Scimitar Equity

ASTM

Aastrom Biosciences, Inc.

August 19, 2010

Q4/10 Review

Valuation: **$4.40**

Fair Value: **$6.65**

Price at 8/18/10: **$1.49**

Market Capitalization: **$42.10 M**

Enterprise Value: **$20.53 M**

Cash: **$19.1 M**

Fully Diluted: **39.012 M**

Shares Outstanding: **28.26 M**

Float: **26.74 M**

Quarterly Burn Rate: **$4-$5M**

52 Week Range: **$1.32 - $4.16**

Avg Volume (Daily): **94,294**

Avg Volume (10 day): **104,314**

Avg Volume (3 Mos): **124,618**

One Year Return: **-53.66%**

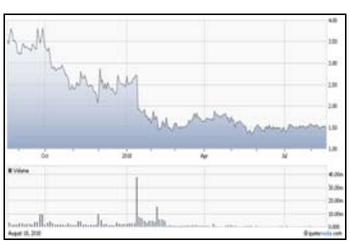
Institutional Ownership: **5.20%**

Insider Ownership: **5.28%**

Beta: **-0.31**

Fiscal Year End: **June 30**

Exchange: **NASDAQ**



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Rome Wasn't Built in a Day, But Aastrom is Crossing the Rubicon

Aastrom Biosciences develops autologous cellular therapies for the treatment of severe and chronic cardiovascular diseases. Using its proprietary tissue repair cell (TRC) technology, ASTM is able to expand the numbers of stem and early progenitor cells from a small amount of bone marrow collected from the patient.

- **Conducting 3 late staged trials; IMPACT-DCM trial, a Phase 2 (cardiac regeneration) with surgical delivery of TRCs in patients with dilated cardiomyopathy (DCM) leading to severe chronic heart failure); DCM P2 trial with catheter delivery of TRCs and the RESTORE-CLI trial, a Phase 3 (vascular regeneration) in patients with CLI (critical limb ischemia).**

- **Initiating a Phase 3 CLI Special Protocol Assessment (SPA) for its autologous cell therapy.**

- **Compelling efficacy, safety results and anecdotal data provide a strong signal of the therapeutic benefit of autologous cell therapy in patients with critical limb ischemia (CLI).**

- **Net loss for Q4/10 was $5.1 M or $0.18 per share versus the Q3/10 net loss of $4.3 M or $0.16 per share. R&D expenses for Q4 were $3.6 M. SG&A expenses for Q4 were $1.5 M. Net loss for Q4 was $5.1 M, or $0.18 per share.**

- **Revenues for FY10 were $89K and R&D expenses were $12.7 M. The differences in FY09 expenses versus FY10 expenses reflect increased clinical activity related to its DCM and CLI programs. SG&A expenses for FY10 were $5.2 M. This change is primarily due to increased employment costs, external legal and consulting fees. Net loss for FY10 was $17.7 M, or $0.72 per share. Loss per share comparisons were impacted by the issuance of 6.5 M shares of common stock on 01/21/10.**

- **Ongoing extension study for control patients from the ongoing open-label Phase 2 IMPACT-DCM clinical trial in patients with dilated cardiomyopathy (DCM). The extension study is designed to offer control-group patients the opportunity to receive treatment with an expanded mixture of their own bone marrow-derived stem and progenitor cells after completing at least 6 months of follow-up.**

- **The blended valuation model implies a pricing of $4.40 given the fully diluted shares outstanding. The Sum of the Parts estimation of $5.62 is discounted 10% and is significantly above this stocks current price of $1.49. A BUY ranking believing that ASTM's stock is held at an extremely low stock price relative to market comparables but should appreciate as partnering opportunities and the regulatory pathway evolves. Shares of ASTM offer upside in near term but, trading remains volatile based on the roller coaster of market dynamics.**

Investment Thesis

I continue with a **BUY** ranking and believe that the current market issues have obscured share price potential.

We derived our current valuation by using a Blended Price Valuation Table which includes a Sum of the Parts (SOTP) analysis, a direct comparable analysis layered with a sector comparable analysis. Our SOTP scenario is extremely conservative (with a 10% discount) and details a Sum of The Parts value of **$5.62** and when merged with a direct comparables analysis of **$3.69** reinforced by a stem cell sector perspective of **$3.88** implies a blended valuation of **$3.69** given the current shares outstanding of **28.26 M** with a fully diluted number of **39.012 M**. The Avg. Blended Price Valuation of **$4.40** is significantly above this stocks current price of **$1.49** and the trading range of **$1.32 -$4.16**. We note the average market capitalization of designated comparables is **$144.05 M** or about **2.5 X** the implied multiple of ASTM's market cap of **$58.13 M (Fully Diluted)**. In a review of there overall sector stem cell companies, ASTM has a **2.6 X** multiple and a fair value of **$3.88**.

ASTM has made significant progress during the past 12 months and is much stronger position to execute clinical programs to commercialize autologous cell therapies. Positive Phase 2b interim results were reported during FY10 in the treatment of critical limb ischemia, the clinical research program in dilated cardiomyopathy was expanded, more than $17 M in new capital was raised, a reverse stock split was executed to improve capital structure, institutional ownership of stock increased, the management team was strengthened with several key appointments while sharpening focus on promising late-stage opportunities to treat cardiovascular diseases. ASTM is preparing to move its Critical Limb Ischemia (CLI) program into Phase 3 development, report final results from the ongoing Phase 2 CLI study, report interim data from the IMPACT-DCM study and complete the ongoing Phase 2 Catheter DCM trial.

Risks

The market conflagration, global debt issues and market dynamics are challenging for the small cap stem cell sector which make the timing and potential for future equity financings uncertain with only $19.1 M in cash with a projected burn rate of $4-5 M per quarter. The uncertainties of clinical trials, the evolving regulatory requirements applicable to stem cell-based products and estimating the completion dates or cost to complete major R&D programs are highly speculative. Failure to obtain, or any delay in obtaining, regulatory approvals could cause their clinical expenditures to increase and have a material adverse effect on operations. ASTM will need to raise a significant amount of additional funds, or through a collaborative partner (or both), to finance the clinical activities of cell product candidates for additional indications.

Valuation Analysis

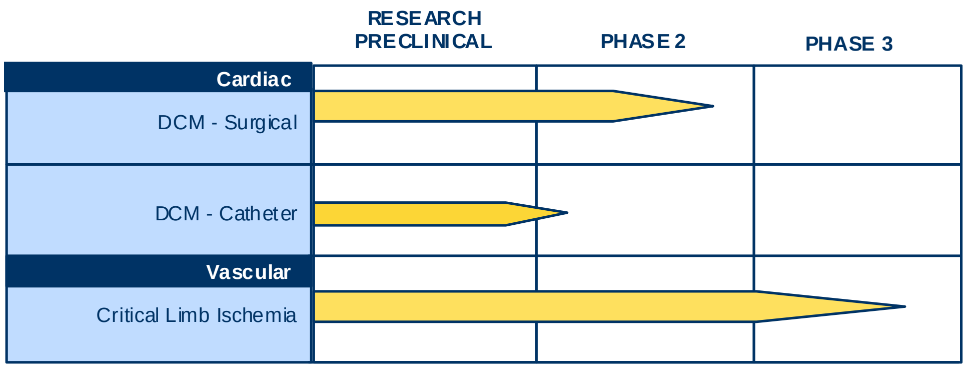
Valuation should be understood in terms of an objective quantitative model and a comprehensive qualitative explanation that enlightens investors to expectation and potential. Given the lack of a specific valuation or an estimate formula for stem cell companies, we are blending different models for a valuation, or as some refer to a price target to come up with a true measurement tool. We retain the discounted cash flow analysis, but most of these companies generate losses per share layered by multiple dilutive financings hoping for the holy grail of an approved therapy.

Patents

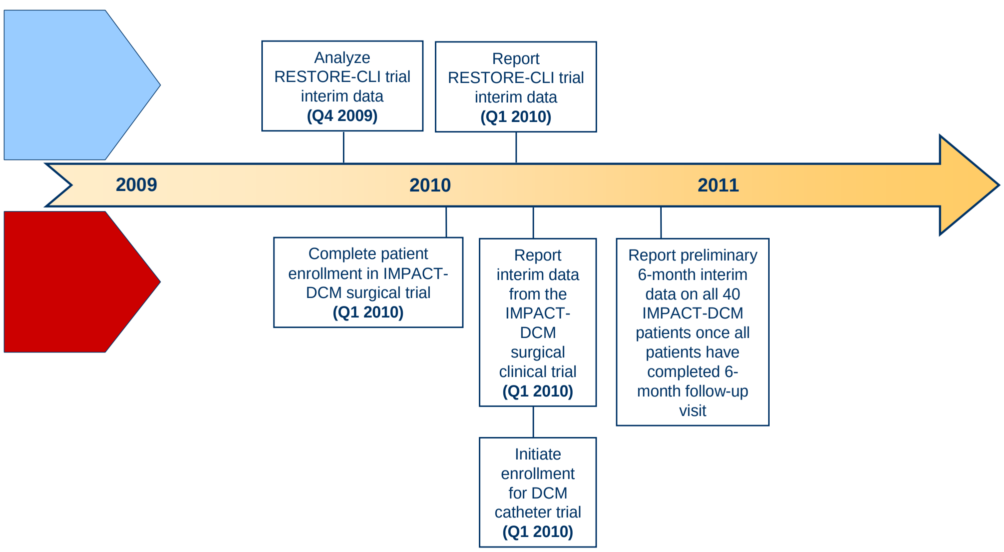
ASTM has 26 US patents issued and 4 pending with 41 foreign issued patents and 4 pending. Certain patent equivalents to the US patents have also been issued in other jurisdictions including Australia, Japan, the Republic of Korea and Canada as well as under the European Convention. ASTM also relies on exclusive, world-wide licenses relating to the production of human cells granted by the University of Michigan for certain patent rights.

ASTM Patents	Issued	Pending
US Patents	**26**	**4**
Foreign Patents	**41**	**4**

Regulatory



In addition to using tissue repair cell (TRC) technology in regulated clinical trials, certain non-US regions allow autologous cell products to be utilized in patient treatments without further registration or marketing authorization.



Key Catalysts and Milestones

VASCULAR (CLI)	STATUS
DCM Catheter - Delivery Initiate Enrollment	Completed
Phase 2 DCM Catheter Study	On-Going
6 Months Data Set - Review for Safety and Efficacy Signals	On-Going
Begin Pivotal Program	On-Going

CARDIAC – CATHETER (DCM)	STATUS
Complete enrollment in IMPACT-DCM Phase 2 surgical trial	Completed
Report interim data from the IMPACT-DCM surgical trial	Completed
Preliminary 6-month interim data on all 40 IMPACT-DCM patients	On-Going
Discuss interim findings with FDA	On-Going
Report final results on all 40 IMPACT-DCM patients	On-Going

CARDIAC – SURGICAL (DCM)	STATUS
Report RESTORE-CLI Phase 2b interim data	Completed
Present interim results at SVS meeting	Completed
Discuss interim findings with FDA	Completed
Present interim results on all patients	On-Going
6 months data set - available (possible AHA Presentation)	On-Going
Pivotal trial in CLI: Approval of SPA	On-Going
Pivotal Program in CLI: Begin Phase 3	On-Going

Insider and Institutional Holdings

HOLDER	% OUTSTANDING
Management, Directors and Officers	5.28%
Institutional Holdings	5.20%
RA Capital Management, LLC	3.59%
BlackRock Institutional Trust Company	3.26%
The Vanguard Group, Inc.	0.83%
CALPERS	0.24%
Northern Trust Corporation	0.18%
Geode Capital Management	0.16%
Investors Capital Advisory Services	0.13%
Commerzbank Aktiengesellschaft	0.12%
Bank of New York Mellon Corporation	0.07%
Harris Financial Corp	0.06%

Capitalization

Financial Instruments (As of 8/18/10)	# of Shares
Number of Common Shares Outstanding	28.256 M
Conversion of Preferred into Common	
Warrants Outstanding (8.877 M) and Stock Options (1.879 M)	10.756 M
Fully Dilutive Total	39.012 M

Valuation Analysis

Direct Comparables:

Small-Mid Cap Stem Cell Company Comparables

Company	Ticker	Price	Market Cap ($M)	EV($M)
Harvest Technologies	Private	N/A	N/A	N/A
Cytori Therapeutics	CYTX	$4.90	$224.91	$199.13
Athersys	ATHX	$2.99	$56.60	$36.31
MesoBlast	MSB	$1.74	$270.04	$272.26
Pluristem Therapeutics	PSTI	$1.18	$24.67	$22.45
Average of Comparables		$2.70	$82.64	$132.54
Aastrom Bioscience	ASTM	$1.49	58.13	
Implied Multiples			2.5x	
Implied Fair Value ASTM			$3.69	

Sector Comparables:

Small-Mid Cap Stem Cell Sector Comparables

Company	Ticker	Price	Market Cap ($M)	EV ($M)
Stem Cells	STEM	$0.87	$104.00	$73.58
Geron Corporation	GERN	$5.23	$533.07	$417.07
Opexa Therapeutics	OPXA	$1.17	$21.51	$13.49
Neuralstem	CUR	$2.08	$87.88	$79.52
NeoStem	NBS	$1.76	$93.34	$98.21
BioTime	BTIM	$5.43	$184.60	$171.05
Osiris Therapeutics	OSIR	$6.78	$222.30	$140.20
Intl. Stem Cell Corporation	ISCO.OB	$1.16	$82.78	$79.27
ReNeuron Group	RENE.L	$7.10	$31.75	$22.28
Average of Comparables		$3.51	$151.25	$121.63
Aastrom Bioscience	ASTM	$1.490	$58.13	
Implied Multiples			2.6x	
Implied Fair Value ASTM			$3.88	

Valuation Analysis (continued)

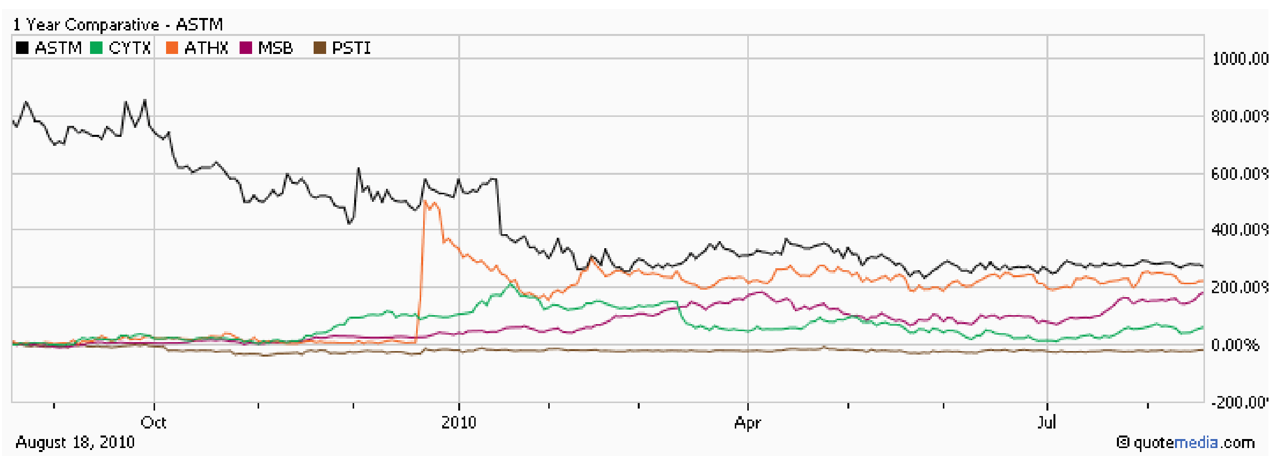
Our Standardized Scimitar Valuation Matrix and Price Target Sensitivity Analysis below assume a **2011** EPS (the companies second estimated year of profitability) of **($0.49)**. We apply a standard **20x** P/E biotech multiple to 2010 EPS and a 10% Discount Rate back to 2009 or 4 years/periods and achieve a fair value of **$6.65** per share.

Aastrom Biosciences (ASTM)					
Valuation Matrix					
Based on projected EPS in 2010 of:					($0.49)
	Discount Factor				
P/E x	10.0%	15.0%	20.0%	25.0%	30.0%
10	($3.32)	($2.78)	($2.35)	($1.99)	($1.70)
15	($4.99)	($4.17)	($3.52)	($2.99)	($2.56)
20	($6.65)	($5.57)	($4.69)	($3.99)	($3.41)
25	($8.31)	($6.96)	($5.87)	($4.98)	($4.26)
30	($9.97)	($8.35)	($7.04)	($5.98)	($5.11)

Valuation (cont)

ASTM Share Price and Volume

Comparables Index



Aastrom Biosciences, Inc. (ASTM): Black
Cytori Therapeutics, Inc. (CYTX): Green
Athersys, Inc. (ATHX): Orange
MesoBlast, FPO (MSB): Pink
Pluristem Therapeutics, Inc. (PSTI): Brown

Financial Highlights

Q4/10

Net loss for Q4/10 was $5.1 M. or $0.18 per share. ASTM reported no revenues for Q4/10. R&D expenses for Q4/10 were $3.6 M with FY09 numbers (ended 6/30/10) coming in at $12.7 M. These changes reflect ASTM's increased clinical activity related to its DCM and CLI programs. SG&A expenses for Q4/10 were $1.5 M and the FY09 were $5.2 M. These changes are primarily due to increased employment costs, external legal and consulting fees. Net loss for FY10 was $17.7 M, or $0.72 per share, compared to a net loss of $15.9 M, or $0.89 per share for FY09. The increase in net loss for FY 09 is primarily due to increased R&D costs. Loss per share comparisons were impacted by the issuance of 6.5 M shares of common stock on 1/21/10. As of 6/30/10, the company had a total of $19.1M in cash, cash equivalents and short term investments. Aastrom expects that its cash spending will average approximately $4 – $5 M per quarter over the next 12 months which includes Phase 3 clinical program planning and initiation costs for the critical limb ischemia program.

Q3/10

Net loss for Q3/10 was $4.3 M or $0.16 per share. Revenues for Q3/10 were $0. The fluctuations in product sales is due to the changes in volume of cell production sales for investigator-sponsored clinical trials in Spain and limited cell manufacturing supplies to a research institute in the US. Total costs and expenses for Q3/10 were $4.263 M. R&D expenses were $2.845 M. Increases reflect continued expansion of clinical development activities including the costs associated with recruitment and treatment of the final patients in the IMPACT-DCM Phase 2 clinical trial. G&A expenses were $1.418 M. The increase in the quarterly expense is primarily the result of increased legal fees and contract services. G&A expenses included a non-cash charge of $100 K relating to share-based compensation expense. Interest income for the quarter was $34 K. The fluctuations in interest income are due primarily to corresponding changes in the level of cash, cash equivalents and short-term investments during the periods, and lower interest rates. Interest expense was $9 K. Net loss for Q3/10 was $4.238 M or $.16 per share. At 3/31/10, ASTM had $22.8 M in cash and cash equivalents and short-term investments. It is expected that cash utilization will average approximately $1.4 M per month for the remainder of fiscal year ending 6/30/10.

Q2/10

Q2/10 net loss of $4.57 M or $0.03 per share. Total revenues for Q2/10 were $16,000. Total costs and expenses for Q2/10 were $4.601M. R&D expenses were $3.283 M. This increases reflected continued expansion of clinical development activities including the costs associated with recruitment and treatment of patients in the IMPACT-DCM and RESTORE-CLI Phase 2 clinical trials. R&D expenses included a non-cash charge of $175 K and $361K relating to share-based compensation expense. G&A expenses were $1.316 M. This decrease was primarily due to an offset of $279 K to the stock compensation expense that was recorded in Q1/10. This offset reversed previously recognized stock compensation expense for certain options held by George W. Dunbar that were forfeited when he stepped down as chief executive officer, president and chief financial officer on 12/14/09 as these options were no longer expected to vest. For Q2/ 10, G&A expenses included a non-cash charge of $127 K relating to share-based compensation expense. Interest income for Q2/10 was $21 K. Any fluctuations in interest income are due primarily to corresponding changes in the level of cash, cash equivalents and short-term investments during past periods and varying yields from the company's investments. Interest expense was $11K. After the completion of the public offering of common stock and warrants in 1/10, ASTM had approximately $25.5 M in cash and cash equivalents on 1/31/10. ASTM received approximately $12.4 M in net proceeds, after underwriting discounts and commissions and other offering expenses, from the sale of 52,077,100 units (including 5,923,100 units sold to the underwriter pursuant to the exercise of its over-allotment option) consisting of an aggregate of 52,077,100 shares of ASTM.

Q1/10

Net loss for Q1/10 was $3.801M, or $0.02 per share. Q1 revenues (product sales) were $73 K. Total costs and expenses decreased to $3.889 M. R&D expenses increased to $2.911 M for Q/1. This increase (from $2.726 M) reflects continued expansion of clinical development activities including the costs associated with recruitment and treatment of patients in the IMPACT-DCM clinical trial. R&D expenses for the quarters ended 9/30/09 and 2008 also include a non-cash charge of $186,000 and $162,000, respectively, relating to share-based compensation expense. SG&A expenses were $946 K. SG&A also include a non-cash charge of $140 K, relating to share-based compensation expense. Interest income was $28 K. Fluctuations (from previous Q's) in interest income are due primarily to corresponding changes in the level of cash and cash equivalents during the periods. Interest expense was $13 K. The changes in net loss is primarily the result of fluctuations in spending of R&D expenses were in part on a per share basis resulting from an increase in the weighted average number of common shares outstanding. At 9/30/09, Aastrom had $17.4 M in cash and cash equivalents.

Financial Statement

Aastrom Biosciences, Inc. (ASTM)								
in thousands (except per-share data)								
Income Statement								
Period Ending	**FY2008**	**FY2009**	**Q1A**	**Q2A**	**Q3A**	**Q4A**	**FY2010**	**FY2011**
Revenues								
Product sales and rentals	208.0	182.0	27.0	28.0	0.0	0.0	55.0	55.0
% growth	*121.3%*	*-12.5%*		*3.7%*	*-100.0%*			*0.0%*
Research and development agreements	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
% growth								*0.0%*
Grants	314.0	0.0	0.0	0.0	0.0	34.0	34.0	34.0
% growth	*-46.9%*	*-100.0%*						*0.0%*
Total Revenues	522.0	182.0	27.0	28.0	0.0	34.0	89.0	89.0
% growth	*-23.8%*	*-65.1%*		*3.7%*	*-100.0%*		-51.1%	*0.0%*
Costs and expenses								
Cost of product sales and rentals	56.0	112.0	4.0	18.0	0.0	12.0	34.0	33.0
% of product sales and rentals revenue	*26.9%*	*61.5%*	*14.8%*	*64.3%*			*61.8%*	*60.0%*
Cost of product sales and rentals- provision for excess inventories	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
% of product sales and rentals revenue	*0.0%*	*0.0%*	*0.0%*	*0.0%*			*0.0%*	*0.0%*
Research and development	15,249.0	11,289.0	2,726.0	2,829.0	2,845.0	4,258.0	12,658.0	8,900.0
% of total revenues	*2921.3%*	*6202.7%*	*10096.3%*	*10103.6%*			*14222.5%*	*10000.0%*
Selling, general, and administrative	6,436.0	4,950.0	1,316.0	1,333.0	1,418.0	1,134.0	5,201.0	5,340.0
% of total revenues	*1233.0%*	*2719.8%*	*4874.1%*	*4760.7%*			*5843.8%*	*6000.0%*
Total Costs and Expenses	21,741.0	16,351.0	4,046.0	4,180.0	4,263.0	5,404.0	17,893.0	14,273.0
% of total revenues	*4164.9%*	*8984.1%*	*14985.2%*	*14928.6%*			*20104.5%*	16037%
Loss from Operations	(21,219.0)	(16,169.0)	(4,019.0)	(4,152.0)	(4,263.0)	(5,370.0)	(17,804.0)	(14,184.0)
Other Income (Expense)								
Other income	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Interest income	1,170.0	296.0	127.0	69.0	34.0	28.9	258.9	436.2
Interest expense	(84.0)	(73.0)	(21.0)	(20.0)	(9.0)	(3.9)	(53.9)	(5.4)
Total Other Income	1,086.0	223.0	106.0	49.0	25.0	25.0	205.0	430.7
Net Loss	(20,133.0)	(15,946.0)	(3,913.0)	(4,103.0)	(4,238.0)	(5,345.0)	(17,599.0)	(13,753)
Net Loss per Share	(0.16)	(0.11)	(0.03)	(0.03)	(0.16)	(0.19)	(0.62)	(0.49)
Shares Outstanding								
Basic and Diluted	129,120	143,016	132,796	134,575	26,737	28,256	28,256	28,256

*projections based on ASTM 8-K from 08/17/10

Please Read these Important Disclosures!

Reg. AC, Analyst Certification

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Valuation, Estimates, and Models Methodology Versus Stock Ranking

In these current volatile market/economic times; Scimitar has stepped back from making specific price targets. Valuation should be understood in terms of an objective quantitative model and a comprehensive qualitative explanation that enlightens investors to expectation and potential. Models reflect current judgment only; they are neither all-inclusive nor can they be guaranteed. Analysis and models are subject to change based on share pricing, share/capitalization increases or decreases, regulatory status and certainly market conditions. http://www.scimitarequity.com/content/disclosure/valuation-methodology.jsp

"INITIATION"	"BUY"	"BUY"
04.07.10	05.13.10	08.19.10

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