June 18, 2024

Leon O. Moulder, Jr. Chief Executive Officer Zenas BioPharma, Inc. 1000 Winter Street North Building, Suite 1200 Waltham, MA 02451

Re: Zenas BioPharma,

Inc.

Amendment No. 2 to

Draft Registration Statement on Form S-1

Submitted June 14,

2024

CIK No. 0001953926

Dear Leon O. Moulder:

We have reviewed your amended draft registration statement and have the following comment.

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 a 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 letter and your amended

draft registration statement or filed registration statement, we may have additional comments.

Amendment No. 2 to Draft Registration Statement on Form S-1

Prospectus Summary Our Obexelimab Program, page 2

1. We note your response to prior comment 1. We also note that disclosure in this section continues to state obexelimab was well tolerated in five completed clinical trials including trials that used intravenous infusion for the delivery of your product candidate. Please balance this statement by clarifying that you have observed serious adverse events in trials of obexelimab

administered through intravenous infusion.

Leon O. Moulder, Jr.

FirstName LastNameLeon O. Moulder, Jr.

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FirstName LastName

Please contact Li Xiao at 202-551-4391 or Angela Connell at 202-551-3426 if you have

questions regarding comments on the financial statements and related matters. Please contact

Tyler Howes at 202-551-3370 or Chris Edwards at 202-551-6761 with any other questions.

Sincerely,

Division of

Office of Life

Sciences cc: Nicholas Roper, Esq.