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Reason for Report:

Earnings Announcement

Changes	Previous	Current
Rating	--	Overweight
Price Tgt	--	\$9.00
FY10E Rev (mil)	--	\$0.0
FY11E Rev (mil)	--	\$0.0
FY10E EPS	(\$1.91)	(\$1.72)
FY11E EPS	--	(\$1.44)

Price:	\$6.05
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

Includes recent PIPE

Market Cap. (mil):	\$198.4
Avg Daily Vol (000):	53
Book Value/Share:	\$2.14
Net Cash Per Share:	\$2.23
Debt to Total Capital:	0%
Est LT EPS Growth:	NA
P/E to LT EPS Growth (FY11):	NA
Est Next Rep Date:	02/01/2011
Fiscal Year End:	Dec

Rev (mil)	2009A	2010E	2011E
Mar	\$0.0A	\$0.0A	\$0.0E
Jun	\$0.0A	\$0.0A	\$0.0E
Sep	\$0.0A	\$0.0A	\$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	2009A	2010E	2011E
Mar	(\$2.57)A	(\$0.83)A	(\$0.42)E
Jun	(\$2.22)A	(\$0.36)A	(\$0.36)E
Sep	(\$2.40)A	(\$0.36)A	(\$0.30)E
Dec	(\$0.98)A	(\$0.36)E	(\$0.36)E
FY	(\$8.06)A	(\$1.72)E	(\$1.44)E
CY	(\$8.06)A	(\$1.72)E	(\$1.44)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 - \$6.05) Overweight

Strong Cash Position to Reach Value Creating Data

CONCLUSION:

Anthera ended 3Q:10 with \$73 million in cash, which we forecast will last through top-line PEARL and VISTA-16 data in 2012. Anthera has completed a 2nd manufacturing run of A-623 and is now enrolling the Phase IIb PEARL study in lupus. The DSMB has met for the first time for the 6,500-patient Phase III VISTA-16 study of *varespladib* in Acute Coronary Syndrome (ACS). We expect biomarker futility on both studies early next year.

- **Strong Cash to Reach Value Driving Data.** Anthera ended 3Q:10 with a strong cash balance of \$73 million, which we forecast should last into 2012. By this time Anthera should have reported top-line PEARL and VISTA-16 data. This month, Anthera was awarded a \$1 million therapeutic discovery tax credit from the IRS.
- **Larger and Longer A-623 Lupus Study.** In July, Anthera began the Phase IIb PEARL SC trial of A-623 for the treatment of lupus. PEARL will randomize up to 600 systemic lupus erythematosus (SLE) patients to 3 doses of A-623 or placebo for 24 weeks on top of standard background therapy. The company has completed a 2nd manufacturing run to supply drug for the trial and will announce a large scale manufacturing agreement soon. The primary endpoint is the SLE responder index used by HGS in the *Benlysta* BLISS studies. PEARL is both larger and longer in our view dramatically increasing the likelihood of success.
- **VISTA-16 Enrolling Patients.** Also in July, Anthera initiated the pivotal VISTA-16 trial of varespladib. Anthera has an SPA agreement with the FDA for a single Phase III ACS study comparing 500mg QD varespladib to placebo on top of *Lipitor* for 16 weeks. VISTA-16 will enroll up to 6,500 ACS patients yielding an expected 385 events and is 80% powered to show a 25% improvement in MACE. An analysis will be performed after the first 1,000 patients likely in 1Q:11 and we expect final data by early 2012.
- **Additional Data at AHA.** Last month, full results of the Phase IIb FRANCIS study were published in the *Journal of the American College of Cardiology*. The study enrolled 625 ACS patients to 500mg QD varespladib or placebo on top of 80mg *Lipitor* for 24 weeks. Varespladib showed a significant reduction in sPLA-2 by week 2 ($p < 0.0001$) that persisted through the study, as well as LDLc by week 8 (-5.7% , $p = 0.0023$) and CRP by week 16 ($p = 0.0067$). Anthera should report additional varespladib data at the AHA meeting in Chicago this month.

INVESTMENT RECOMMENDATION:

We reiterate our Overweight rating and \$9 price target. We value varespladib at \$288 million and add mid'11E net cash and assuming exercise of the warrants. 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)

3-Nov-10

	1QA	2QA	3QA	4QA	2009A	1QA ¹	2QA	3QA	4QE	2010E	1QE	2QE	3QE	4QE	2011E
Total Revenues	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Operating Expenses:															
R&D Expense	2,915	2,286	2,526	688	8,415	\$5,242	\$6,438	6,885	10,000	28,565	12,000	10,000	8,000	10,000	40,000
SG&A Expense	846	999	885	695	3,425	1,224	1,510	1,510	2,000	6,244	2,000	2,000	2,000	2,000	8,000
Total Operating Expenses	\$3,761	\$3,286	\$3,411	\$1,383	11,841	\$6,466	\$7,948	\$8,395	\$12,000	34,809	\$14,000	\$12,000	\$10,000	\$12,000	48,000
Operating Loss	(\$3,761)	(\$3,286)	(\$3,411)	(\$1,383)	(\$11,841)	(\$6,466)	(\$7,948)	(\$8,395)	(\$12,000)	(\$34,809)	(\$14,000)	(\$12,000)	(\$10,000)	(\$12,000)	(\$48,000)
Interest and Other Income	13	9	(0)	2	24	3	\$12	62	65	142	55	45	40	35	175
Interest Expense	(37)	(59)	(193)	(96)	(385)	(4,641)	0	0	0	(4,641)	0	0	30	20	50
Total Other Income (Expense)	(24)	(50)	(193)	(94)	(362)	(4,638)	12	62	65	(4,500)	55	45	70	55	225
Pre-Tax Loss	(\$3,785)	(\$3,336)	(\$3,604)	(\$1,477)	(\$12,203)	(\$11,104)	(\$7,936)	(\$8,334)	(\$11,935)	(\$39,309)	(\$13,945)	(\$11,955)	(\$9,930)	(\$11,945)	(\$47,775)
Income Tax Expense	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Net Loss	(\$3,785)	(\$3,336)	(\$3,604)	(\$1,477)	(\$12,203)	(\$11,104)	(\$7,936)	(\$8,334)	(\$11,935)	(\$39,309)	(\$13,945)	(\$11,955)	(\$9,930)	(\$11,945)	(\$47,775)
Net Loss per Share	(\$2.57)	(\$2.22)	(\$2.40)	(\$0.98)	(\$8.06)	(\$0.83)	(\$0.36)	(\$0.36)	(\$0.36)	(\$1.72)	(\$0.42)	(\$0.36)	(\$0.30)	(\$0.36)	(\$1.44)
Shares Outstanding	1,471	1,500	1,500	1,500	1,514	13,344	22,224	22,964	33,000	22,883	33,100	33,200	33,300	33,500	33,275

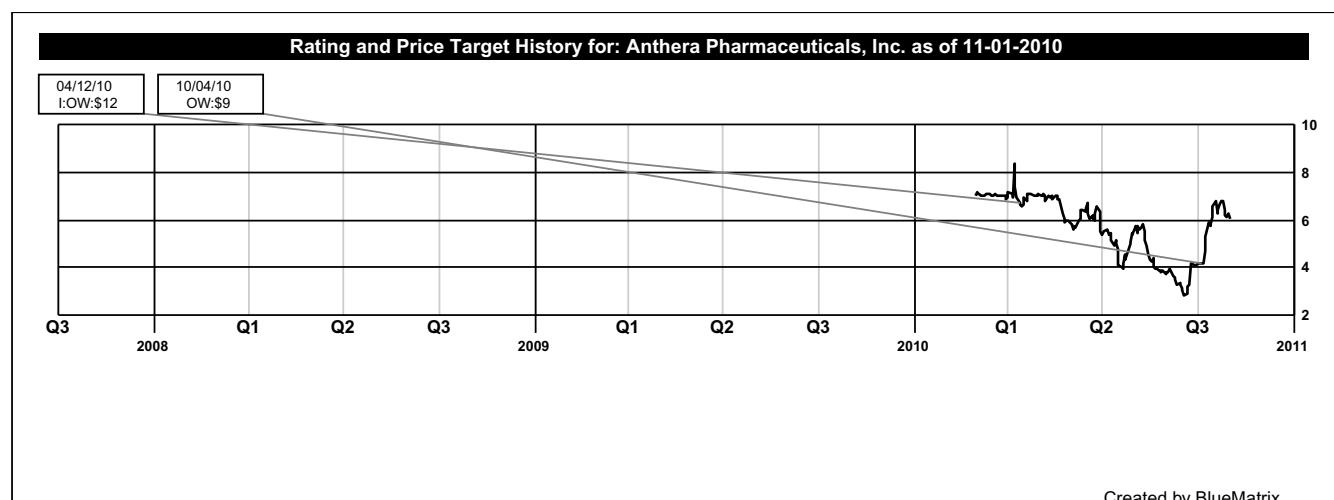
Source: Company reports and Piper Jaffray estimates.

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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			Count	Percent
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Analyst Certification — Edward A. Tenthoff, Sr Research Analyst — Chad J. Messer, Ph.D., Research Analyst

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