

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): December 13, 2010

Enzo Biochem, Inc.

(Exact Name of Registrant as Specified in Its Charter)

New York

(State or Other Jurisdiction of Incorporation)

001-09974

(Commission File Number)

13-2866202

(IRS Employer Identification No.)

**527 Madison Avenue
New York, New York**

(Address of Principal Executive Offices)

10022

(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 December 13, 2010, Enzo Biochem, Inc., a New York corporation, (the "Company") issued a press release announcing its operating results for its first fiscal quarter ended October 31, 2010.

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 accordance with General Instruction B.2. of Form 8-K, the information contained in this Current Report on Form 8-K, including Exhibit 99.1, is being furnished and shall not be deemed to be "filed" for purposes of Section 18 of the Exchange Act or otherwise subject to the liability of that section. Such information shall not be incorporated by reference in any filing of the Company, whether made before or after the date hereof, regardless of any general incorporation language in such filing, except as otherwise expressly set forth by specific reference in such a filing.

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.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

<u>Exhibit No.</u>	<u>Description</u>
99.1	Press Release of Enzo Biochem, Inc., dated December 13, 2010

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.

Date: December 16, 2010

ENZO BIOCHEM, INC.

By: /s/ Barry Weiner

Barry Weiner
President, Chief Financial Officer,
Principal Accounting Officer and
Director



*news
release*

Enzo Biochem, Inc.
527 Madison Avenue
New York, NY 10022

FOR IMMEDIATE RELEASE

ENZO BIOCHEM ANNOUNCES FIRST QUARTER RESULTS

**COMPANY GENERATES POSITIVE EBITDA, IMPROVING \$2.9 MILLION
SEQUENTIALLY; RECENT ACTIONS TO STREAMLINE OPERATIONS BEGIN TO
DRIVE RESULTS**

NEW YORK, NY, December 13, 2010 — Enzo Biochem, Inc. (NYSE:ENZ) today reported improved sequential results for the first fiscal quarter ended October 31, 2010, the result of recent programs to reduce expenses, consolidate activities and expand operations.

“We are pleased to report that our program instituted this quarter aimed at making Enzo more efficient and designed to produce more effective use of our assets is beginning to show results, as demonstrated by improved performance,” said Barry Weiner, President. “While we are in the early stages of this comprehensive program, the results experienced to date are very encouraging.”

“Moreover, in the first quarter, we achieved several milestones. We submitted Colon Sentry, a unique assay for risk-stratification of colon cancer occurrence, to the New York State Department of Health for approval. In addition, we began enrolling the first patients in our clinical trial of Optique™, our candidate therapeutic for the treatment of autoimmune uveitis. We also continued to roll out proprietary products and systems designed to aid in drug development,” he added.

Among the quarter’s highlights (all references are to sequential quarter over quarter results, normalized for an inventory charge and severance of \$1.8 million where applicable):

- Enzo Life Sciences, benefiting from increased emphasis on higher margin products, realized a greater than 100% gain in operating income.
- Enzo Clinical Labs increased revenues 6%, while reducing the operating loss 62%.
- Company-wide, gross margin increased \$2.0 million or 17%.
- Operating expenses decreased 7%, or to 57% of revenues, from 63%.
- EBITDA, a non-GAAP measure, was \$23,000, an improvement of \$2.9 million from the prior quarter.
- Net loss for the quarter was reduced 70%.

Quarter's Results

Total revenues for the first quarter of fiscal 2011 increased to \$25.7 million, from \$25.2 million a year ago, or 2%, despite slightly lower revenues at Life Sciences resulting from a program to emphasize higher margined products, and advanced 3% sequentially. Enzo Clinical Labs benefited from an increase in market share and a new provider contract.

Gross profit margin improved 17% to \$13.5 million, or 53% of revenues, compared to the fiscal 2010 fourth quarter's \$11.5 million and was a slight improvement year over year. R&D expenses were \$1.8 million, 28% lower than both a year ago and in the July 2010 quarter, and SG&A declined \$0.5 million to \$11.0 million, as a percentage of revenues down 3% from a year ago and 1% from the prior quarter. Overall operating expenses, including R&D, SG&A, legal and provision for uncollectible accounts were \$14.6 million, a decline of 4% from last year's first quarter and 7% from the preceding July period. The operating loss decreased 42%, to (\$1.1) million from the corresponding year-ago period, while the net loss of (\$1.1) million was 38% lower year over year. EBITDA, adjusted for approximately \$1.1 million in both periods for depreciation and amortization, was \$23,000, compared to a year ago EBITDA loss of (\$959,000), an improvement of \$936,000.

The Company's financial condition remained strong, with working capital of \$42.1 million. As of October 31, 2010, cash and cash equivalents, plus short term investments in US Treasury Bills, totaled \$31.6 million. At November 30, 2010 Enzo's cash, and cash equivalents and short-term investments were \$33.9 million, which exceeded the July 31, 2010 balance by \$0.3 million. Cash utilization in operations declined year over year by approximately \$1 million to \$1.8 million principally due to the reduced loss in the 2011 period. Management's plan is to move towards being cash flow positive from operations in calendar 2011. There was no debt.

Segment Results

Enzo Clinical Labs ("Lab") benefited in the quarter from increased market share and service volume increases in connection with its being named a participating provider for Empire BlueCross BlueShield in the metropolitan New York area. Revenues increased to \$12.4 million, compared to \$11.1 million a year ago and \$11.7 million in the July 2010 quarter, gains of 12% and 6%, respectively. The Lab has increasingly moved to position itself as a provider of molecular diagnostic and other higher-margin esoteric services. Gross margins improved \$0.5 million and \$1.1 million year over year and sequentially, respectively. Uncollectible accounts receivables increased to \$1.1 million, from \$0.9 million a year ago, primarily due to a change in payer mix which is expected to normalize in the months ahead. SG&A was \$4.5 million in the current quarter, a decrease of \$0.3 million from the prior quarter and slightly higher year over year as a result of increased benefit costs. Operating loss improved sequentially to \$0.9 million from \$2.3 million and was comparable year over year.

Enzo Life Sciences' profitability for the quarter improved due to benefits from the plan instituted in July to integrate functions and rationalize workforce levels. Product and royalty and license fee revenues of \$13.3 million in the fiscal 2011 first quarter, compared with \$14.1 million a year ago, and \$13.2 million in the preceding three months. Product revenues declined \$0.6 million over the prior year period mainly due to planned reduction in lower margin distributed products. Gross profit margin improved to 65% in the October 2010 quarter, compared with 64%

a year ago and 59% in the July 2010 quarter, after adjusting for an inventory charge of \$1.3 million. Operating income amounted to \$3.0 million, compared to \$2.1 million a year ago, and \$1.6 million in the preceding fourth quarter of fiscal 2010, after adjusting for the inventory charge and severance.

Conference Call

The Company will conduct a conference call on December 13, 2010 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 30085004. Interested parties may also listen over the Internet at <http://phx.corporate-ir.net/playerlink.zhtml?c=94391&s=wm&e=3572918>. 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 December 27, 2010. The replay of the conference call can be accessed by dialing 1-800-642-1687, and when prompted, use PIN number 30085004. International callers can dial 1-706-645-9291, 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. 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 or 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.

About Enzo Biochem

Enzo Biochem, Inc., is a growth-oriented integrated life sciences and biotechnology company focused on harnessing biological process to develop research tools, diagnostics and therapeutics, and serves as a provider of test services, including esoteric tests, to the medical community. Since our founding in 1976, our strategic focus has been on the development of enabling technologies in the life sciences field. Enzo Life Sciences develops, produces and markets proprietary labeling and detection products for gene sequencing, genetic analysis and immunological research, among others. Its catalog of over 30,000 products serves the molecular biology, drug discovery and pathology research markets worldwide. Enzo Clinical Labs

provides laboratory services for a growing roster of physicians in the New York Metropolitan area, Eastern Pennsylvania and New Jersey. Its tests include, in addition to routine tests, capabilities for detecting molecular infection disease, molecular oncology, autoimmune disorders and genetics. Enzo Clinical Labs also provides clinical diagnostic services that allow Enzo to capitalize on its extensive advanced molecular and cytogenetic capabilities and the broader trends in predictive and personalized diagnostics. Enzo Therapeutics is a biopharmaceutical venture that has developed multiple novel approaches in the areas of gastrointestinal, infectious, ophthalmic and metabolic diseases. It has focused its efforts on developing treatment regimens for diseases and conditions for which current treatment options are ineffective, costly, and/or cause unwanted side effects. In the course of the company's research and development activities, Enzo has also developed a substantial portfolio of intellectual property asset with patent coverage across a number of key 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, 2010. 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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Contact:

For: Enzo Biochem, Inc.

Steven Anreder, 212-532-3232 or Michael Wachs, CEOcast, Inc., 212-732-4300

TABLE FOLLOWS

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

Selected operations data:

	Three months ended October 31, 2010 (unaudited)	
	2010	2009
Product revenues	\$ 10,184	\$ 10,744
Royalty and license fee income	3,078	3,311
Clinical laboratory services	12,390	11,110
	\$ 25,652	\$ 25,165
Gross profit	\$ 13,473	\$ 13,329
Gross profit %	53%	53%
Loss before income taxes	(\$ 1,060)	(\$ 1,893)
(Provision) benefit for income taxes (A)	(62)	79
	(\$ 1,122)	(\$ 1,814)
Net loss	(\$ 1,122)	(\$ 1,814)
Basic and diluted loss per share	(\$ 0.03)	(\$ 0.05)
Weighted average shares outstanding - basic and diluted	38,160	37,855

Reconciliation of GAAP Net Loss to EBITDA:

Net loss	(\$ 1,122)	(\$ 1,814)
Depreciation and amortization	1,088	943
Interest expense (income)	(5)	(9)
Provision for income taxes	62	(79)
	\$ 23	(\$ 959)
EBITDA (B)	\$ 23	(\$ 959)

Notes:

A- All periods reflect effective tax rates below the statutory rate due to inability to recognize future tax benefits.

B- EBITDA is a non-GAAP measure, as described in the attached press release

Selected balance sheet data:

	October 31, 2010	July 31, 2010
Cash and cash equivalents and short term investments	\$ 31,559	\$ 33,566
Working capital	\$ 42,056	\$ 42,181
Stockholders' equity	\$ 96,295	\$ 97,016
Total assets	\$ 115,450	\$ 115,245