

May 24, 2010

StemCells, Inc. (Nasdaq/STEM)

Robert M. Wasserman

Director of Research

561-208-2905

rwasserman@dawsonjames.com

Neutral Lowering to Neutral on weaker markets

StemCells is developing human neural stem cells for therapeutic applications

Investment Highlights

1) **StemCells, Inc.** released their Q1/2010 financial results earlier this month, including revenues of \$230,000 and a net loss of \$6.1 million or (\$0.05) per share. This compares to revenues of \$57,000 and a net loss of \$9.2 million or (\$0.07) per share in the prior year period. Revenues for the quarter were evenly divided between product sales from the SCS acquisition of \$116,000 and \$114,000 from licensing and grant revenue. Q1/2010 results also included a net gain of \$1.5 million or \$0.01 per share for a decrease in the value of warrant liabilities. The Company was able to keep general and administrative costs level in Q1/2010 at \$2.5 million while R&D costs increased slightly to \$5.0 million from \$4.2 million in Q1/09 due to the initiation in Q1/2010 of a Phase I trial in PMD. StemCells used approximately \$7 million in cash for operations in Q1/2010, and after an offset of a little over \$1 million raised from stock purchases cash on hand declined to \$31.5 million at the end of the quarter, or about 12-18 months worth of time at current levels of cash burn.

2) We are adjusting our estimates for STEM for 2010 slightly to \$1.4 million in revenues (from \$3.0 million) and \$28.8 million in net losses, or (\$0.24) per share, from \$30.3 million in net losses, or (\$0.28) per share. The primary factors in adjusting our 2010 estimates are lower levels of product sales, lower general and administrative costs, and the gain on warrant liabilities, offset by higher than forecast R&D expenditures. For the year, we are forecasting that operating cash burn for STEM will be approximately \$24 million, barring any major changes in R&D activity or conversely, partnership participation.

3) **We are lowering our rating on STEM to Neutral** on general market weakness, a specific flatness in biotech and stem cell stocks, and the Company's need so far this year to sell shares in the open market through an ongoing sales agreement, which creates near-term weakness in the stock. STEM shares could benefit this year from the signing of a partnership for existing R&D programs, or even new indications. Conversely, pursuing new markets for the Company's Human neural stem cells could lead to higher R&D spending (in the absence of licensing fees or expense reimbursement from a partner) thus accelerating cash burn and creating a more immediate need for raising additional capital and share dilution. However, stem cell stocks tend to trade as

Current Price \$0.99

Price Target N/A

Estimates	F2008A	F2009	F2010E
Revenues(\$000s)	\$232	\$993	\$1,415
EPS	(\$0.35)	(\$0.26)	(\$0.24)

Stock Data	
52-Week Range	\$0.94-\$1.86
Shares Outstanding (mil.)	119.0
Market Capitalization (mil.)	\$117.8
Enterprise Value (mil.)	\$87.2
Debt to Capital (3/10)	3.6%
Book Value/Share (3/10)	\$0.25
Price/Book	4.0 x
Average Trading Volume (3-Month)	1.1 million
Insider Ownership	7.0%
Institutional Ownership	17.7%
Short interest	14.3 million
Dividend / Yield	\$0.00/0.0%



Price target and ratings changes over the past 3 yrs:
Initiated - January 14, 2009 - Price Target \$3.00
Downgraded - May 24, 2010

a group, and any exciting progress on the R&D front or partnerships from any industry players could trigger a rebound in STEM shares later this year, so we will monitor the stock for future purchase re-entry points.

Risk Factors

StemCells' clinical programs and ultimately final products are reliant **on approvals by the US FDA** and other regulatory bodies. There can be no guarantee of timely or definitive regulatory approvals for any of their pipeline products. In addition, the development of human stem-cell therapies is breaking new ground both technologically and ethically in the United States, and controversy surrounding this technology continues to exist. StemCells owns or exclusively licenses a number of **patents related to human neural stem cells** and methods of deriving and using these cells. At various times in the future, the Company may have to defend these patents, and indeed currently the Company is involved in patent litigation with Neuralstem Inc. relating to the use of human neural stem cells. The Company has recently resumed pursuing its patent infringement cases against Neuralstem following several decisions by the US PTO to uphold the Company's patents, with discovery and a trial date anticipated to begin sometime in 2010 or 2011. Finally, although we estimate that the Company has as much as 15-18 months worth of cash remaining to fund ongoing operations, should StemCells **incur any unusually large expenses or accelerate its R&D programs**, the Company may have to go back to the equity markets sooner than in mid-2011.

Catalysts/Investor Timeline

- 1) Complete Phase I NCL study report – end of year 2009
- 2) File for Second Phase I trial for NCL - 2010
- 3) Begin Phase I trial for PMD – 2010
- 4) Initiate clinical trials in new CNS indications including spinal cord injury, retinal disorders, or myelin disorders in the brain – 2010 or 2011
- 5) Begin clinical trials for first indication in human Liver Engrafting Cells (hLEC) program – 2010
- 6) Additional license agreements for stem cell services for SCS – 2009 and 2010

StemCells, Inc.
Consolidated Statements of Income
 (in \$000s, except EPS)

Robert M. Wasserman

FYE December	2005	2006	2007	2008	1Q09	2Q09	3Q09	4Q09	2009	1Q10	2Q10E	3Q10E	4Q10E	2010E	2011E
					March	June	Sept	Dec		March	June	Sept	Dec		
Revenues															
Licensing agreements and grants	\$206	\$93	\$57	\$232	\$57	\$145	\$99	\$308	\$608	\$114	\$145	\$195	\$245	\$699	\$2,500
Product sales and other	0	0	0	0	0	121	154	110	385	116	150	200	250	716	4,000
Total revenues	206	93	57	232	57	265	253	418	993	230	295	395	495	1,415	6,500
Expenses															
Cost of product sales						60	141	60	261	44	60	90	120	314	2,000
Research and development	8,226	13,600	19,937	17,808	4,236	5,055	4,989	5,651	19,930	5,037	5,200	5,250	5,300	20,787	22,000
General and administrative	5,540	7,154	7,927	8,296	2,539	2,202	2,112	2,678	9,531	2,585	2,500	2,600	2,700	10,385	11,000
Wind-down expenses	2,827	709	783	866	205	340	(6)	110	650	165	100	100	100	465	400
Total expenses	16,593	21,464	28,648	26,970	6,980	7,656	7,236	8,499	30,371	7,831	7,860	8,040	8,220	31,951	35,400
Loss from operations	(16,387)	(21,371)	(28,591)	(26,738)	(6,924)	(7,391)	(6,983)	(8,081)	(29,378)	(7,601)	(7,565)	(7,645)	(7,725)	(30,536)	(28,900)
Interest and misc. income	4,649	2,480	2,460	803	42	8	35	140	226	1,516	100	90	80	1,786	300
Interest and other expense		(57)	1,109	(3,151)	(2,400)	16	1,803	2,707	2,126	(39)	(10)	(10)	(10)	(69)	(50)
Net income (loss)	(11,738)	(18,948)	(25,023)	(29,086)	(9,282)	(7,366)	(5,145)	(5,234)	(27,027)	(6,124)	(7,475)	(7,565)	(7,655)	(28,819)	(28,650)
Basic income per share to common	(\$0.18)	(\$0.25)	(\$0.31)	(\$0.35)	(\$0.10)	(\$0.07)	(\$0.05)	(\$0.05)	(\$0.26)	(\$0.05)	(\$0.06)	(\$0.06)	(\$0.06)	(\$0.24)	(\$0.25)
Diluted income per share to common	(\$0.18)	(\$0.25)	(\$0.31)	(\$0.35)	(\$0.10)	(\$0.07)	(\$0.05)	(\$0.05)	(\$0.26)	(\$0.05)	(\$0.06)	(\$0.06)	(\$0.06)	(\$0.24)	(\$0.25)
Basic shares outstanding	63,643	74,611	79,772	82,716	96,048	104,776	108,257	114,880	106,046	118,959	119,500	120,000	120,500	119,740	121,500
Diluted shares outstanding	63,643	74,611	79,772	82,716	96,048	104,776	108,257	114,880	106,046	118,959	119,500	120,000	120,500	119,740	121,500
Key ratios:															
Cash Flow/share	\$0.04	\$0.02	\$0.02	(\$0.29)	(\$0.06)	(\$0.06)	(\$0.04)	(\$0.03)	(\$0.19)	(\$0.05)	(\$0.05)	(\$0.05)	(\$0.05)	(\$0.20)	(\$0.20)
EBITDA/share	\$0.04	\$0.02	\$0.01	(\$0.25)	(\$0.06)	(\$0.06)	(\$0.06)	(\$0.06)	(\$0.23)	(\$0.05)	(\$0.05)	(\$0.05)	(\$0.06)	(\$0.21)	(\$0.21)

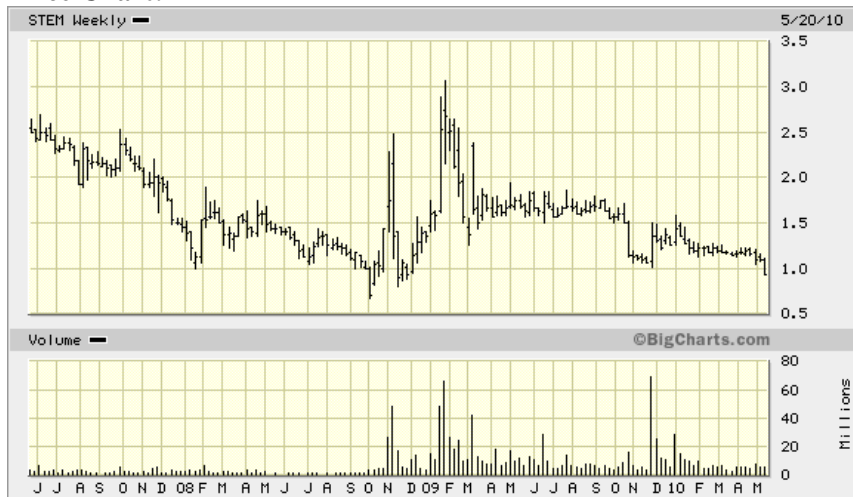
Balance Sheets

	(\$000s)							
Assets:	12/31/09	3/31/10	Investor Catalyst Timeline					
			1Q09	2Q09	3Q09	4Q09	2010E	2011E
			March	June	Sept	Dec		
Cash and marketable securities	\$38,815	\$31,494						
Accounts receivable, net	766	448						
Prepaid expenses & other	560	695						
Total current	40,141	32,637					X	
Property & equip., net	2,857	2,637						X
Goodwill & intangibles	5,667	5,183						X
Other	2,525	2,541						X or X
TOTAL ASSETS	\$51,190	\$42,999						X or X
Liabilities:								
Accounts payable	\$891	\$1,018						
Accrued expenses	5,210	3,492						
Notes payable	229	230						
Other current	200	227						
Total current	6,530	4,967						
Long-term debt	785	726						
Other long-term	13,381	11,582						
Total long-term liabilities	20,695	17,274						
Stockholders' equity	30,495	25,724						
TOTAL LIAB & EQ	\$51,190	\$42,999						X(2) X(2)

Source: Dawson James Securities, Inc. estimates; Company documents

Important Disclosures:

Price Chart:



Price target and ratings changes over the past 3 years:

Initiated - January 14, 2009 – Target \$3.00

Downgraded to Neutral – May 24, 2010

Analyst Certification: The analyst(s) whose name appears on this research report certifies that 1) all of the views expressed in this report accurately reflect his personal views about any and all of the subject securities or issuers discussed; and 2) no part of the research analyst's compensation was, is, or will be directly or indirectly related to the specific recommendations or views expressed by the research analyst in this research report; and 3) All Dawson James employees, including the analyst(s) responsible for preparing this research report, may be eligible to receive non-product or service specific monetary bonus compensation that is based upon various factors, including total revenues of Dawson James and its affiliates as well as a portion of the proceeds from a broad pool of investment vehicles consisting of components of the compensation generated by investment banking activities, including but not limited to shares of stock and/or warrants, which may or may not include the securities referenced in this report.

Dawson James has received investment banking compensation from the company mentioned in this report and actively seeks compensation for investment banking services in the future. Dawson James does not make a market in this security. Neither the research analyst whose name appears on this report nor any member of his household is an officer, director or advisory board member of the company. Dawson James did not receive any other compensation from the company in the previous 12 months. The Firm and/or its directors and employees may own securities of the company(s) in this report and may increase or decrease holdings in the future.

Ratings definitions: 1) **Buy:** the stock is expected to appreciate and produce a total return of at least 20% over the next 12-18 months; 2) **Neutral:** the stock is fairly valued for the next 12-18 months; and 3) **Sell:** the stock is expected to decline at least 20% over the next 12-18 months and should be sold.

Ratings Distribution	Company Coverage		Investment Banking	
	# of Companies	% of Total	# of Companies	% of Totals
Buy	9	64%	4	44%
Neutral	5	36%	4	80%
Sell	0	0%	0	0%
Total	14	100%	8	57%

Information about valuation methods and risks can be found in the “STOCK VALUATION” and “RISKS” sections of this report.

DAWSON JAMES SECURITIES, INC., Member SIPC, FINRA, (the "Firm") does not make a market in these securities. The Firm may perform or seek to perform investment banking services for these companies in the future. Analysts receive no direct compensation in connection with the firm's investment banking business. All Dawson James employees, including the analyst(s) responsible for preparing this research report, may be eligible to receive non-product or service specific monetary bonus compensation that is based upon various factors, including total revenues of Dawson James and its affiliates as well as a portion of the proceeds from a broad pool of investment vehicles consisting of components of the compensation generated by investment banking activities, including but not limited to shares of stock and/or warrants, which may or may not include the securities referenced in this report. The Firm, its officers, directors, analysts or employees may effect transactions in and have long or short positions in the securities (or options or warrants with respect thereto) mentioned herein. Although the statements of fact in this report have been obtained from and are based upon recognized statistical services, issuer reports or communications, or other sources that the Firm believes to be reliable, we cannot guarantee their accuracy. All opinions and estimates included in this report constitute the analyst's judgment as of the date of this report and are subject to change without notice. The Firm may effect transactions as principal or agent in the securities mentioned herein. The securities discussed or recommended in this report may be unsuitable for investors depending on their specific investment objectives and financial position. This report is offered for informational purposes only, and does not constitute an offer or solicitation to buy or sell any securities discussed herein in any jurisdiction where such would be prohibited. Additional information is available upon request.