UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, DC 20549

FORM 8-K

CURRENT REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934

Date of report (Date of earliest event reported): June 9, 2014 Enzo Biochem, Inc. (Exact Name of Registrant as Specified in Its Charter) New York (State or Other Jurisdiction of Incorporation) 13-2866202 001-09974 (IRS Employer Identification No.) (Commission File Number) 527 Madison Avenue New York, New York 10022 (Address of Principal Executive Offices) (Zip Code) (212) 583-0100 (Registrant's Telephone Number, Including Area Code) (Former Name or Former Address, if Changed Since Last Report) Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below): ☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425) ☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12) ☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

□ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 2.02. Results of Operations and Financial Condition.

On June 9, 2014, Enzo Biochem, Inc. (the "Company") issued a press release announcing its operating results for its third fiscal quarter and nine months ended April 30, 2014. A copy of the press release is furnished as Exhibit 99.1 attached hereto and is incorporated by reference in its entirety into this item 2.02 of this Current Report on Form 8-K.

In its press release, the Company discloses items not prepared in accordance with accounting principles generally accepted in the United States ("GAAP"), or non-GAAP financial measures (as defined in Regulation G promulgated by the U.S. Securities and Exchange Commission) that exclude certain significant charges or credits that are important to an understanding of the Company's ongoing operations. The Company believes that its inclusion of non-GAAP financial measures provides useful supplementary information to and facilitates analysis by investors in evaluating the Company's performance and trends. The determination of significant charges or credits may not be comparable to similar measures used by other companies and may vary from period to period. The Company uses both GAAP financial measures and the disclosed non-GAAP financial measures internally to evaluate and manage the Company's operations and to better understand its business. These non-GAAP financial measures are in addition to, not a substitute for, or superior to, measures of financial performance prepared in accordance with GAAP.

Non-GAAP net income (loss), non-GAAP earnings (loss) per share, adjusted EBITDA, are supplemental measures of our performance that are not required by, or presented in accordance with, GAAP. We define non-GAAP net income (loss) as consolidated net income / (loss) for such period adjusted for the following net of tax (i) litigation charges and settlements, (ii) business restructuring or other restructurings of a similar nature, and (iii) other unusual charges or expenses. We define adjusted EBITDA as an amount equal to consolidated net income / (loss) for such period adjusted for the following (i) interest expense, (ii) interest income, (iii) provision (benefit) for income taxes, (iv) depreciation and amortization expenses, (v) litigation charges and settlements, (vi) business restructuring charges or other restructurings of a similar nature, and (vii) other unusual charges or expenses.

Item 7.01. Regulation FD Disclosure.

The information provided in Item 2.02 of this Current Report on Form 8-K is incorporated herein by reference in its entirety.

The information in this report (including the exhibits) is furnished pursuant to Item 2.02 and shall not be deemed to be "filed" for purposes of Section 18 of the Securities Exchange Act of 1934 (the "Exchange Act"), nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933 or the Exchange Act, except as shall be expressly set forth by specific reference in such filing.

Item 9.01. Financial Statements and Exhibits. (d) Exhibits.

99.1 Press Release of Enzo Biochem, Inc., dated June 9, 2014.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

ENZO BIOCHEM, INC.

Date: June 9, 2014

By: /s/ Barry W. Weiner Barry W. Weiner President

DRAFT - CONFIDENTIAL



news release Enzo Biochem, Inc. 527 Madison Avenue

New York, NY 10022

FOR IMMEDIATE RELEASE

ENZO BIOCHEM REPORTS STRONG THIRD FISCAL QUARTER RESULTS

Operations Benefiting from Transformative Program Enhancing Value

NEW YORK, NY, June 9, 2014-- Enzo Biochem Inc. (NYSE:ENZ) today reported strong results for the fiscal third quarter ended April 30, 2014 as compared to the corresponding year-ago period.

- · Quarterly revenues increased 6.1% year over year and 4.6%, sequentially.
- · Improvement reflects increasing benefits from program emphasizing greater value driven service and product revenues.
- · Adjusted EBITDA increased by \$3.6 million in the third quarter 2014 to (\$1.0) million, over the prior year period.
- · Operating income up strongly and net loss reduced sharply, excluding legal settlement and litigation reserve recorded in the period.
- Increases in the menu of in house test offerings is providing both margin improvement and improved services levels.
- · Legal settlement of \$5.1 million provides incremental liquidity to advance product development activities.
- · Cash position of nearly \$15 million, working capital in excess of \$16 million, double the level of prior quarter.

"The results for the third fiscal quarter tangibly benefited from our program to emphasize higher-value services and products at both our operating units, Enzo Clinical Labs and Enzo Life Sciences," said Barry Weiner, Enzo President. "Increases in higher value molecular tests, along with higher throughput, and greater efficiencies are benefiting the Labs. Enzo Life Sciences results reflect our focus on higher margin products and the result of our previously announced

initiatives that also reduced overhead and costs. The market for Life Science products, while still feeling the effects of reduced government grants and expenditures, nonetheless has also showed improvement on the research front. The partnership that we announced last week in Innate Pharma SA can expand the demand for our protein aggregation product line which are key tools used in drug discovery, an expanding market for Enzo.

"Enzo is now well positioned, financially and operationally, with several potentially significant new developments in the pipeline, an increasing number of companies seeking to partner with us in developing and marketing new molecular diagnostics, and the potential to monetize our broad intellectual property estate through upcoming Court hearings, all of which, we believe, enhances the outlook."

Third Quarter Results

Revenues in the period increased to approximately \$24.0 million, as compared to \$22.6 million a year ago and \$22.9 million in the preceding second fiscal quarter, despite a reduction in royalty income, a function of sales at a licensee. Gross margin increased 15% year over year and 6% sequentially, and as a percentage of revenues at 43% was up from 40% a year ago, and level with the prior quarter. The quarter also reflected lower R&D and SG&A expenditures (which as a percentage of revenues declined to 47.8%, from 53.2% a year ago and are unchanged from the fiscal 2014 second quarter, respectively). The provision for uncollectible receivables also declined to \$0.7 million from approximately \$0.9 million in each of the respective periods due to increased Clinical Lab efficiencies. The GAAP loss for the quarter was (\$0.5) million, compared to GAAP losses of (\$5.8) million a year ago and (\$3.6) million the prior quarter.

The quarter included legal settlements, net of \$3.1 million, as a result of the announced settlement with Affymetrix, Inc. of \$5.1 million offset by an estimated legal settlement reserve of \$2.0 million associated with the U.S. Department of Justice investigation relating to Enzo Clinical Labs' processes in the collection of diagnosis codes from physicians. Excluding these amounts and associated legal fees, and one-time separation costs, non-GAAP net loss would be (\$2.1) million down from (\$5.8) million a year ago, a \$3.7 million improvement.

EBITDA (earnings before interest, taxes, depreciation and amortization), a non-GAAP measure, amounted to \$0.6 million, compared to a negative (\$4.6) million last year and (\$2.5) million in the preceding period. Adjusted EBITDA in the third quarter amounted to (\$1.0) million.

On April 30, 2014, current assets totaled \$38.2 million and current liabilities amounted to \$22.1 million, a current ratio of 1.73 to 1. Cash and cash equivalents amounted to \$14.8 million, up from \$9.0 million at the end of fiscal year July 31, 2013.

Segment Results

Revenues at Enzo Clinical Labs increased 8.7% over last year's comparable quarter, to \$14.5 million, and increased 5% from the January 2014 quarter. Gross margin improved to \$4.8 million, from \$4.1 million a year ago and \$4.6 million sequentially, with the gross profit

percentage at 33%, up from 30% a year ago and level with the preceding quarter. Selling, general and administrative expenses amounted to \$5.1 million, equal to 35% as a percentage of revenues, compared to 37.7% a year ago and on a par with the January 2014 period. Results benefited from higher margin esoteric tests and a higher volume of tests processed. The quarter also included advances in validation of new molecular test offerings which will provide incremental service offerings and margin growth, as well as the validation in house of several tests in the immunology and chemistry areas which also contribute to both margin growth and service improvements. As noted previously, the period's results include a \$2.0 million charge for an estimated legal settlement based on preliminary settlement discussions with the U.S. Department of Justice relating to the investigation which began in 2012 covering the period back to 2004. The Lab's pre-tax loss for the quarter was (\$3.3) million, including the \$2.0 million estimated legal reserve mentioned above, compared to pre-tax losses of (\$2.1) million a year ago and (\$1.5) million sequentially.

Life Sciences product revenues in the third quarter amounted to \$8.7 million, up from \$8.3 million a year ago and \$8.1 million in the preceding 2014 quarter. Royalty and license fee income, which is chiefly a reflection of licensee sales, declined to \$0.7 million, from \$1.0 million in the prior year. Gross margin on life science products alone increased to \$4.9 million, from \$4.0 million and \$4.2 million, in the respective year over year and preceding quarters, and as a percentage of sales equaled 56%, 49% and 52%, respectively. Revenue from internally developed products in areas such as genomics and drug discovery continue to grow year over year while profitable licensed and distributed products continue to contribute to the strengthening of the portfolio. SG&A declined approximately \$0.5 million year over year, to \$3.3 million, reflecting the ongoing cost-reduction program. Pre-tax income equaled \$6.2 million, compared to \$0.3 million a year ago and \$1.4 million in the January 2014 period, reflecting the Affymetrix legal settlement of \$5.1 million offset in part by reduced royalty income.

Conference Call

The Company will conduct a conference call Tuesday, June 10, 2014 at 8:30 AM ET. The call can be accessed by dialing 1-888-459-5609. International callers can dial 1-973-321-1024. Please reference PIN number 53091172. Interested parties may also listen over the Internet at http://phoenix.corporate-ir.net/phoenix.zhtml?p=irol-eventDetails&c=94391&eventID=4879258 To listen to the live call on the Internet, please go to the web site at least fifteen minutes early to register, download and install any necessary audio software. For those who cannot listen to the live broadcast, a replay will be available approximately two hours after the end of the live call, through midnight (ET) on Tuesday, June 24, 2014. The replay of the conference call can be accessed by dialing 1-800-585-8367, and when prompted, use PIN number 53091172. International callers can dial 1-404-537-3406, using the same PIN number.

NON-GAAP Financial Measures

To comply with Regulation G promulgated pursuant to the Sarbanes-Oxley Act, Enzo Biochem attached to this news release and will post to the Company's investor relations web site (www.enzo.com) any reconciliation of differences between non-GAAP financial information that may be required in connection with issuing the Company's quarterly financial results.

The Company uses EBITDA, as a measure of performance to demonstrate earnings exclusive of interest, taxes, depreciation and amortization. Adjustments to EBITDA are for items of a non-recurring nature and are reconciled on the table provided. The Company manages its business based on its operating cash flows. The Company, in its daily management of its business affairs and analysis of its monthly, quarterly and annual performance, makes its decisions based on cash flows, not on the amortization of assets obtained through historical activities. The Company, in managing its current and future affairs, cannot affect the amortization of the intangible assets to any material degree, and therefore uses EBITDA as its primary management guide. Since an outside investor may base its evaluation of the Company's performance based on the Company's net loss not its cash flows, there is a limitation to the EBITDA measurement. EBITDA is not, and should not be considered, an alternative to net loss, loss from operations, or any other measure for determining operating performance of liquidity, as determined under accounting principles generally accepted in the United States (GAAP). The most directly comparable GAAP reference in the Company's case is the removal of interest, taxes, depreciation and amortization.

We refer you to the tables attached to this press release which includes reconciliation tables of GAAP to Non-GAAP net income (loss) and EBITDA to Adjusted EBITDA.

About Enzo Biochem

Enzo Biochem is a pioneer in molecular diagnostics, leading the convergence of clinical laboratories, life sciences and therapeutics through the development of unique diagnostic platform technologies that provide numerous advantages over previous standards. A global company, Enzo Biochem utilizes cross-functional teams to develop and deploy products systems and services that meet the ever-changing and rapidly growing needs of health care both today and into the future. Underpinning Enzo Biochem's products and technologies is a broad and deep intellectual property portfolio, with patent coverage across a number of key enabling technologies.

Except for historical information, the matters discussed in this news release may be considered "forward-looking" statements within the meaning of Section 27A of the Securities Act of 1933, as amended and Section 21E of the Securities Exchange Act of 1934, as amended. Such statements include declarations regarding the intent, belief or current expectations of the Company and its management, including those related to cash flow, gross margins, revenues, and expenses are dependent on a number of factors outside of the control of the company including, inter alia, the markets for the Company's products and services, costs of goods and services, other expenses.

government regulations, litigations, and general business conditions. See Risk Factors in the Company's Form 10-K for the fiscal year ended July 31, 2013. Investors are cautioned that any such forward-looking statements are not guarantees of future performance and involve a number of risks and uncertainties that could materially affect actual results. The Company disclaims any obligations to update any forward-looking statement as a result of developments occurring after the date of this press release.

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ENZO BIOCHEM, **INC**. (in thousands, except per share data)

Selected operations data:

	Three months ended April 30, (unaudited)				Nine months ended April 30, (unaudited)			
		2014		2013		2014		2013
Revenues: Clinical laboratory services Product revenues	\$	14,542 8,707	\$	13,384 8,265	\$	43,250 24,424	\$	41,881 24,574
Royalty and license fee income		729		949		3,366		3,982
Total revenues	\$	23,978	\$	22,598	\$	71,040	\$	70,437
Gross profit	\$	10,394	\$	9,048	\$	30,743	\$	29,425
Gross profit %		43%		40%		43%		42%
Loss before income taxes		(448)		(5,808)		(6,743)		(15,415)
Benefit (provision) for income taxes		(7)		38		(65)		280
Net loss	\$	(455)	\$	(5,770)	\$	(6,808)	\$	(15,135)
Basic and diluted loss per share	(\$	0.01)	(\$	0.15)	<u>(</u> \$	0.16)	(\$	0.38)
Weighted average shares outstanding - basic and diluted		43,243		39,553		42,062		39,381
Selected balance sheet data:								
		l 30, 2014 audited)	July	y 31, 2013				
Cash and cash equivalents	\$	14,804	\$	9,007				
Working capital	\$	16,054	\$	8,704				
Stockholders' equity	\$	37,923	\$	34,132				
Total assets	\$	62,516	\$	58,958				

The following table presents a reconciliation of reported net income (loss) and basic and diluted earnings per share to non-GAAP net income (loss) and basic and diluted earnings per share for the three months ended April 30, 2014 and 2013:

ENZO BIOCHEM, INC.

Non-GAAP, Reconciliation Table (in thousands, except per share data)

Three months ended April 30,

		April 30,			
	2014		2013 (unaudited)		
	(unaudite	<u>d)</u>			
Reported GAAP net income (loss)	\$	(455) \$	(5,770)		
Adjusted for:					
Legal settlements, net		(3,100)	-		
Legal fees associated with settlements		965	_		
Separation payments and accelerated stock compensation		498	_		
Non-GAAP net income (loss)	\$	(2,092) \$	(5,770)		
		<u>-</u>	, ·		
Weighted Shares Outstanding					
Basic and diluted		43,243	39,553		
Basic and diluted earnings per share					
Basic and diluted earnings per share GAAP	(\$	0.01) (\$	0.15)		
Basic and diluted earnings per share non-GAAP	(\$	0.05) (\$	0.15)		

The following table presents a reconciliation of reported net income (loss) for the three months ended April 30, 2014 and 2013 to adjusted EBITDA:

ENZO BIOCHEM, INC.

Adjusted EBITDA, Reconciliation Table (in thousands, except per share data)

Three months ended

	April 30,				
	2014		2013		
	(unaudited)			(unaudited)	
GAAP net income (loss)	\$	(455)	\$	(5,770)	
Plus:					
Depreciation and amortization		989		1,162	
Interest expense		47		10	
(Benefit) provision for income taxes		7		(38)	
EBITDA	\$	588	\$	(4,636)	
Adjusted for:					
Legal settlements, net		(3,100)		_	
Legal fees associated with settlements		965		_	
Separation payments and accelerated stock compensation		498		_	
Adjusted EBITDA	\$	(1,049)	\$	(4,636)	