caused by shipment on dry ice. Anthera plans to bring on additional sites and geographies (Korea and Singapore), and thus still expects to complete enrollment by late 3Q:11/early 4Q:11. Prior to the study halting, Anthera had dosed 12 lupus patients and screened an additional 45-50 demonstrating a high level of interest in the study. Anthera will begin an open-label extension study to keep the first 12 patients on drug and generate long-term safety data.
- **Additional PEARL-SC Trial Details.** In order to increase powering, Anthera will now randomize up to 540 lupus patients to 3 sub-cutaneous doses of either 100mg or 200mg once weekly or 200mg once monthly A-623 or placebo for 24 weeks on top of standard background therapy. The primary endpoint is the SLE responder index used in the *Benlysta* BLISS studies. The larger patient number could provide powering for inter-arm comparability. Anthera also recently announced that Merck BioManufacturing will supply large scale GMP clinical and pre-commercial supply of A-623. This agreement ensures the supply of A-623 up to launch of the drug.
- **VISTA-16 Enrollment On-Track.** Anthera is also actively enrolling Acute Coronary Syndrome (ACS) patients in the pivotal VISTA-16 trial of varespladib. A biomarker futility analysis of the first 1,000 patients is on track for April and we expect final data in early 2012.

INVESTMENT RECOMMENDATION:

We reiterate our Overweight rating and \$9 price target. We value varespladib at \$288 million and add mid'11E net cash assuming the exercise of the warrants. We do not currently value A-623, which could provide considerable upside to our target. Anthera holds no debt.

RISKS TO ACHIEVEMENT OF TARGET PRICE:

Risks include clinical, regulatory and commercial. Varespladib and/or A-623 may fail in the clinic. Anthera may require additional cash from the capital markets.

COMPANY DESCRIPTION:

Anthera is a biopharmaceutical company developing varespladib and A-623.

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Anthera Pharmaceuticals
Quarterly Earnings Estimates
(\$ in thousands except per share)

23-Feb-11

	<u>2009A</u>	<u>1QA</u> ¹	<u>2QA</u>	<u>3QA</u>	<u>4QA</u>	<u>2010E</u>	<u>1QE</u>	<u>2QE</u>	<u>3QE</u>	<u>4QE</u>	<u>2011E</u>	<u>2012E</u>
Total Revenues	0	0	0	0	0	0	0	0	0	0	0	0
Operating Expenses:												
R&D Expense	8,415	\$5,242	\$6,438	6,885	10,892	29,457	12,000	10,000	8,000	10,000	40,000	45,000
SG&A Expense	<u>3,425</u>	<u>1,224</u>	<u>1,510</u>	<u>1,510</u>	<u>2,057</u>	<u>6,301</u>	<u>2,000</u>	<u>2,000</u>	<u>2,000</u>	<u>2,000</u>	<u>8,000</u>	<u>9,000</u>
Total Operating Expenses	11,841	\$6,466	\$7,948	\$8,395	\$12,949	35,758	\$14,000	\$12,000	\$10,000	\$12,000	48,000	54,000
Operating Loss	(\$11,841)	(\$6,466)	(\$7,948)	(\$8,395)	(\$12,949)	(\$35,758)	(\$14,000)	(\$12,000)	(\$10,000)	(\$12,000)	(\$48,000)	(\$54,000)
Total Other Income (Expense)	(362)	(4,638)	12	62	(92)	(4,656)	55	45	30	20	150	15
Pre-Tax Loss	(\$12,203)	(\$11,104)	(\$7,936)	(\$8,334)	(\$13,040)	(\$40,414)	(\$13,945)	(\$11,955)	(\$9,970)	(\$11,980)	(\$47,850)	(\$53,985)
Income Tax Expense	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Net Loss	(\$12,203)	(\$11,104)	(\$7,936)	(\$8,334)	(\$13,040)	(\$40,414)	(\$13,945)	(\$11,955)	(\$9,970)	(\$11,980)	(\$47,850)	(\$53,985)
Net Loss per Share	(\$8.06)	(\$0.83)	(\$0.36)	(\$0.36)	(\$0.40)	(\$1.76)	(\$0.42)	(\$0.36)	(\$0.30)	(\$0.36)	(\$1.44)	(\$1.60)
Shares Outstanding	1,514	13,344	22,224	22,964	32,829	22,910	33,000	33,100	33,200	33,400	33,175	33,650

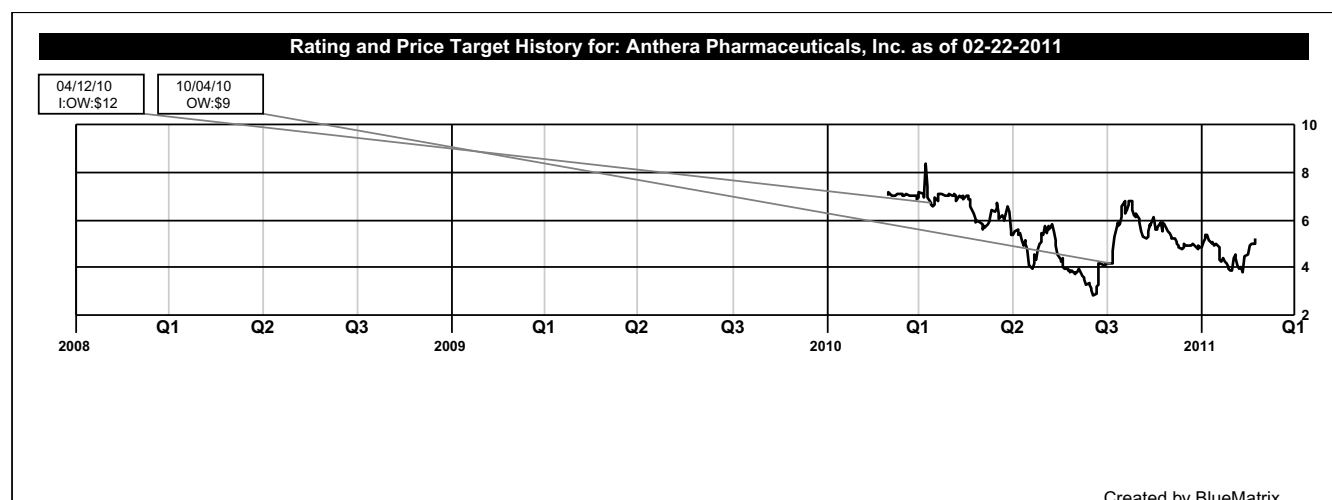
Source: Company reports and Piper Jaffray estimates.

Note: CY:09A results include adjusted primary share count excluding preferred stock. As a result, quarterly EPS does not add to full year result.

1. 1Q:10 R&D expense includes \$3.5 million non-cash milestone payment in IPO stock to Lilly and Shinogi.

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Rating	Count	Percent	IB Serv./Past 12 Mos.	
			Count	Percent
BUY [OW]	311	49.80	69	22.19
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Analyst Certification — Edward A. Tenthoff, Sr Research Analyst — Chad J. Messer, Ph.D., Research Analyst

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