

October 14, 2010



Enzo Biochem Reports Fourth Quarter and Year End Results

Recent Initiatives to Generate Cost Savings in Excess of \$4 Million and Target Positive Cash-Flow from Operations in 2011

NEW YORK--(BUSINESS WIRE)-- Enzo Biochem, Inc. (NYSE:ENZ) today reported results for the fiscal fourth quarter, consistent with our announcement on September 20, 2010, and for the year ended July 31, 2010.

"As we have previously stated," said Barry Weiner, President of Enzo, "we have this past year taken aggressive actions to streamline operations, reduce overhead and generate cost savings designed to position the Company to capitalize on its many strengths in diagnostics services and life sciences, as well as to enhance our financial capabilities and achieve positive cash flow. In the fourth fiscal quarter, we took substantial charges to support these actions. The improved operating results will start to be reflected beginning with the first quarter of fiscal 2011 now underway."

In the fourth quarter of fiscal 2010, compared to a year ago:

- Aided by gains at Enzo Clinical Labs, total revenues advanced to \$24.9 million, up \$0.4 million, or 1.7%.
- Gross profit declined \$0.6 million to \$10.2 million, which included a charge of approximately \$1.3 million related to rationalization of low-margin products at Enzo Life Sciences. Without that charge, gross profit would have approximated \$11.5 million, compared to \$10.8 million a year ago. Gross profit margin, adjusted for the charge, would have equaled 46%, instead of 41%, as reported, as compared to a gross margin of 44% last year.
- Selling, general and administrative expenses (SG&A), as a percentage of revenues, improved to 45.1%, after adjusting for severance of \$0.3 million, from 47.6%, reflecting continuing efforts to manage costs.

The reported net loss for the period of \$5.5 million would have been approximately \$1.8 million without the inventory charge and one-time severance costs of \$0.5 million for the workforce realignment, or a \$3.7 million net loss, as compared to a \$4.9 million net loss in the corresponding year-ago period, after adjusting for an inventory purchase accounting charge of \$0.4 million. On a fully diluted per share basis, the net loss amounted to \$0.15 per share, of which \$0.05 was due to the above charges, compared to \$0.14 per share a year ago, of which \$0.01 was due to the inventory adjustment.

Cash, cash equivalents and short-term investments approximated \$34 million at July 31, 2010 and April 30, 2010. Cash used in operations decreased to \$0.2 million in the fiscal

fourth quarter from \$2.7 million in the year ago period.

For the full year total revenues increased 8% to \$97.1 million and gross profit, despite the fourth quarter inventory adjustment, was up 23%, to approximately \$45.0 million, with the gross margin at 46%, compared with 41% a year earlier. Operating expenses, which exclude cost of goods and services, approximated \$63.3 million and as a percentage of revenues, excluding the \$3.7 million in litigation settlement and related legal costs, declined 200 basis points to 65%. This resulted in an operating loss of \$22.1 million, a 6% improvement compared to the prior year's operating loss of \$23.4 million. The year's net loss was reduced 6%, to \$22.2 million, or a loss of \$0.59 per diluted share, down from \$23.6 million, or a loss of \$0.63 per diluted share. EBITDA loss, as adjusted for the litigation settlement and legal costs, improved by \$6.3 million to \$14.3 million.

Segment Results

Enzo Clinical Labs posted a 3.4% increase in fourth quarter revenues, to \$11.7 million, and an increase for the year of 12%, to \$44.2 million. The revenue increase resulted from increased service volume, including higher priced testing, despite a slowdown in physician office visits due to the economy and lower Medicare reimbursement rates. Gross profit for the quarter amounted to \$3.7 million, against \$4.1 million a year ago, and for the year totaled \$14.6 million, up from \$13.3 million a year ago. The fiscal fourth quarter and the year were both impacted by higher expenses for reagents and other associated costs.

At Enzo Life Sciences, year-over-year product revenues increased 6%, to \$43.1 million, and for the quarter amounted to \$10.5 million, as compared to \$10.6 million last year. Royalty and license fee income increased 4% and 6%, from the prior year and fourth quarter, respectively. Gross margins on product revenues increased 49% for the year, to \$20.6 million, but were off \$0.4 million to \$3.7 million for the quarter, in large measure reflecting the aforementioned decision to rationalize low-margin inventory in favor of more profitable, higher margin products.

Streamlining Operations

The initiatives announced approximately five weeks ago involve consolidation of acquisitions made the past three years at Enzo Life Sciences into a more cohesive and effective global provider, that draws on the developmental and marketing strengths of each unit. As a result, the segment will have a greater focus on higher margin products in demand in today's increasingly molecular-based approach to medical research, diagnosis and treatment. At Enzo Clinical Labs, the expense reductions and process improvements are attributed to the investment in greater automation of test processing and workforce rationalization. It is estimated, that the actions taken will result in a reduction in annualized operating expenses in excess of \$4 million, while also targeting the Company to positive cash flow from operations in 2011.

Recent Events

Enzo Therapeutics, which has reduced its activities for greater cost effectiveness, announced initiation of a clinical trial for Uveitis that will be conducted at the National Institute of Health's National Eye Institute. The randomized, double-masked, placebo-controlled trial of Optiquel(TM) is expected to involve approximately 60 subjects, with results scheduled to

be announced in 2012.

Enzo Clinical Labs was named a participating laboratory provider, effective August 1, 2010, to Empire BlueCross Blue Shield for the metropolitan New York area, in addition to being awarded a license for doing business in the Commonwealth of Pennsylvania. This is the first of several such license applications it has filed with other key states that will enable Clinical Labs to undertake a greater role as a national provider of esoteric and high value diagnostics.

"Fiscal 2010 was very much a year of change, transition and refocusing at Enzo Biochem. As we structure the Company to more fully realize its potential in the evolving field of personalized medicine, we believe that we have strengthened Enzo financially while also providing optionality to more fully capitalize on the multiple opportunities provided in the new directions of healthcare today," said Mr. Weiner.

Conference Call

The Company will conduct a conference call on October 15, 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 16372257. Interested parties may also listen over the Internet at <http://phx.corporate-ir.net/phoenix.zhtml?p=irol-eventDetails&c=94391&eventID=3425053>. 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 October 29, 2010. The replay of the conference call can be accessed by dialing 1-800-642-1687, and when prompted, use PIN number 16372257. 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. A further adjustment to the EBITDA was shown in this press release to reflect the litigation settlement to a former officer and the related legal costs. 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, 2009. 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.

ENZO BIOCHEM, INC.

(in thousands, except per share data)

	Three months ended	Fiscal year ended
Selected operations data:	July 31, 2010	July 31, 2010

	(unaudited)			
	2010	2009	2010	2009
Revenues:				
Product revenues	\$ 10,512	\$ 10,640	\$ 43,111	\$ 40,592
Royalty and license fee income	2,749	2,593	9,793	9,376
Clinical laboratory services	11,684	11,298	44,178	39,604
Total revenues	\$ 24,945	\$ 24,531	\$ 97,082	\$ 89,572
Gross profit	10,222	10,793	\$ 44,965	\$ 36,511
Gross profit %	41%	44%	46%	41%
Loss before income taxes	(\$5,757)	(\$5,452)	(\$22,261)	(\$23,477)
(Provision) Benefit for income taxes (A)	244	173	28	(87)
Net loss	(\$5,513)	(\$5,279)	(\$22,233)	(\$23,564)
Basic and diluted loss per share	(\$0.15)	(\$0.14)	(\$0.59)	(\$0.63)
Weighted average shares outstanding - basic and diluted	38,156	37,776	38,001	37,511
Reconciliation of GAAP Net Loss to EBITDA, as adjusted:				
Net loss	(\$5,513)	(\$5,279)	(\$22,233)	(\$23,564)
Add-back (deduct):				
Depreciation and amortization	1,045	1,207	4,269	3,462
Interest expense (income)	(6)	(12)	(19)	(581)
Provision (benefit) for income taxes	(244)	(173)	(28)	87
EBITDA (B)	(\$4,718)	(\$4,257)	(\$18,011)	(\$20,596)
Adjustment for litigation settlement to			3,698	

former officer and
related legal
costs

EBITDA, as adjusted (C)	(\$4,718)	(\$4,257)	(\$14,313)	(\$20,596)
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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

C- EBITDA, adjusted for litigation settlement to former officer and related legal costs

Selected balance
sheet data:

	July 31, 2010	July 31, 2009
Cash and cash equivalents and short term investments	\$ 33,566	\$ 50,235
Working capital	\$ 42,181	\$ 60,518
Stockholders' equity	\$ 97,016	\$ 116,781
Total assets	\$ 115,245	\$ 133,128

Source: Enzo Biochem, Inc.