

Emerging Company Research

BG Medicine — Outperform (1)

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Analysts
Doug Schenkel
(617) 946-3918
doug.schenkel@cowen.com

Shaun Rodriguez, Ph.D. (617) 946-3929 shaun.rodriguez@cowen.com

BGMD Analyst Day Recap

Summary: Yesterday, BG Medicine hosted an analyst and investor meeting and used the event to provide an update on the its two leading development programs as well as to formally introduce its new senior management appointments. The following were our key takeaways:

- **CardioSCORE in Focus.** A 510(k) for CardioSCORE, formerly AMIPredict, was submitted to FDA in late December and appears on track for clearance this year. The intended use is as an aid in the assessment of near term risk for major CV events and death for men 55y and older and women 60y and older-potentially a multi hundred million dollar revenue opportunity. Importantly, the validation study (n>6,000) demonstrated CardioSCORE combined with Framingham Risk Score identifies about 55% of patients who progress to a major CV event within 2 years. Our ~\$100 ASP assumption appears reasonable as aggregate reimbursement for the 7 immunoassays is \$136. Although the rollout plan was not detailed, the ability to leverage the installed base for the Abbott ARCHITECT system was stressed.
- **Galectin-3 Submission Delayed.** Initial 510(k) submission for an automated Galectin-3 test through partners had been expected by YE2011, was delayed to Q1:12 on the Q3:11 call, and is now expected in Q2:12, with a second in H2. As we have noted in the past, these delays are indicative of the inherent challenges associated with relying on partnerships for product development; thus, this is a risk that will continue for this program.
- New CEO Focused on Turning the Corner to Commercialization. Eric Bouvier, appointed CEO in January, articulated his focus on directing the company from discovery/development to commercialization. Mr. Bouvier plans to articulate the specifics of the CardioSCORE commercialization plan in the coming months. The new \$10MM debt financing was described as opportunistic and will allow the co. to focus on execution.

BGMD (02/13)	\$8.27	Reve	enue \$MM							
Mkt cap	\$158.8MM	FY	2010	201	1 <u>E</u>	201	2E	2013E		
Dil shares out	19.2MM	Dec	Actual	Prior	Current	Prior	Current	Prior	Current	
Avg daily vol	45.8K	Q1	_	_	0.9A	_	0.7	_	_	
52-wk range	\$3.3-12.8	Q2	_	_	0.2A	_	0.8	_	_	
Dividend	Nil	Q3	_	_	0.2A	_	1.2	_	_	
Dividend yield	Nil	Q4			0.4	_	1.9	_		
BV/sh	NA	Year	0.8	_	1.7	_	4.5	_	35.4	
Net cash/sh	\$1.70	EV/S	_	_	70.6x	_	26.7x	_	3.4x	
Debt/cap	NA									
ROIC (LTM)	NA									
5-yr fwd EPS	NA	EPS \$	\$							
growth (Norm)		FY	<u>2010</u>	<u>201</u>	<u>1E</u>	<u>201</u>	<u>2E</u>	<u> 2013E</u>		
		Dec	Actual	Prior	Current	Prior	Current	Prior	Current	
		Q1	_	_	(0.26)A	_	(0.42)	_	_	
		Q2	_	_	(0.25)A	_	(0.44)	_	_	
		Q3	_	_	(0.25)A	_	(0.44)	_	_	
S&P 500	1351.8	Q4	_		(0.37)	_	(0.42)	_		
		Year	(6.12)	_	(1.15)	_	(1.72)	_	(0.85)	
		P/E	_	_	_	_	_	_	_	



Key Milestones / Catalysts

Milestone / Catalyst	Est. Timing
Manual Galectin-3 test ramp through LabCorp, Health Diagnostic Labs	H1:2011A
Initial 510(k) filing for automated Galectin-3 test through partners	Q2:12E
Galectin-3 label expansion: identifying risk of heart failure	2013E
Galectin-3 label expansion: Crestor (rosuvastatin) response assessment	2013E
AMIPredict (now CardioSCORE) initial 510(k) filing	Dec 2011A
Lipid Dx initial launch	2013-2014E
Specific CPT code for Galectin-3	2013E

Source: Company reports and Cowen and Company estimates

Positives

- 1. Robust, proprietary biomarker discovery program
- 2. Strategy focuses investments on developing assays for novel and proprietary biomarkers; leverages large existing installed base of immunoassay analyzers.

Negatives

- 1. Regulatory BGMD's strategy is to pursue 510(k) clearance for its tests in the US; there is a risk FDA will increase the amount of data required from diagnostic providers.
- 2. Reimbursement BGMD Galectin-3 should be able to cross-walk to CPT codes to achieve consistent reimbursement and is pursuing an independent CPT code in parallel; but there are risks to both of these.
- 3. Reliance on partners Although BGMD has done an impressive job of establishing partnerships with leading industry players; the company is reliant upon these partners for development and commercialization of its key tests.
- 4. Pre-commercial stage, relatively low visibility While the diagnostic markers being developed by BGMD have ample clinical evidence, and market potential exists, the company remains a very early commercial stage and had sub \$1MM in revenue in 2010.



					ВС	G Medicine - In	come Stateme	ent							
(in millions)	Q1:11	Q2:11	Q3:11	Q4:11E	Q1:12E	Q2:12E	Q3:12E	Q4:12E	2010	2011E	2012E	2013E	2014E	2015E	3-Yr CAGR
IVD Kits	0.1	0.1	0.1	0.2	0.3	0.4	0.7	1.3		0.5	2.7	25.5	44.6	71.4	351%
CLIA Lab IVD	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.5		0.1	1.4	9.5	16.2	26.6	445%
Contract Services	0.8	0.1	0.1	0.1	0.1	0.1	0.1	0.1		1.1	0.4	0.4	0.5	0.6	-22%
Total Revenue	\$0.9	\$0.2	\$0.2	\$0.4	\$0.6	\$0.8	\$1.2	\$1.9	\$0.8	\$1.7	\$4.5	\$35.4	\$61.3	\$98.6	233%
Cost of Sales	0.2	0.2	0.1	0.2	0.2	0.3	0.5	0.7	0.8	0.6	1.8	12.1	19.6	29.6	
Gross Profit	\$0.7	\$0.0	\$0.1	\$0.2	\$0.3	\$0.5	\$0.7	\$1.2	\$0.0	1.0	2.7	23.3	\$41.6	\$69.0	243%
R&D	1.7	2.4	1.9	2.8	3.2	3.4	3.5	3.6	6.5	8.8	13.7	16.6	19.9	23.3	
SG&A	2.0	2.5	3.1	4.2	5.0	5.3	5.5	5.6	8.1	11.8	21.4	24.9	28.6	32.4	
Operating Expenses	3.7	4.9	5.0	7.0	8.2	8.7	9.0	9.2	14.6	20.6	35.1	41.5	48.6	55.7	
Income (loss) from Operations	(\$3.0)	(\$4.8)	(\$4.9)	(\$6.8)	(\$7.9)	(\$8.2)	(\$8.3)	(\$8.0)	(\$14.6)	(\$19.5)	(\$32.4)	(\$18.2)	(\$6.9)	\$13.3	-29%
Other income (expenses)	0.1	(0.0)	(0.0)	0.5	0.5	0.5	0.5	0.5	2.6	0.6	2.0	2.0	2.0	2.0	
Pre-Tax income (loss)	(3.1)	(4.8)	(4.9)	(7.3)	(8.4)	(8.7)	(8.8)	(8.5)	(17.2)	(20.1)	(34.4)	(20.2)	(8.9)	11.3	
Taxes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(2.4)	(3.1)	4.0	
Net Income	(\$3.1)	(\$4.8)	(\$4.9)	(\$7.3)	(\$8.4)	(\$8.7)	(\$8.8)	(\$8.5)	(\$17.2)	(\$20.1)	(\$34.4)	(\$17.7)	(\$5.8)	\$7.4	
Shares Outstanding	12.2	19.2	19.3	19.5	19.7	19.9	20.1	20.3	3.0	17.6	20.0	20.8	21.8	22.8	
EPS	(\$0.26)	(\$0.25)	(\$0.25)	(\$0.37)	(\$0.42)	(\$0.44)	(\$0.44)	(\$0.42)	(\$6.12)	(\$1.15)	(\$1.72)	(\$0.85)	(\$0.27)	\$0.32	
Margin Analysis (% of sales) Gross Profit	82.3%	12.7%	53.1%	52.0%	58.0%	58.0%	60.0%	62.0%	4.0%	62.5%	60.2%	66.0%	68.0%	70.0%	
R&D	82.3% 200.4%	1068.3%	53.1% 1081.6%	700.0%	58.0% 560.8%	58.0% 418.5%	297.9%	189.5%	4.0% 798.4%	532.3%	307.3%	46.9%	32.5%	23.6%	
SG&A	232.4%	1134.8%	1716.2%	1050.0%	876.2%	652.3%	468.1%	294.7%	989.0%	711.0%	480.0%	70.3%	46.7%	32.8%	
Operating Profit (loss)	-366.2%	-2188.2%	-2726.8%	-1823.0%	-1466.6%	-1074.3%	-748.5%	-448.5%	-1783.4%	-1180.8%	-727.1%	-51.3%	-11.3%	13.5%	
Taxes (% of pre tax income)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	35.0%	35.0%	35.0%	
Net Income	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	
Growth Analysis (% y/y)															
IVD Kits					218.4%	240.9%	754.4%	550.0%	-	-	-	-	75.0%	60.0%	
CLIA Lab IVD					-	-	-	400.0%	-	-	-	-	70.0%	65.0%	
Contact Services					-87.0%	0.0%	0.0%	0.0%	-	-	-62.6%	0.0%	25.0%	20.0%	
Revenue					-33.3%	267.6%	556.4%	375.0%	-	102.1%	169.4%	694.1%	73.1%	61.0%	
Gross Profit R&D					-53.0% 86.8%	1583.0% 44.0%	642.1% 80.8%	466.3% 28.6%	-	3036.4% 34.7%	159.4% 55.5%	769.5% 21.2%	78.3% 20.0%	65.7% 17.0%	
SG&A					151.6%	111.3%	79.0%	33.3%		45.3%	81.9%	16.4%	15.0%	13.0%	
Operating Profit (loss)					-	-	-	-	-	-	-	-	-	-	
Concensus Pougnus	Q1:11	Q2:11	Q3:11	Q4:11E	Q1:12E	Q2:12E	Q3:12E	Q4:12E	2010	2011E	2012E	2013E	2014E	2015E	
Consensus Revenue Growth	\$0.1 NM	\$0.2 NM	\$0.3 NM	\$0.3 NM	\$0.3 -60%	\$0.5 130%	\$0.9 414%	\$1.5 286%	\$8.7	\$1.5 -83%	\$3.3 115%	\$31.9 879%	\$76.3 139%	\$101.4 33%	
Actual /Cowen	\$0.9	\$0.2	\$0.2	\$0.4	\$0.6	\$0.8	\$1.2	\$1.9	\$0.8	\$1.7	\$4.5	\$35.4	\$61.3	\$98.6	
Consensus Gross Profit	\$0.0	\$0.0	\$0.1	\$0.4	\$0.2	\$0.3	\$0.5	\$1.0	NM	\$1.0	\$1.9	\$22.8	\$55.3	\$74.0	
Consensus Gross Margin	55.1%	16.7%	40.7%	50.7%	52.7%	52.7%	53.3%	65.7%	NM	63.4%	59.4%	71.5%	72.5%	73.0%	
Actual /Cowen	82.3%	12.7%	53.1%	52.0%	58.0%	58.0%	60.0%	62.0%	4.0%	62.5%	60.2%	66.0%	68.0%	70.0%	
Consensus Op. Mgn.	-13100.0%	-3482.4%	-2148.3%	-2295.2%	-1853.3%	-1274.4%	-707.6%	-417.5%	-212.9%	-1222.7%	-787.6%	-36.7%	15.6%	17.1%	
Actual /Cowen	-366%	-2188%	-2727%	-1823%	-1467%	-1074%	-749%	-449% #	-1783%	-1181%	-727%	-51%	-11%	14%	
Consensus EPS	-\$0.35	-\$0.30	-\$0.33	-\$0.30 #	-\$0.32	-\$0.33	-\$0.32	-\$0.29 #	-\$1.07	-\$1.07	-\$1.25	-\$0.55	\$0.21	\$0.54	
Actual / Cowen	-\$0.26	-\$0.25	-\$0.25	-\$0.37	-\$0.42	-\$0.44	-\$0.44	-\$0.42	-\$6.12	-\$1.15	-\$1.72	-\$0.85	-\$0.27	\$0.32	

Source: Company reports and Cowen and Company estimates



Addendum

STOCKS MENTIONED IN IMPORTANT DISCLOSURES

Ticker	Company Name
BGMD	BG Medicine

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 Chicago
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 Cleveland
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 Atlanta
 (866) 544-7009
 Dallas
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 London

 (affiliate)
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(a) Assumptions: Time horizon is 12 months; S&P 500 is flat over forecast period.

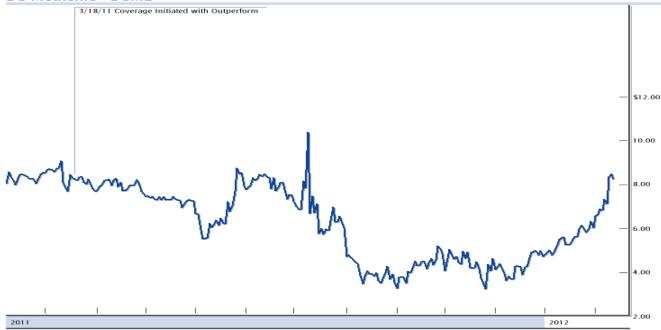
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