



December 30, 2020

VIA EDGAR

U.S. Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Washington, D.C. 20549

Attention: Perry J. Hindin

**Re: Enzo Biochem, Inc.
Definitive Proxy Statement on Schedule 14A
Filed November 27, 2020
File No. 1-09974**

Dear Mr. Hindin:

On behalf of Enzo Biochem, Inc. (the "Company"), we are writing to submit the Company's responses to the comments of the staff (the "Staff") of the Division of Corporation Finance of the Securities and Exchange Commission (the "Commission") relating to the above referenced Definitive Proxy Statement on Schedule 14A (File No. 001-09974) filed by the Company on November 27, 2020 (the "Proxy Statement"). Capitalized terms used herein but not defined herein have the meanings given to such terms in the Proxy Statement.

In a telephonic conversation with you on December 29, 2020, you provided oral comments on the Proxy Statement relating to the statement therein that "[s]hareholders will have the same rights and opportunities to participate in the virtual Annual Meeting as they would at an in-person meeting." You requested clarification as to whether shareholders holding shares in "street name" are provided with equal rights and opportunities to participate in the virtual Annual Meeting, including the right to vote at the meeting and/or submit questions at the meeting, as they have at an in-person meeting.

As disclosed in the Proxy Statement, to attend the virtual Annual Meeting, shareholders must visit www.virtualshareholdermeeting.com/ENZ2020 and enter the 16-digit control number included on the proxy card or voting instruction form that is sent to each shareholder. If the shareholder was a shareholder of record of the Company's common stock at the close of business on November 23, 2020 (the "Record Date") the shareholder's 16-digit control number can be found on its proxy card. If the shareholder was a beneficial owner of the Company's common stock at the close of business on the Record Date (i.e., its shares were held in "street name"), the shareholder's 16-digit control number can be found on the notice and instructions received from its broker or other nominee.

After accessing the virtual platform, shareholders may vote their shares during the meeting by clicking the "Vote Here!" button. In addition, shareholders may submit written questions through the virtual platform, which will be answered during the question and answer portion of the virtual Annual Meeting, subject to time and relevancy restrictions as prescribed by the Rules of Conduct for the Annual Meeting.

We believe these features of the virtual platform allow shareholders to exercise the same rights and provide shareholders the same opportunities to participate in the virtual Annual Meeting as they would at an in-person annual meeting.

Concurrent with the submission of this letter, the Company is filing additional definitive proxy materials that encourage shareholders to vote using the Company proxy and reiterate how shareholders may access the virtual platform for the Annual Meeting to vote and submit questions at the Annual Meeting.

Please contact me at 312-984-7617 if you have any questions or require any additional information in connection with this letter.

Sincerely,

/s/ Eric Orsic

cc: Dr. Elazar Rabbani, Ph.D.
Chairman of the Board, Chief Executive Officer, and Secretary
Enzo Biochem, Inc.
