

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

**SCHEDULE 14A**  
(Rule 14a-101)

INFORMATION REQUIRED IN PROXY STATEMENT

SCHEDULE 14A INFORMATION

Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934

(Amendment No. )

Filed by the Registrant

Filed by a Party other than the Registrant

Check the appropriate box:

- Preliminary Proxy Statement
- Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))
- Definitive Proxy Statement
- Definitive Additional Materials
- Soliciting Material Under Rule 14a-12

---

ENZO BIOCHEM, INC.

(Name of Registrant as Specified in Its Charter)

LONE STAR VALUE INVESTORS, LP  
LONE STAR VALUE INVESTORS GP, LLC  
LONE STAR VALUE MANAGEMENT, LLC  
JEFFREY E. EBERWEIN  
DIMITRIOS J. ANGELIS  
JOHN M. CLIMACO

---

(Name of Persons(s) Filing Proxy Statement, if Other Than the Registrant)

Payment of Filing Fee (Check the appropriate box):

- No fee required.
  - Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.
-

(1) Title of each class of securities to which transaction applies:

(2) Aggregate number of securities to which transaction applies:

(3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined):

(4) Proposed maximum aggregate value of transaction:

(5) Total fee paid:

Fee paid previously with preliminary materials:

Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the form or schedule and the date of its filing.

(1) Amount previously paid:

(2) Form, Schedule or Registration Statement No.:

(3) Filing Party:

(4) Date Filed:

Lone Star Value Management, LLC, together with the other participants named herein (collectively, "Lone Star Value"), has made a definitive filing with the Securities and Exchange Commission of a proxy statement and an accompanying GOLD proxy card to be used to solicit votes for the election of Lone Star Value's slate of two highly-qualified director nominees to the Board of Directors of Enzo Biochem, Inc., a New York corporation (the "Company"), at the Company's upcoming 2016 annual meeting of shareholders ("Annual Meeting"), or any other meeting of shareholders held in lieu thereof, and any adjournments, postponements, reschedulings or continuations thereof.

On December 29, 2015, Lone Star Value issued a press release, which is set forth in full below, announcing the withdrawal of its slate of nominees for election to the Board of Directors of the Company at the Annual Meeting. **Proxies received by Lone Star Value that have not been revoked or revoked by the shareholders giving us such proxies, will be voted at the Annual Meeting in accordance with the instructions provided to us.**

#### LONE STAR VALUE ISSUES STATEMENT TO FELLOW ENZO SHAREHOLDERS

##### *Responds to Flaws in ISS Report and Enzo's False Allegations*

##### *Withdraws Proxy Contest at This Time but Will Monitor Enzo for any Failure to Deliver*

NEW YORK, Dec. 29, 2015 /PRNewswire/ – Lone Star Value Management, LLC, together with its affiliates and the other participants in its solicitation (collectively, "Lone Star Value", "LSV", "us", or "we"), owns approximately 600,000 shares common stock of Enzo Biochem, Inc. ("Enzo" or the "Company") (NYSE: ENZ), issued the following statement to Enzo shareholders today.

Dear Fellow Enzo Biochem Shareholders:

As you know, Lone Star Value, a long-term shareholder of Enzo, has been engaged in a proxy contest seeking the election of two highly-qualified director candidates to Enzo's Board of Directors.

We have carefully reviewed the report issued by Institutional Shareholders Services (ISS) regarding its recommendation for the upcoming Annual Meeting of Enzo shareholders. We are surprised by the significant and apparent mistakes in ISS' analysis and are disappointed in ISS' flawed determination. We are also alarmed by the false accusations and anti-shareholder tactics freely employed by Enzo's incumbent directors in their adamant resistance to shareholder input in this election contest. We further note that Enzo's incumbent directors seem entrenched and resistant to changing the Company's poor corporate governance or its related party transactions which we believe harm shareholder rights and shareholder value.

For us, this contest has always been about catalyzing positive change, initiating a thoughtful dialogue among Enzo shareholders regarding the future of our Company, and sending a message to the incumbent Board that they are directly responsible to shareholders, the true owners of the Company. We have determined to withdraw our proxy contest at this time and will carefully monitor the Board's performance going forward in terms of improvements in financial performance, shareholder value creation, and corporate governance. We do, however, want to set the record straight on a few points of importance:

The ISS report makes such obvious mistakes in its contorted choice of peer group that it undermines the credibility and impartiality of the report altogether.

Enzo has self-servingly changed its peer group three times in the past year with no apparent justification other than a blatant attempt to create a more favorable comparison. For example, Enzo compiled a peer group in mid-December that they had never used before seemingly due solely to the initiation of our proxy contest. Rather than use any reasonable group of peers for Enzo, including the peer group ISS had previously used itself in its report from the prior year, ISS chose to rely on Enzo's random selection of 11 companies that Enzo most recently patched together solely to make itself look more favorable. Beyond making such a poor choice of peer group and failing to provide any justification for this choice, ISS decided to go against common practice and against common sense and compared Enzo to the median of this random group of 11 companies rather than the average as would have been far more sensible. Notably, ISS uses a different peer group to compare Enzo to others for the purposes of examining executive compensation. We are surprised and disappointed by this apparently partial determination which leads to the flawed and, in our view, unjustifiable conclusion that despite underperforming all peer groups and indices for almost any normal measurable period, Enzo does not need change.

---

Enzo's Board has played fast and loose with the truth in this contest but must hold itself to a higher standard in the future to earn credibility with shareholders

As noted above, we have decided to give Enzo's incumbents the chance to improve performance and corporate governance going forward and as such we do not want to engage in excessive back-and-forth over the numerous falsities to which Enzo has resorted in its efforts to ward off shareholder input. Blatantly false comments regarding the track records of our nominees, John Climaco and Dimitrios Angelis, are extremely troubling to us. That the Board would stop at nothing, including open disparagement of Messrs. Climaco and Angelis, playing fast and loose with the truth, and making numerous threats of tarnishing our nominees' reputation shows the depths to which the incumbents will go to avoid any fresh, independent, and outside perspective in the boardroom. Directors of public companies are subject to high standards – truthfulness being one of the most important. We urge the Board to hold itself to a higher standard in the future and not blindly follow the lead of a management team with a vested interest in maintaining the status quo.

#### Lone Star Value's Decision and Commitment to Fellow Shareholders

We initiated our proxy contest as a last resort effort in order to create positive change at Enzo, send a message to the current Board that they are accountable to shareholders rather than management, and initiate a healthy and much needed debate over the future of the Company and the urgency for improved performance and corporate governance. This difficult but necessary debate has been initiated and we received tremendous shareholder input that the Company's financial performance and corporate governance needs to be improved. Rather than waste more time and shareholder resources, we have determined to withdraw our proxy contest at this time to give the incumbent Board a chance to improve financial performance and corporate governance going forward. We will continue to monitor the incumbents' progress and we intend to hold them accountable in the future for any failure to deliver improvement. We thank our fellow shareholders for their encouragement and support for our efforts to enhance Enzo's Board and shareholder rights. Proxies received by us to date that have not been revoked or revoked by the shareholders giving us such proxies, will be voted in accordance with the instructions provided to us.

Best Regards,

Jeffrey E. Eberwein

Lone Star Value Management, LLC

#### **About Lone Star Value Management:**

Lone Star Value Management, LLC ("Lone Star Value") is an investment firm that invests in undervalued securities and engages with its portfolio companies in a constructive way to help maximize value for all shareholders. Lone Star Value was founded by Jeff Eberwein who was formerly a Portfolio Manager at Soros Fund Management and Viking Global Investors. Lone Star Value is based in Old Greenwich, CT.

#### **Investor Contact:**

John Glenn Grau  
InvestorCom  
(203) 972-9300 ext. 11

**SOURCE:** Lone Star Value Management, LLC