Zacks Small-Cap Research

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Grant Zeng, CFA
312-630-9880x9466
gzeng@zacks.com

scr.zacks.com
111 North Canal Street, Chicago, IL 60606

Pressure Biosciences (PBIO-OTCQB)

PBIO: Second quarter financials in line—Neutral.

Current Recommendation	**Neutral**
Prior Recommendation	Outperform
Date of Last Change	05/16/2012
Current Price (08/20/12)	$0.31
Twelve- Month Target Price	**$0.75**

OUTLOOK

Pressure BioSciences (PBIO) is a research products and services provider for the life science industry. We are impressed and optimistic about the Company's novel, enabling platform technology pressure cycling technology (PCT) which has competitive advantages over existing technologies in the sample preparation market. PCT is increasingly gaining recognition by research labs, but user adoption is still less than expected. Product sales may need longer time to gain traction in our view. Current risk/return profile is balanced at this time; therefore we are neutral on PBIO shares.

SUMMARY DATA

52-Week High	**$1.15**
52-Week Low	**$0.21**
One-Year Return (%)	**-60.26**
Beta	**2.14**
Average Daily Volume (sh)	**15,584**
Shares Outstanding (mil)	**10**
Market Capitalization ($mil)	**$3**
Short Interest Ratio (days)	**3.01**
Institutional Ownership (%)	**2**
Insider Ownership (%)	**41**
Annual Cash Dividend	**$0.00**
Dividend Yield (%)	**0.00**
5-Yr. Historical Growth Rates	
Sales (%)	**37.0**
Earnings Per Share (%)	**N/A**
Dividend (%)	**N/A**
P/E using TTM EPS	**N/A**
P/E using 2011 Estimate	**N/A**
P/E using 2012 Estimate	**N/A**
Zacks Rank	**3**

Risk Level	**High,**
Type of Stock	**Small-Value**
Industry	**Med Instruments**
Zacks Rank in Industry	**N/A**

ZACKS ESTIMATES

Revenue
(in millions of $)

	Q1 (Mar)	Q2 (Jun)	Q3 (Sep)	Q4 (Dec)	Year (Dec)
2011	0.18 A	0.19 A	0.28 A	0.34 A	0.99 A
2012	0.31 A	0.32 A	0.40 E	0.43 E	1.46 E
2013					3.00 E
2014					5.50 E

Earnings per Share
(EPS is operating earnings before non-recurring items)

	Q1 (Mar)	Q2 (Jun)	Q3 (Sep)	Q4 (Dec)	Year (Dec)
2011	-$0.34 A	-$0.41 A	-$0.19 A	-$0.30 A	-$1.14 A
2012	-$0.14 A	-$0.12 A	-$0.13 E	-$0.14 E	-$0.54 E
2013					-$0.33 E
2014					-$0.20 E

Zacks Projected EPS Growth Rate - Next 5 Years % **N/A**

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WHAT'S NEW

PBIO Reports in line Second Quarter Financials

On August 14, 2012, Pressure BioSciences, Inc. (PBIO) reported financial results for the second quarter ended June 30, 2012.

Total revenue for the second quarter of 2012 was $324,908 compared to $190,686 for the comparable period in 2011, a 70% increase.

Revenue from the sale of PCT products and services was $224,384 for the second quarter of 2012 compared to $190,686 for the same period in 2011, an 18% increase.

Grant revenue in the second quarter of 2012 was $100,524; during the same period in 2011, no grant revenue was reported.

Sales of PCT-based consumables generated revenue of approximately $22,000 for the three months ended June 30, 2012 compared to approximately $20,000 for the same period in 2011, an increase of 10%.

The Company installed eight PCT Sample Preparation Systems during Q2 2012 compared to seven during the same period in 2011.

Operating loss for Q2 2012 was $682,790, compared to $842,277 for the same period in 2011, a decrease of approximately 19%. This decrease was primarily due to increased revenue and continued tight controls on spending. After the exclusion of non-cash charges, operating cash burn for the second quarter of 2012 was approximately $596,000 compared to approximately $794,000 for the second quarter of 2011, a decrease of approximately 25%.

Net loss was $1.1 million or $ 0.11 per share for the second quarter of 2012 compared to $0.41 for the same period in 2011.

In general, second quarter financials are in line with our expectations. We are pleased to see product sales increased 18% for the second quarter, and operating costs were controlled at the same time. We are especially glad that consumables sales increased 10% in the second quarter. This is important as we stated many times before. As more and more instruments are installed, consumables sales will continue to increase and make meaningful contribution to the top line.

PCT Platform Continues to Show Advantages in Multiple Studies

Recently, PBIO announced that multiple research reports have cited the ability of the Company's PCT Platform to improve the detection of RNA, DNA, and/or protein in forensic, environmental, and biodefense applications, and in research studies focused on the discovery of biomarkers of disease. These studies were conducted in laboratories worldwide, including:

- Institute of Forensic Sciences (Beijing, China) where scientists concluded that PCT was one of the most effective methods available for extracting DNA from bone in forensic applications. These findings extend earlier studies by other forensic scientists that PCT could lead to better methods of identification of crime victims and bodies of missing persons.

- Lawrence Berkeley National Laboratory (Berkeley, CA) where scientists studying the Deepwater Horizon oil spill in the Gulf of Mexico used PCT to increase cell lysis efficiency. Studies such as this are important in the assessment of the impact of oil spills on the environment.

- Cernomics Solutions (Frederick, MD) where scientists concluded that PCT sterilized and extracted complex, mixed matrix biological samples better than other pre-analytical sample preparation methods available today. Improved methods for safe and effective sample preparation are essential for rapid and robust identification of highly infectious potential bioterror agents, and also to enable better basic research underlying solutions discovery and development.

- Harvard School of Public Health (Boston, MA) where scientists demonstrated that PCT could achieve superior recovery of membrane-associated proteins with more than a 20-fold increase in throughput and with improved reproducibility. The improvement in the recovery of membrane proteins is believed to be critical to the understanding of diseases and disorders such as cancer and Alzheimer's, and to the discovery of new drug therapies.

We believe these findings, together with previous publications, strongly support the importance of the PCT Platform in the life sciences field, including forensics, environmental analyses, biodefense, and biomarker discovery applications. This has created increased interest in its PCT Platform in the past, and will continue to drive sales in the future.

PBIO Continues Global Sales Reach Expansion

On July 12, 2012, PBIO announced distribution agreements with three companies in different countries. This is the indication that the Company continues to expand in the global market.

These distribution agreements with three companies have combined sales coverage in six new countries. This brings to eleven the number of additional countries over the past seven months where the PCT sample preparation instrument and consumable products are now being offered for sale.

For China, the Company entered into an exclusive distribution agreement with the Yinzhou Police Equipment & Technology Co., Ltd. (Guangzhou, China) for its PCT product line and a non-exclusive agreement for its patent-pending, mechanical homogenization device, the Shredder SG3, and associated consumables. This Agreement allows Yinzhou to market and sell PBI products into the forensics marketplace only. PBIO plans to add one or more additional distributors in China for representation outside of the forensics area during the second half of 2012.

For Vietnam, Cambodia, and Laos, the Company entered into an exclusive distribution agreement with BMN MSI., Ltd. (Hanoi, Vietnam) for its PCT product line and a non-exclusive agreement for the Shredder SG3 homogenization device and associated consumables.

For Australia and New Zealand, the Company entered into an exclusive distribution agreement with iScience Technology (Melbourne, Australia) for its PCT product line, and a non-exclusive agreement for the Shredder SG3 homogenization device and associated consumables.

PBIO recently launched aggressive commercialization initiatives for its Pressure Cycling Technology (PCT)-based products. Within one year, management has established multiple co-marketing or distribution agreements worldwide. During the first half of 2012, PBIO added four strategic US partners and four international distributors to help the Company aggressively market and sell its novel PCT instruments and consumables. Initial orders have already been received from several of these new partners/distributors. We believe that the number of such orders will continue to increase during the second half of 2012, which will positively impact revenue for 2012.

Two Favorable Financing Deals Landed

PBIO recently landed two favorable financing deals with two institutions.

On April 9, 2012, PBIO entered into a definitive agreement with **Ironridge BioPharma Co.** to purchase $500,000.00 in shares of Series E Convertible Preferred Stock of the Company.

Each share of the 500 shares of preferred stock is convertible into approximately 980 shares of common stock, which is determined by dividing the stated value of the Series E Preferred Stock of $1,000 by a fixed conversion price of $1.02 per share. The conversion price is not subject to any price anti-dilution protection. Ironridge will receive no warrants. There are few restrictive covenants and no amortization provisions in the transaction. The Preferred Stock will accrue dividends at 10.5% per annum, subject to a credit risk and make-whole adjustment, and is payable in cash or shares of registered common stock at the discretion of PBIO. Under certain conditions and subject to certain limitations, the Company may require Ironridge to convert their preferred stock into common stock.

In connection with the transaction, Ironridge represented that it has never shorted the Company's stock, does not hold any short position in the Company's stock, and will not engage in or effect, directly or indirectly, any short sale for at least one year.

On July 3, 2012, Pressure BioSciences, Inc. (PBIO) announced that it has reached agreement with seventeen investors on an initial tranche of approximately $600,000 of a $1.2 million private placement. The transaction consists of the sale of approximately 120,000 units of a newly designated series of preferred stock and warrants to purchase Common Stock. The investors in the initial tranche include all members of the Company's new Board of Directors, all officers of the Company, all members of the prior Board of Directors, and several existing accredited investors in PBIO.

Pursuant to the agreement, the price per unit is $5.00. Each unit consists of one share of Series G Preferred Stock (convertible into ten shares of Common Stock at a Common Stock equivalent price of $0.50 per share) and a Warrant to purchase five shares of restricted Common Stock. The Warrants are exercisable for a period of three years, at an exercise price of $0.50 per share. Of the approximate $600,000 initial tranche, $485,000 was received in cash and $115,000 will be from the conversion of debt.

In addition to the initial tranche of $600,000, PBIO plans to close one or more additional tranches in the private placement on or before August 31, 2012.

Our takeaways from the transaction:

- The deal immediately **boosts PBIO's balance sheet**.

- These transactions are **favorable to PBIO**. In the first deal, the conversion price of $1.02 is a premium of 64.5% over the then share price of $0.62 with no warrants and no restrictive provisions. In the second deal, the conversion price of $0.50 is a premium of 72% over the then current share price of $0.29. This is unusual since most financing for small cap biotech companies are toxic and diluting to existing shareholders. This validates PBIO's technology and its commercial potential.

- The relationship could be "the beginning of a **long and mutually beneficial** partnership" as Ironridge said in the press release. The Fund is not in the habit of doing bridge financings. There is a good chance that PBIO might be looking to go back to the Fund for additional funding.

Another interesting and important factor to consider is that in the second deal, all insiders including board members, both old and new, as well as all officers of the PBIO, are participating in the placement. This means that management and directors are confident that the Company is doing or will be doing well.

VALUATION AND RECOMMENDATION

We maintain our Neutral rating on PBIO shares and our twelve-month price target is $0.75.

PBIO has developed a unique and superior pressure cycling technology for the preparation of biological laboratory samples. The Company's PCT platform holds competitive advantages over incumbent technologies in many important aspects related to sample preparation.

We are especially optimistic about the Company's collaboration programs which will generate great awareness of the PCT platform among researchers in the sample preparation market. We are also impressed with the potential of the PCT technology in new application areas such as in the forensic, oil-spill clean-up and agricultural applications.

With a rapidly growing market worldwide, combined with its unique technology and broad range of product offering, the Company is well positioned to boost its top line and bottom line in the coming years.

But we are concerned about the slow sales ramp for the Company's PCT products. Since its launch in 2005, sales have been immaterial (under $1 million mark). Sales of PCT products in 2011 declined 12.5%. One of the major factors was the resignation of the Company's Vice President of Sales in early May 2011. But Product sales continued to decline in 4Q11 and 1Q12. Although we are pleased to see sales growth in 2Q12, the absolute number is still low. Without meaningful product revenue growth, PBIO will be under great pressure to finance its operations by continuously issuing new shares or convertible notes.

Certainly, product sales ramp will take longer than we expected to gain traction. Profitability will take longer to achieve accordingly.

In terms of valuation, currently, the Company trades around $0.3 per share with a market cap of $3.0 million based on 10 million shares outstanding. It looks very cheap now, but there is a reason for the current valuation. Currently, the Company has only limited revenue base and has been losing money since its inception. Also, the Company has a relatively weak balance sheet, and further financing may be needed soon. We think risk/reward profile is balanced for PBIO at this time.

Our price target of $0.75 represents a market cap of $7.5 million. This is achievable if sales continue to grow in second half of this year.

Cash Position is a Major Concern

Since it began operation as Pressure BioSciences in 2005, the Company has been losing money. The Company has only limited revenue derived from its PCT-based instruments and PCT-dependent consumable products. The Company has experienced negative cash flows from operations since its inception. According to our financial model, the Company will continue to lose money until fiscal 2015 when the Company will be profitable with an EPS of $0.09 per share.

As of June 30, 2012, PBIO had cash and cash equivalents of $20,916. Management indicated that the Company's number one goal over the short term is to secure sufficient financing to support working capital needs both for the short term and for the next two years. Management remains confident that they will close on significant funding soon.

Equity financing will dilute existing shareholder base. A financing deal with a strategic partner should be positive to the Company's long term growth.

PROJECTED INCOME STATEMENT

$ in million except per share data	Q1	Q2	Q3	Q4	12/11A	Q1	Q2	Q3	Q4	12/12E	12/13E	12/14E	12/15E
Product/Service Revenue	$0.18	$0.19	$0.22	$0.18	$0.77	$0.16	$0.22	$0.25	$0.28	$0.92	$2.50	$5.00	$10.50
YOY Growth	-4.50%	-32.71%	11.81%	-15.03%	-12.51%	*-8.8%*	*17.7%*	*14.8%*	*56.7%*	*19.7%*	*172.0%*	*100.0%*	*110.0%*
Grant Revenue	$0.00	$0.00	$0.06	$0.16	$0.22	$0.14	$0.10	$0.15	$0.15	$0.54	$0.50	$0.50	$1.00
Total Revenues	**$0.18**	**$0.19**	**$0.28**	**$0.34**	**$0.99**	**$0.31**	**$0.32**	**$0.40**	**$0.43**	**$1.46**	**$3.00**	**$5.50**	**$11.50**
YOY Growth	*-37.9%*	*-52.6%*	*-24.6%*	*22.2%*	*-26.3%*	*69.2%*	*70.4%*	*42.6%*	*28.0%*	*47.9%*	*105.4%*	*83.3%*	*109.1%*
CoGS	$0.1	$0.1	$0.1	$0.1	$0.3	$0.1	$0.1	$0.1	$0.1	$0.4	$1.1	$1.7	$3.1
Gross Income	**$0.10**	**$0.11**	**$0.19**	**$0.24**	**$0.64**	**$0.23**	**$0.22**	**$0.28**	**$0.29**	**$1.02**	**$1.93**	**$3.78**	**$8.43**
Gross Margin	*56.3%*	*58.9%*	*66.6%*	*72.6%*	*65.3%*	*74.4%*	*66.4%*	*70.3%*	*68.3%*	*69.7%*	*64.2%*	*68.7%*	*73.3%*
Gross Margin for PCT revenue	*56.3%*	*58.9%*	*57.0%*	*48.5%*	*55.3%*	*52.5%*	*51.3%*	*52.5%*	*51.3%*	*51.9%*	*57.0%*	*65.6%*	*70.8%*
R&D	$0.2	$0.3	$0.2	$0.2	$1.0	$0.3	$0.3	$0.3	$0.3	$1.1	$1.2	$1.4	$1.6
% R&D	*121.2%*	*138.3%*	*88.5%*	*71.0%*	*98.2%*	*88.9%*	*78.9%*	*68.8%*	*69.8%*	*75.5%*	*40.0%*	*25.5%*	*13.9%*
SG&A	$0.7	$0.7	$0.7	$0.9	$3.0	$0.9	$0.6	$0.9	$1.0	$3.4	$4.5	$5.0	$5.5
% SG&A	*396.6%*	*362.3%*	*244.1%*	*260.1%*	*300.2%*	*301.1%*	*197.7%*	*227.5%*	*220.9%*	*234.3%*	*150.0%*	*90.9%*	*47.8%*
Other	$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
% Other	*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%*
Operating Income	**($0.8)**	**($0.8)**	**($0.7)**	**($0.9)**	**($3.3)**	**($1.0)**	**($0.7)**	**($0.9)**	**($1.0)**	**($3.5)**	**($3.8)**	**($2.6)**	**$1.3**
Operating Margin	*-461.5%*	*-441.7%*	*-266.0%*	*-258.5%*	*-333.1%*	*-315.6%*	*-210.1%*	*-225.9%*	*-222.4%*	*-240.1%*	*-125.8%*	*-47.6%*	*11.6%*
Other Net	$0.00	$0.08	$0.18	$0.04	$0.31	($0.10)	$0.17	$0.00	$0.00	$0.07	$0.00	$0.00	$0.00
Pre-Tax Income	**($0.8)**	**($0.8)**	**($0.6)**	**($0.8)**	**($3.0)**	**($1.1)**	**($0.5)**	**($0.9)**	**($1.0)**	**($3.4)**	**($3.8)**	**($2.6)**	**$1.3**
Pref. stk Div	$0.13	$0.41	$0.40	$1.19	$2.14	$0.02	$0.58	$0.50	$0.50	$1.60	$0.00	$0.00	$0.00
Taxes (Benefit)	$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
Tax Rate	*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%*
Reported Net Income	**($1.0)**	**($1.2)**	**($1.0)**	**($2.0)**	**($5.1)**	**($1.1)**	**($1.1)**	**($1.4)**	**($1.5)**	**($5.0)**	**($3.8)**	**($2.6)**	**$1.3**
YOY Growth	-	-	-	-	-	-	-	-	-	-	*-25.1%*	*-30.6%*	*-150.8%*
Net Margin	*-535.0%*	*-614.9%*	*-343.9%*	*-599.7%*	*-518.2%*	*-355.7%*	*-335.4%*	*-350.9%*	*-338.7%*	*-344.9%*	*-125.8%*	*-47.6%*	*11.6%*
Shares Out	*2.8*	*2.9*	*6.3*	*6.7*	*4.7*	*7.7*	*10.2*	*10.4*	*10.4*	*9.7*	*11.5*	*13.0*	*15.0*
Reported EPS	**($0.34)**	**($0.41)**	**($0.15)**	**($0.30)**	**($1.10)**	**($0.14)**	**($0.11)**	**($0.13)**	**($0.14)**	**($0.52)**	**($0.33)**	**($0.20)**	**$0.09**
YOY Growth	-	-	-	-	-	-	-	-	-	-	*-36.9%*	*-38.6%*	*-144.0%*
One time charge	$0.00	$0.00	($0.22)	$0.00	*($0.22)*	*$0.00*	*($0.18)*	*$0.00*	*$0.00*	*($0.18)*	*$0.00*	*$0.00*	*$0.00*
Non GAAP Net Income	**($1.0)**	**($1.2)**	**($1.2)**	**($2.0)**	**($5.3)**	**($1.1)**	**($1.3)**	**($1.4)**	**($1.5)**	**($5.2)**	**($3.8)**	**($2.6)**	**$1.3**
Non GAAP EPS	**($0.34)**	**($0.41)**	**($0.19)**	**($0.30)**	**($1.14)**	**($0.14)**	**($0.12)**	**($0.13)**	**($0.14)**	**($0.54)**	**($0.33)**	**($0.20)**	**$0.09**

Source: Company filings and Zacks Investment Research Inc. estimates

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HISTORICAL ZACKS RECOMMENDATIONS



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