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): September 20, 2016

Enzo Biochem, Inc.

(Exact Name of Registrant as Specified in Its Charter)

New York

| (State or Other Jurisdiction | of Incorporation) |
|---|--|
| 001-09974 | 13-2866202 |
| (Commission File Number) | (IRS Employer Identification No.) |
| 527 Madison Avenue | |
| New York, New York | 10022 |
| (Address of Principal Executive Offices) | (Zip Code) |
| (212) 583-0 | 100 |
| (Registrant's Telephone Number | r, Including Area Code) |
| (Former Name or Former Address, if | Changed Since Last Report) |
| k the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy ral Instruction A.2. below): | the filing obligation of the registrant under any of the following provisions (see |
| 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 8.01 Other events
On September 20, 2016, Enzo Biochem, Inc. (the "Company") issued a press release titled "Enzo Biochem Announces New York State Health Department Approval of New Easily Adaptable, Cost Effective Cardiac Assay"

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

99.1 Press Release of Enzo Biochem, Inc., dated September 20, 2016.

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: September 20, 2016 By:

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



news release

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

FOR IMMEDIATE RELEASE

Enzo Biochem Announces New York State Health Department Approval of New Easily Adaptable, Cost Effective Cardiac Assay

PLAQPRO™ Lp-PLA, Assay is Based on a Proprietary Enzo Biochem Assay Platform, Further Underscoring Growing Importance of Company's Clinically Relevant Diagnostics

NEW YORK, NY, September 20, 2016 – Enzo Biochem, Inc. (NYSE: ENZ) today announced that the New York State Department of Health has granted conditional approval for use of Enzo Clinical Labs' PLAQPRO™ Lp-PLA₂ Assay.

This cardiac assay delivers improved consistency and is designed to work on open platform clinical analysis instruments. The open platform configuration is one of the several factors that contribute to its cost effectiveness, which is vital to today's clinical labs that are confronted by shrinking reimbursements.

Elazar Rabbani, Ph.D., Enzo CEO and Chairman, commented that "the approval of PLAQPRO™ Lp-PLA is a strong addition to Enzo's comprehensive cardiac testing panels, and is especially important to women's health." Often a woman will have no symptoms of heart disease, yet it is a leading cause of death for women in the United States accounting for an estimated 500,000 female lives lost each year. The assay is an important addition to Enzo's expanding line of women's health products, while also helping to solidify Enzo's position as a leading full service women's health lab.

PLAQPRO™ Lp-PLA₂ Assay is a biochemical activity assay designed to identify lipoprotein-associated phospholipase A2, a marker associated with the potential for coronary heart disease. The PLAQPRO™ Lp-PLA₂ Assay can be useful as part of a cardiac testing panel for individuals at intermediate or high risk for developing coronary heart disease. Early identification of increased risk of developing coronary heart disease offers the opportunity to adjust patient lifestyles or utilize medical interventions to reduce risk. The assay was developed using the Company's strong expertise in assay development, antibody production, small molecule chemistry, and detection technology.

Dr. Rabbani emphasized Enzo's commitment to delivering a robust line of products and services that will provide medically relevant, cost effective solutions that are easily adaptable to the workflow of clinical laboratories. The Company's integrated Life Science-Clinical Lab structure continues to be instrumental in its ability to seamlessly develop and advance products from innovation and manufacturing in our life sciences group and validation and commercialization through our clinical laboratory.

Enzo's proprietary platforms, ranging from DNA-based technologies to cellular analysis, and the assays based on them, continue to provide more sensitive diagnostic information at lower costs than many other tests currently on the market. The Company's recently approved assays are the forerunners of a comprehensive line of open diagnostic products under development by Enzo to address the critical needs of clinical laboratories. Currently, laboratories are often locked into closed-system contracts with molecular diagnostic suppliers that, faced with ever-declining reimbursements, reduce or even eliminate operating margins.

The Company's development pipeline includes an extensive line of assays for detection of numerous women's health infectious agents as well as for the identification of other pathogens. The Company is also developing a proprietary line of products designed to aid pathologists in differentiating the characteristics of various tumors from biopsy specimens. The Company's molecular-based products and services are targeted at a market currently estimated to be in excess of \$3 billion annually.

About Enzo Biochem

Enzo Biochem is a pioneer in molecular diagnostics, leading the convergence of clinical laboratories, life sciences and intellectual property 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 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, 2015. 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.

or

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