

September 25, 2024

VIA EDGAR AND ELECTRONIC TRANSMISSION

U.S. Securities and Exchange Commission
Division of Corporation Finance
Office of Life Sciences
100 F Street, NE
Washington, DC 20549

Attention: Eric Atallah
Vanessa Robertson
Jimmy McNamara
Joshua Gorsky

Re: **BioAge Labs Inc.**
Amendment No. 1 to Registration Statement on Form S-1
Filed September 18, 2024
File No. 333-281901

Ladies and Gentlemen:

We are submitting this letter on behalf of BioAge Labs, Inc. (the “*Company*”) in response to the comment of the staff (the “*Staff*”) of the U.S. Securities and Exchange Commission (the “*Commission*”) contained in the Staff’s letter dated September 23, 2024 (the “*Letter*”), regarding the Company’s Amendment No. 1 to the Registration Statement on Form S-1 (File No. 333-281901) filed by the Company with the Commission on September 18, 2024 (the “*Registration Statement*”). Concurrently, we are transmitting herewith and filing a copy of the Company’s Amendment No. 2 to the Registration Statement on Form S-1 (“*Amendment No. 2*”). The numbered paragraph below corresponds to the numbered comment in the Letter and the Staff’s comment is presented in bold italics.

In addition to addressing the comment raised by the Staff in the Letter, the Company has revised Amendment No. 2 to update certain other disclosures. Capitalized terms used and not otherwise defined herein have the same meanings as specified in the Amendment No. 2.

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

Notes to Condensed Consolidated Financial Statements

Note 12. Subsequent Events, page F-50

1. Please disclose the number of options that have been issued subsequent to June 30, 2024 and the estimated fair value of the underlying common stock.

In response to the Staff's comment, the Company has revised its disclosure beginning on page F-50 of Amendment No. 2 to disclose the number of options that have been issued subsequent to June 30, 2024 and the estimated fair value of the underlying common stock.

Should the Staff have additional questions or comments regarding the foregoing, please do not hesitate to contact me at (415) 875-2420, or in my absence, Robert Freedman at (206) 389-4524.

Sincerely,

/s/ Julia Forbess

Julia Forbess

Partner

FENWICK & WEST LLP

cc:

Kristen Fortney, Chief Executive Officer and President
BioAge Labs, Inc.

Robert Freedman, Esq.
Matthew Rossiter, Esq.
Michael Pilo, Esq.
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Charlie S. Kim, Esq.
Denny Won, Esq.
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