

September 18, 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.  
Registration Statement on Form S-1  
Filed September 3, 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 6, 2024 (the “*Letter*”), regarding the Company’s Registration Statement on Form S-1 (File No. 333-281901) initially filed by the Company with the Commission on September 3, 2024 (the “*Registration Statement*”). Concurrently, we are transmitting herewith and filing a copy of the Company’s Amendment No. 1 to the Registration Statement on Form S-1 (the “*Amendment No. 1*”). 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. 1 to update certain other disclosures. Capitalized terms used and not otherwise defined herein have the same meanings as specified in the Amendment No. 1.

Registration Statement on Form S-1

Certain Relationships and Related Party Transaction  
Directed Share Program, page 190

1. *We note your disclosure here and elsewhere in your prospectus discussing your directed share program. Please expand your disclosure here, and elsewhere as appropriate, to address the process that prospective participants will follow to participate in the program, the manner in which you will communicate with participants and determine the amount each will receive, when and how you will determine the allocation for the program, and whether such allocation will change depending on the interest level of potential participants, as well as any other material features of the program.*

In response to the Staff's comment, the Company has revised its disclosure on pages 191 and 215 of Amendment No. 1 to address the process that prospective participants will follow to participate in the directed share program, the manner in which we will communicate with participants and determine the amount each will receive, when and how we will determine the allocation for the program, and whether such allocation will change depending on the interest level of potential participants, as well as other material features of the program.

\* \* \* \* \*

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.  
**Fenwick & West LLP**

Charlie S. Kim, Esq.

Denny Won, Esq.

Divakar Gupta, Esq.

**Cooley LLP**