

November 16, 2021

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

Re: Tempus Labs, Inc.
Amendment No. 1 to

Draft Registration Statement on Form S-1

Submitted on

October 28, 2021

CIK No. 0001717115

Dear Mr. Lefkofsky:

We have reviewed your amended draft registration statement and have the following comments. In some of our comments, 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 comments apply 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 these comments and your amended draft registration statement or filed registration statement, we may have additional comments.

Amendment No. 1 to Draft Registration Statement

Data, page 7

1. We note your response to prior comment 5. While we recognize the removal of references to the phrase "gross profit", the term "cohort lifetime value" could imply a fair market value associated with the cohort. Please consider an alternative that better reflects what the figure represents, such as "Cumulative revenue in excess of cost".

2. As a related matter, please address the following both here and elsewhere in the filing where this cohort analysis is presented:

Tell us why you have not provided a cohort analysis for the 6 months ended June 30, 2021. Revise your disclosures on page top of page 9 to clarify, if true, that sequencing

Eric Lefkofsky
Tempus Labs, Inc.
November 16, 2021
Page 2

revenue is a component of genomics net revenue, licensing revenue is a component of data and other revenue, and initial sequencing costs are a component of cost of revenues, genomics.

Quantify, to the extent possible, how much of your cost of revenues, data pertain to the licensing of the cohort data for the periods presented.

Management's Discussion and Analysis
Comparison of the Six Months Ended June 30, 2020 and 2021, page 113

3. We note your response to prior comment 12. While we recognize the

unique nature of each of the Company's contracts within the Data and other product category, please clarify for us if there are metrics or other measures used by management to evaluate the success of this revenue stream (for example, number of clinical trial matches, number of clinical trial enrollments and/or number of de-identified records delivered per period). If so, please consider disclosing those metrics and any relevant trends so that investors have more context to understand fluctuations in your operating results between the periods presented.

Contractual Obligations and Commitments, page 119

4. We note your response to prior comment 14. Please revise to present your discussion of material cash requirements from known contractual and other obligations as of the most recent fiscal period presented. Please refer to Item 303(b)(1) of Regulation S-K.

Consolidated Financial Statements
Summary of Significant Accounting Policies, page F-10

5. We note your response to prior comment 21. We also note your disclosure on page 125 and elsewhere that you cover the actual direct costs associated with the technical integrations needed to create data connections with healthcare institutions. Please supplementally quantify the cost of these technical integrations. If material, please revise to disclose your accounting policy for costs to obtain and/or fulfill contracts with customers. Please refer to ASC 340-40.

FirstName LastNameEric Lefkofsky
Revenue Recognition, page F-14
Comapany NameTempus Labs, Inc.

6. We are November 16, considering 2021 Page 2your responses to comments 23 - 25. We may have further comments.

FirstName LastName
Eric Lefkofsky
FirstName LastNameEric Lefkofsky
Tempus Labs, Inc.
Comapany 16,
November NameTempus
2021 Labs, Inc.

November
Page 3 16, 2021 Page 3
FirstName LastName

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