

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

January 27, 2023

Eric Lefkofsky Chief Executive Officer Tempus Labs, Inc. 600 West Chicago Avenue, Suite 510 Chicago, Illinois 60654

Re: Tempus Labs, Inc.
Amendment No. 5 to Draft Registration Statement on Form S-1
Submitted January 17, 2023
CIK No. 0001717115

Dear Eric Lefkofsky:

We have reviewed your amended draft registration statement and have the following comment. In our comment, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by providing the requested information and either submitting an amended draft registration statement or publicly filing your registration statement on EDGAR. If you do not believe our comment applies to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing the information you provide in response to this comment and your amended draft registration statement or filed registration statement, we may have additional comments.

Amendment No. 5 to Draft Registration Statement on Form S-1

Consolidated Financial Statements

9. Stock-Based Compensation, page F-34

1. We note your response to comment 1 from our letter dated October 27, 2022. Please revise to your disclosures here, on pages 126-127, and elsewhere as appropriate, to explain the change in your valuation methodology for stock-based compensation awards during the periods presented.

Eric Lefkofsky Tempus Labs, Inc. January 27, 2023 Page 2

You may contact Lisa Etheredge, Senior Staff Accountant, at 202-551-3424 or Robert Littlepage, Accounting Branch Chief, at 202-551-3361 if you have questions regarding comments on the financial statements and related matters. Please contact Kyle Wiley, Staff Attorney, at 202-344-5791 or Jan Woo, Legal Branch Chief, at 202-551-3453 with any other questions.

Sincerely,

Division of Corporation Finance Office of Technology

cc: Courtney Tygesson