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

We note your response to comment 1 from our letter dated October 27, 2022. Please revise to vour 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

FirstName LastNameEric Lefkofsky

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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

cc: Courtney Tygesson