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): October 9, 2014

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 *kee* 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 October 9, 2014, Enzo Biochem, Inc. (the "Company") issued a press release announcing its operating results for its fourth fiscal quarter and fiscal year ended July 31, 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. 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, non-GAAP earnings 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 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 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 discussed under Item 2.02 and Item 7.01 above, including Exhibit 99.1, shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or incorporated by reference in any filing by the Company under the Securities Act of 1933, as amended, except as shall be expressly set forth by specific reference in such a filing.

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 October 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: October 9, 2014

By:

/s/ Barry W. Weiner Barry W. Weiner President



FOR IMMEDIATE RELEASE

Exhibit 99.1

news release

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

ENZO BIOCHEM REPORTS STRONG FISCAL FOURTH QUARTER RESULTS

Transformative Programs to Heighten Efficiency, Broaden Capabilities Yield Solid Benefits

NEW YORK, NY, October 9, 2014-- Enzo Biochem Inc. (NYSE:ENZ) today reported results for the fourth quarter and fiscal year ended July 31, 2014, with continued solid year-end gains posted by both Life Sciences and Clinical Labs.

- · Fourth quarter revenues increased over the prior year period, despite reduced royalty fee income.
- Gross margins improved year over year across the board resulting in an improvement to 44% in the current quarter from 41% in the prior year period.
- Increasing volume of molecular diagnostic tests and women's health test specialty benefiting Clinical Lab results, while at Life Sciences concentration on higher margin products are paying off as margins increased from 49% to 55%.
- Operations generated positive cash flow for two consecutive quarterly periods, with cash generated in the fourth quarter of \$1.0 million, an improvement of \$2.5 million from a year-ago.
- Year over year full year net loss sharply reduced by \$8.3 million.
- Cash of \$17.5 million almost double year-ago level, closing year with improved, highly liquid balance sheet.

"This past year has been one of solid progress for Enzo, culminating with notably improved results in the final quarter that, we are confident, point to further gains in the new fiscal year now underway," said Barry Weiner, Enzo President. "Our focus is on completing our transformation, by further reducing overhead, increasing efficiency, tightening controls, broadening markets and adding capabilities in high margin molecular diagnostics to increase Enzo's share of the rapidly growing marketplace.

"Our lead proprietary platform, AmpiProbe®, has been designed to provide a low cost solution to clinical laboratories that can provide comprehensive diagnostic output. It is a diagnostic system that can be adapted to detect numerous gene targets and has the potential to run multiple tests from one clinical sample. It is also adaptable to the standard workflow in the lab for running

molecular tests. We believe this system will allow us to become a high-value supplier of lower cost molecular assays - a much needed product in todays pressured reimbursement market.

"On the legal front, having recently satisfactorily resolved several cases, including the Perkin-Elmer matter in New York, we have pending roughly a dozen patent infringement cases where we continue to have high expectations of favorable outcomes. This is a period of exciting opportunities for Enzo, and we look forward to fiscal 2015."

Fourth Quarter Operating Results

Revenues for the fourth quarter amounted to \$24.9 million, up 7% year over year. These gains were achieved despite a 20% decline in royalty and licensing income from third parties, which nonetheless exceeded \$1.0 million. Gross margin improved to \$10.9 million, from \$9.4 million last year, with gross profit as a percentage of revenues at 44%, compared with 41% a year ago. R&D amounted to \$0.6 million, compared to \$0.9 million a year ago, reflecting an adjustment to prior estimated amounts since total expenditures on new products actually were higher. With legal expenses at \$2.2 million, up from approximately \$1.0 million a year ago due to increased litigation surrounding the Company's intellectual property, operating expenses increased 5%. The operating loss declined to \$3.1 million, compared to a year ago loss of \$3.4 million, a \$0.3 million improvement.

The net loss for the quarter amounted to \$3.2 million, compared with the year ago net loss of \$3.1 million, when results benefited from approximately \$0.4 million in tax benefits which was not present in the current quarter.

Fully diluted and basic share loss, as reported, was (\$0.07), compared to (\$0.08) a year ago. EBITDA (earnings before interest, tax, depreciation and amortization), a non-GAAP measure, improved to a loss of \$2.2 million, compared to a loss of \$2.4 million last year. Adjusted EBITDA in the fiscal 2014 fourth quarter was a loss of \$1.8 million.

Operating cash flow for the fourth quarter was a \$1.0 million compared to a use of \$1.5 million in the prior year period, reflecting an improvement in business performance.

For fiscal 2014, revenues approximated \$96 million, compared to \$93.7 million a year earlier, an increase of 2%. Gross margin improved 7%, to \$41.7 million, and gross profit as a percent of revenues increased to 43%, compared with 41%. The net loss was reduced approximately 45%, or by \$8.2 million, to a loss of (\$10.0) million, from (\$18.2) million. Adjusted EBITDA was a negative (\$7.0) million, vs. (\$14.3) million a year ago, an improvement of more than 50%.

Operating cash flows for the year was a use of \$1.7 million, compared to a use of \$10.0 million in the prior year.

As of July 31, 2014, cash and cash equivalents was \$17.5 million. Working capital amounted to \$15.8 million, as compared to \$8.7 million a year ago.

Segment Results

Enzo Clinical Labs continues to grow its molecular test offerings and is recognized as a leading provider of an extensive menu of tests related to women's health.

Fourth quarter revenues were \$15.4 million, up 10% from last year's \$14.0 million. For the full year, revenues increased 5%, to \$58.7 million. The quarter's gross margin improved 25%, to \$5.3 million, and as a percentage of revenue, gross profit was 34%, compared to 30% in the prior year. Operating loss for the quarter of (\$0.9) million, improved by \$0.6 million year over year, or 40%. The Lab's full year operating loss was (\$6.6) million, compared to (\$7.1) million in the prior year.

At **Enzo Life Sciences**, revenues for the quarter increased 6%, to \$8.4 million, as the segment continued to place emphasis on higher margin product offerings. Fourth quarter product gross margins totaled \$4.6 million, up 18% from last year's \$3.9 million; gross profit as a percentage of revenues was 55%, vs. 49% respectively. Full year gross margin advanced 10%, to \$17.5 million, with the gross profit percentage at 53%, compared to 49% in fiscal 2013. Operating income for the quarter totaled \$1.6 million, compared to a year ago of \$1.3 million, and for the year totaled \$10.4 million, compared to \$3.0 million a year ago.

Conference Call

The Company will conduct a conference call Friday, October 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 7864886. Interested parties may also listen over the Internet http://phoenix.zhtml?p=irol-eventDetails&c=94391&eventID=5169529 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 Friday, October 24, 2014. The replay of the conference call can be accessed by dialing 1-800-585-8367, and when prompted, use PIN number 7864886. 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 (<u>www.enzo.com</u>) 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, 2014. 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.

For Enzo Biochem, Inc.

Steven Anreder Anreder & Company 212-532-3232 steven.anreder@anreder.com

or

Michael Wachs CEOcast, Inc. 212-732-4300 <u>mwachs@ceocast.com</u>

ENZO BIOCHEM, INC.

(in thousands, except per share data)

| Basic and diluted loss per share (\$0.07) (\$0.08) (\$0.23) (\$0.46) Weighted average shares outstanding - basic and diluted 44,020 40,284 42,561 39,607 Selected balance sheet data: | Selected operations data: | Three months ended July 31, (unaudited) | | | | Fiscal year ended July 31, | | | | |
|--|---|---|---------------|------|---------------|-------------------------------|----------|------|-------------|--|
| Clinical laboratory services \$ 15,439 \$ 14,008 \$ 58,689 \$ 32,526 Product revenues 3,426 7,951 32,250 32,526 Royally and license fee income 1,042 1,310 4,408 5,292 Total revenues \$ 24,907 \$ 23,269 \$ 95,947 \$ 93,707 Gross profit \$ 10,935 \$ 9,446 \$ 41,679 \$ 38,872 Gross profit % 444% 41% 43% 41% Loss before income taxes (3,162) (3,532) (9,905) (18,949) (Provision) benefit for income taxes (7) 430 (72) 712 Net loss \$ (3,169) \$ (3,102) \$ (9,977) \$ (18,237) Basic and diluted loss per share (\$0,07) (\$0.08) (\$0.23) (\$0.46) Weighted average shares outstanding - basic and diluted 44,020 40,284 42,561 39,607 Selected balance sheet data: | | 2014 | | 2013 | | 2014 | | 2013 | | |
| g 21,001 g 21,001 g 00,0101 Gross profit \$ 10,935 \$ 9,446 \$ 41,679 \$ 38,872 Gross profit % 44% 41% 43% 41% Loss before income taxes (3,162) (3,532) (9,905) (18,949) (Provision) benefit for income taxes (7) 430 (72) 712 Net loss \$ (3,169) \$ (3,102) \$ (9,977) \$ (18,237) Basic and diluted loss per share (\$0.07) (\$0.08) (\$0.23) (\$0.46) Weighted average shares outstanding - basic and diluted 44,020 40,284 42,561 39,607 Selected balance sheet data: | Clinical laboratory services Product revenues | \$ | 8,426 | \$ | 7,951 | \$ | 32,850 | \$ | 32,526 | |
| Gross profit % 44% 41% 43% 41% Loss before income taxes (3,162) (3,532) (9,905) (18,949) (Provision) benefit for income taxes (7) 430 (72) 712 Net loss \$(3,162) \$(3,102) \$(9,907) \$(18,237) Basic and diluted loss per share (\$0.07) (\$0.08) (\$0.23) (\$0.46) Weighted average shares outstanding - basic and diluted 44,020 40,284 42,561 39,607 Selected balance sheet data: | Total revenues | \$ | 24,907 | \$ | 23,269 | \$ | 95,947 | \$ | 93,707 | |
| Loss before income taxes (3,162) (3,532) (9,905) (18,949) (Provision) benefit for income taxes (7) 430 (72) 712 Net loss \$ (3,169) \$ (3,102) \$ (9,977) \$ (18,237) Basic and diluted loss per share (\$0.07) (\$0.08) (\$0.23) (\$0.46) Weighted average shares outstanding - basic and diluted 44,020 40,284 42,561 39,607 Selected balance sheet data: | Gross profit | \$ | 10,935 | \$ | 9,446 | \$ | 41,679 | \$ | 38,872 | |
| (Provision) benefit for income taxes (7) 430 (72) 712 Net loss \$ (3,169) \$ (3,102) \$ (9,977) \$ (18,237) Basic and diluted loss per share (\$0.07) (\$0.08) (\$0.23) (\$0.46) Weighted average shares outstanding - basic and diluted 44,020 40,284 42,561 39,607 Selected balance sheet data: | Gross profit % | | 44% | | 41% | | 43% | | <u>41</u> % | |
| Net loss \$ (3,169) \$ (3,102) \$ (9,977) \$ (18,237) Basic and diluted loss per share (\$0.07) (\$0.08) (\$0.23) (\$0.46) Weighted average shares outstanding - basic and diluted 44,020 40,284 42,561 39,607 Selected balance sheet data: | Loss before income taxes | | (3,162) | | (3,532) | | (9,905) | | (18,949) | |
| Weighted average shares outstanding - basic and diluted 44,020 40,284 42,561 39,607 Selected balance sheet data: July 31, 2014 July 31, 2013 40,284 42,561 39,607 Cash and cash equivalents \$ 17,455 \$ 9,007 \$ 17,455 \$ 9,007 \$ 15,771 \$ 8,704 \$ 36,950 \$ 34,132 | (Provision) benefit for income taxes Net loss | \$ | | \$ | | \$ | <u> </u> | \$ | | |
| Selected balance sheet data: July 31, 2014 July 31, 2013 Cash and cash equivalents \$ 17,455 \$ 9,007 Working capital \$ 15,771 \$ 8,704 Stockholders' equity \$ 36,950 \$ 34,132 | Basic and diluted loss per share | | (\$0.07) | | (\$0.08) | | (\$0.23) | | (\$0.46) | |
| July 31, 2014 July 31, 2013 Cash and cash equivalents \$ 17,455 \$ 9,007 Working capital \$ 15,771 \$ 8,704 Stockholders' equity \$ 36,950 \$ 34,132 | Weighted average shares outstanding - basic and diluted | | 44,020 | | 40,284 | | 42,561 | | 39,607 | |
| Cash and cash equivalents \$ 17,455 \$ 9,007 Working capital \$ 15,771 \$ 8,704 Stockholders' equity \$ 36,950 \$ 34,132 | Selected balance sheet data: | | | | | | | | | |
| Working capital \$ 15,771 \$ 8,704 Stockholders' equity \$ 36,950 \$ 34,132 | | July | July 31, 2014 | | July 31, 2013 | | | | | |
| Stockholders' equity \$ 36,950 \$ 34,132 | Cash and cash equivalents | \$ | 17,455 | \$ | 9,007 | | | | | |
| | Working capital | \$ | 15,771 | \$ | 8,704 | | | | | |
| Total assets \$ 64,411 \$ 58,958 | Stockholders' equity | \$ | 36,950 | \$ | 34,132 | | | | | |
| | Total assets | \$ | 64,411 | \$ | 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 and twelve months ended July 31, 2014 and 2013:

ENZO BIOCHEM, INC.

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

| | Three months ended July 31, | | | | | Fiscal year ended July 31, | | | |
|--|-----------------------------|----------|------|----------|------|-------------------------------|----|----------|--|
| | 2014 | | 2013 | | 2014 | | | 2013 | |
| Reported GAAP net income (loss) | \$ | (3,169) | \$ | (3,102) | \$ | (9,977) | \$ | (18,237) | |
| Adjusted for: | | | | | | | | | |
| Legal settlements, net | | | | | | (3,100) | | | |
| Legal fees associated with settlements | | 100 | | | | 1,065 | | _ | |
| Separation payments and accelerated stock compensation | | 130 | | | | 628 | | | |
| Exit costs associated with contract terminations | | 167 | | _ | | 167 | | _ | |
| Non-GAAP net income (loss) | \$ | (2,772) | \$ | (3,102) | \$ | (11,217) | \$ | (18,237) | |
| Weighted Shares Outstanding | | | | | | | | | |
| Basic and diluted | | 44,020 | | 40,284 | | 42,561 | | 39,607 | |
| Basic and diluted earnings per share | | | | | | | | | |
| Basic and diluted earnings per share GAAP | | (\$0.07) | | (\$0.08) | | (\$0.23) | | (\$0.46) | |
| Basic and diluted earnings per share non-GAAP | | (\$0.06) | | (\$0.08) | | (\$0.26) | | (\$0.46) | |

The following table presents a reconciliation of reported net income (loss) for the three and twelve months ended July 31, 2014 and 2013 to adjusted EBITDA:

ENZO BIOCHEM, INC.

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

| | Three months ended July 31, | | | | Fiscal year ended July 31, | | | | | |
|--|--------------------------------|---------|------|---------|-------------------------------|---------|------|----------|--|--|
| | 2014 | | 2013 | | 2014 | | 2013 | | | |
| GAAP net (loss) | \$ | (3,169) | \$ | (3,102) | \$ | (9,977) | \$ | (18,237) | | |
| Plus: | | | | | | | | | | |
| Depreciation and amortization | | 956 | | 1,108 | | 3,971 | | 4,605 | | |
| Interest expense | | 46 | | 29 | | 208 | | 54 | | |
| (Benefit) provision for income taxes | | 7 | | (430) | | 72 | | (712) | | |
| EBITDA | \$ | (2,160) | \$ | (2,395) | \$ | (5,726) | \$ | (14,290) | | |
| Adjusted for: | | | | | | | | | | |
| Legal settlements, net | | | | | | (3,100) | | | | |
| Legal fees associated with settlements | | 100 | | _ | | 1,065 | | | | |
| Separation payments and accelerated stock compensation | | 130 | | _ | | 628 | | _ | | |
| Exit costs associated with contract terminations | | 167 | | | | 167 | | | | |
| Adjusted EBITDA | \$ | (1,763) | \$ | (2,395) | \$ | (6,966) | \$ | (14,290) | | |