BUY



BG MEDICINE, INC. (NASDAQ: BGMD)

Analyst Day Preview: Raising the Curtain – Partially – on AMIPredict; Galectin-3 Marketing and Reimbursement Likely to Take Center Stage.

INVESTMENT RATING Prior rating	BUY
Price Target Prior Target	\$8.25
Price (2/8/12) 52 Week Range Shares Outstanding Market Capitalization	
Cash (9/30/11)	\$28.0 MM

	YEAR END	December				
REVENU	JE (MM'S):					
	Current	Prior				
2012E	\$0.8					
2011E	\$1.4					
2010A	\$0.8					
EPS (F	.D.):					
	Current	Prior	P/E			
2012E	(\$0.99)		NA			
2011E	(\$1.02)		NA			

(\$5.78)

2010A

NA

QUARTERLY EPS:									
2011E Mar A JunA SepA Dec	(\$0.26) (\$0.25) (\$0.25) (\$0.26)	Prior							
2010A Mar Jun Sep Dec	(\$0.27) (\$0.27) (\$0.22) (\$0.24)								

Kevin DeGeeter 212.409.2027 kdegeeter@ladenburg.com

HIGHLIGHTS

We expect the company's Analyst Day - including presentation of topline data from a 6,822-patient validation study for AMIPredict - next Monday (2/13) to be a material catalyst for BGMD shares and would look to build positions prior to the meeting. While we expect BGMD to withhold detailed disclosure of AMIPredict for a future medical meeting or publication, we do expect to see topline results, learn about basic design of the assay and outlines of the commercial model. BGMD filed a 510(k) for AMIPredict in late December 2011 but has provided limited details on design and performance of the multivariate assay. As such, our model - and Street expectation - incorporates modest economic contribution despite the large market opportunity of 60 million Americans. We have included peak net economics of roughly \$10M annually in our financial forecast but are awaiting details on strategy for commercialization and confirmation of clinical utility before including a detailed revenue forecast. Additionally, the Analyst Day will be the first opportunity for new CEO Eric Bouvier to meet with the investment community. We expect his comments to include thoughts on marketing strategies to accelerate adoption of galectin-3. Lastly, we continue to believe BGMD's long commitment to a content-driven business model and focus on clinical validation is unique in the diagnostic industry and positions BGMD as a development partner of choice.

- Raising The Curtain Partially on AMIPredict: In conjunction with the Analyst Day in New York Monday Feb. 13th, we expect BGMD to also make the first substantive comments on the clinical performance and commercial vision for AMIPredict, a test for identifying vulnerable or unstable plaque associated with risk of future heart attack. We encourage investors to focus not solely on the overall predictive power but also on subset analysis of incremental predictive power independent of the Framingham Risk Score. A majority of heart attack patients in U.S. are classified as low or medium risk by Framingham score. Capturing high risk patients not identified by Framingham is essential for establishing clinical utility of AMIPredict. However, we do not know if granularity on subset analysis will be presented next week or embargoed for future publication and medical conferences.
- New CEO Likely to Sharpen Marketing Message: With the launch of galectin-3 in 2011 and a recent FDA filing of AMIPredict, we believe BGMD is in the early stages of a natural progression from a research-oriented startup to a more commercially driven company. The addition of Eric Bouvier (former head of U.S. operations for bioMerieux) as CEO in January is an important step in the transition, in our view. We expect him to use the Analyst Day to provide his preliminary thoughts on strengthening commercial adoption of galectin-3.
- Greater Clarity on Galectin-3 Reimbursement: We believe many investors
 are not aware the AMA's editorial review panel approved a CPT code for
 galectin-3 in Nov. 2011. While reimbursement levels will not be set until after a
 meeting in July 2012 and take effect in 2013, we believe the favorable vote for
 issuing a code is a key accomplishment worthy of attention at the Analyst Day.

Disclosures and Analyst Certifications can be found in Appendix A.

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520 Madison Avenue, New York, NY 10022 • Telephone: 212-308-9494

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Overview of Biolmage Validation Study for AMIPredict

In June 2009, the industry cooperative group HRP Initiative completed enrollment of 6,822 patients (males ages 55-80 and females ages 60-80) in a screening study known as the Biolmage Study. All participants submitted to a physical exam and provided a blood sample to screen for potential biomarkers. This information was compared to results from imaging procedures to identify correlation between biomarkers and the imaging data from ultrasound of the carotid arteries and a CT-scan to measure coronary calcification. BGMD retains rights to use samples collected in the Biolmage study and to the data for its product discovery and development studies. Samples from this large study were used in BGMD's validation study of AMIPredict.

US Population ~ 303 million Humana membership ~11 million Excluded - Humana members outside target markets Humana membership in Control Group 1 Chicago IL. Ft. Lauderdale FI. Control Group 2 ~ 1.1 million Excluded - Humana members who do not meet age, coverage or claims eligibility criteria Approximate pool of potential study - Chicago IL ~ 38,000 Ft. Lauderdale FL ~ 48,000 Eligibility survey \downarrow by phone or Internet BioImage Study N = 7,687~ 80% with ≥ 1 claims risk indicator Randomization

Baseline plus

CACS, Carotid and

Abdominal US and ABI

N = 6,104

Advanced Imaging
CTA (380), MRI (525) or

PET-CT (180)

Target N = 600

Table 1.

Source: American Heart Journal (July 2010)

Telephone

survey only

N = 865

≥ 3 years

Baseline -

no Imaging

N = 718

Atherothrombotic events

Table 2.

BG Medicine Income Statement																
(in \$ millions except per share)	2010A	1Q11A	2Q11A	3Q11A	4Q11E	2011E	1Q12E	2Q12E	3Q12E	4Q12E	2012E	2013E	2014E	2015E	2016E	2017E
Galectin-3 sales	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.2	\$0.2	\$4.3	\$15.5	\$31.1	\$44.8	\$54.2
AMIPredict	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	1.7	3.8	7.5	11.5
HRP	0.0	0.8	0.2	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
License revenues	0.8	0.9	0.2	0.2	0.2	1.4	0.2	0.2	0.2	0.2	0.6	0.6	0.6	0.6	0.6	0.6
Total Revenue	\$0.8	\$0.9	\$0.2	\$0.2	\$0.2	\$1.4	\$0.2	\$0.2	\$0.2	\$0.3	\$0.8	\$5.6	\$17.7	\$35.5	\$52.9	\$66.3
cogs	0.8	0.2	0.2	0.1	0.1	0.5	0.1	0.1	0.1	0.1	0.4	0.7	1.8	3.2	3.9	4.6
Gross profit	\$0.0	\$0.7	\$0.0	\$0.1	\$0.1	\$0.9	\$0.1	\$0.1	\$0.1	\$0.2	\$0.5	\$4.9	\$15.9	\$32.3	\$49.0	\$61.6
SG&A	8.1	2.0	2.5	3.1	3.0	10.6	3.1	3.1	3.2	4.0	13.3	17.5	18.7	19.9	21.1	22.5
Research & development	6.5	1.7	2.4	1.9	2.2	8.2	2.2	2.2	2.2	2.2	8.8	9.6	10.4	11.2	12.0	12.4
Operating profit (loss)	(\$14.6)	(\$3.0)	(\$4.8)	(\$4.9)	(\$5.1)	(\$17.9)	(\$5.2)	(\$5.2)	(\$5.3)	(\$6.0)	(\$21.7)	(\$22.2)	(\$13.2)	\$1.2	\$15.9	\$26.8
Interest income (expense)	(2.6)	(0.1)	0.0	0.0	0.0	(0.1)	0.0	0.0	0.0	0.0	0.1	0.1	0.1	(0.0)	0.0	0.2
Taxes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(9.7)
Net profit (loss)	(17.2)	(3.1)	(4.8)	(4.9)	(5.1)	(17.9)	(5.2)	(5.2)	(5.3)	(5.9)	(21.6)	(22.1)	(13.1)	1.2	15.9	17.3
Earnings (loss) per share	(\$5.78)	(\$0.26)	(\$0.25)	(\$0.25)	(\$0.26)	(\$1.02)	(\$0.27)	(\$0.27)	(\$0.22)	(\$0.24)	(\$0.99)	(\$0.91)	(\$0.54)	\$0.05	\$0.65	\$0.71
One-time gain (loss) Accretion of redeemable convertible preferred stock	\$0.00 (\$0.35)	\$0.00 (\$0.01)	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 (\$0.01)	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00
Net income (loss) as reported Profit (loss) per share as reported	(18.2) (\$6.13)	(3.2) (\$0.27)	(4.8) (\$0.25)	(4.9) (\$0.25)	(5.1) (\$0.26)	(\$1.03)	(5.2) (\$0.27)	(5.2) (\$0.27)	(5.3) (\$0.22)	(5.9) (\$0.24)	(\$0.99)	(22.1) (\$0.91)	(13.1) (\$0.54)	1.2 \$0.05	15.9 \$0.65	17.3 \$0.71
Weighted average common shares	3.0	12.2	19.2	19.3	19.3	17.5	19.3	19.3	24.3	24.3	21.8	24.3	24.3	24.3	24.3	24.3

Source: Company reports and Ladenburg Thalmann estimates

Table 3.

Expected Near-term Events							
Event	Time	Importance					
Present Biolmage Validation Study for AMIPredict	1Q12	High					
Present Framingham Validation Study for Galectin-3 as Risk Marker for HF	March 2012	High					
1st FDA Filing for Automated Galectin-3 Test	1Q12	Low					
2nd FDA Filing for Automated Galectin-3 Test	2Q12	Low					
Publication of Framingham Validation Study for Galectin-3 as Risk Marker	1H12	Moderate					
EMEA Filing AMIPredict	1H12	Low					
EMEA Filing for 1 or More Automated Galectin-3 Tests	1H12	Low					
Publication on Use of Galectin-3 for Predicting CRT Response (high risk patients)	1H12	Low					
FDA Filing for Expanded Galectin-3 use to include Risk Assessment	1H12	Low					
Meeting to Discuss Reimbursement Levels for Galectin-3 CPT Code	July 2012	Moderate					
Publication on Use of Galectin-3 for Predicting CRT Response (low risk patients)	2H12	Moderate					
FDA clearance for AMIPredict	2H12	Low					
FDA clearance for 1st automated Galectin-3 Test	2H12	Moderate					
FDA clearance for 2nd automated Galectin-3 Test	2H12	Low					
EMEA clearance of AMIPredict	2H12	Low					
EMEA clearance of 1 or more Automated Galectin-3 Tests	2H12	Low					
Launch of AMIPredict	4Q12	Moderate					
FDA Clearance of Expanded Label Indication for Galectin-3	4Q12	High					
Announcement of Reimbursement Levels for Galectin-3 in 2013 Fee Schedule	4Q12	High					
3rd FDA Filing for Automated Galectin-3 Test	4Q12	Low					

Source: Ladenburg Thalmann estimates

APPENDIX A: IMPORTANT RESEARCH DISCLOSURES

ANALYST CERTIFICATION

I, Kevin DeGeeter, attest that the views expressed in this research report accurately reflect my personal views about the subject security and issuer. Furthermore, no part of my compensation was, is, or will be directly or indirectly related to the specific recommendation or views expressed in this research report.

The research analyst(s) primarily responsible for the preparation of this research report have received compensation based upon various factors, including the firm's total revenues, a portion of which is generated by investment banking activities.

COMPANY BACKGROUND

BG Medicine commercializes diagnostic tests based on content discovered by its biomarker discovery research group. The Waltham, MA-based company's lead program, a test for the galectin-3 biomarker, is FDA-cleared for use in staging of heart failure patients. The pipeline includes tests for predicting heart attack risk and for predicting risk of lipid disorders. BG Medicine sells its tests through commercial partners and has no plans for a significant direct sales effort.

VALUATION METHODOLOGY

We currently rate BGMD shares at BUY with a price target of \$8.25 based on 26x multiple on our fully taxed 2017 EPS estimate of \$0.71 discounted back at a 20% cost of capital.

RISKS

We think the primary risks of an investment in BGMD shares include, but are not limited to: Intellectual Property. The company's business model is based on identifying and commercializing tests based on proprietary biomarkers. BGMD has several filed and issued patents pertaining to the role of galectin-3 in diagnosing and staging heart failure patients and methods for developing diagnostic kits and tests based on galectin-3. There can be no assurance changes to U.S. patent law or interpretation will not adversely impact the company's future revenues. Regulatory. Each of BGMD's IVD partners expects to submit a 510(k) application to FDA for automated versions of the galectin-3 test. There can be no assurance validation studies and subsequent registration studies will be adequate to support 510(k) clearance of galectin-3 as an automated prognostic test for heart failure. Additionally, the predictive value of galectin-3 in assessing risk of heart failure following acute coronary injury is an important source of potential future market expansion. There can be no assurance galectin-3 will win FDA clearance in this indication. Additionally, the company may seek to launch its AMIPredict multivariate test as a laboratory developed test (LDT) under CLIA regulations. There can be no assurance that AMIPredict will receive a CLIA waiver or that FDA will continue to exercise regulatory discretion over LDTs. Reimbursement. Galectin-3 is not currently covered by most private insurance payers, Medicare or state health plans in Europe. In the U.S., clinicians and their patient can seek reimbursement through submission under miscellaneous codes on an out-of-network basis. BGMD has received a unique CPT code for galectin-3 and hopes to have the new code included in the 2013 clinical laboratory fee schedule. There can be no assurance Medicare or private pavers will reimburse for the test or that reimbursement levels will be adequate to meet the terms of license agreements with IVD manufacturers or for BGMD to earn a profit, Additionally, the timing of future reimbursement coverage from both private payers, state health plans in Europe and Medicare is not certain. Partnership. Four equipment vendors have licensed rights to sell galectin-3 tests both in the United States and certain ex-U.S. markets. There can be no assurance these partners can process the test in a commercially reasonable time period. Additionally, effective positioning of galectin-3 may require promotion to primary care doctors, which is outside of many of the partners' commercial focus and beyond the means of BGMD to address, in our view. There can be no assurance BGMD will identify an appropriate commercial partner to maximize the value of BGMD or that a partner will provide the required commitment of commercial resources. Financing. The company believes current financial resources will fund the company through 2012. However, successful commercial launch of automated galectin-3 tests will require significant marketing expense and development of AMIPredict may require substantial direct research funding from BGMD. There can be no assurance BGMD will have access to private capital in the future on adequate terms, or at all.

STOCK RATING DEFINITIONS

Buy: The stock's return is expected to exceed 12.5% over the next twelve months.

Neutral: The stock's return is expected to be plus or minus 12.5% over the next twelve months.

Sell: The stock's return is expected to be negative 12.5% or more over the next twelve months.

Investment Ratings are determined by the ranges described above at the time of initiation of coverage, a change in risk, or a change in target price. At other times, the expected returns may fall outside of these ranges because of price movement and/or volatility. Such interim deviations from specified ranges will be permitted but will become subject to review.

RATINGS DISPERSION AND BANKING RELATIONSHIPS (AS OF 1/31/12)

Buy: 76% (31% are banking clients)
Neutral: 24% (10% are banking clients)
Sell: 0% (0% are banking clients)

PERSONALIZED MEDICINE STOCKS UNDER AUTHOR ANALYST COVERAGE ("The Universe")

BG Medicine (BGMD), Exact Sciences (EXAS), Genetic Technologies (GENE), Genomic Health (GHDX), Myriad Genetics (MYGN), Navidea Biopharmaceuticals (NAVB), NeoGenomics (NGNM), OPKO Health (OPK), Response Genetics (RGDX), Sequenom (SQNM), SeraCare Life Sciences (SRLS) and Vermillion (VRML).

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