

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

FORM 12b-25

SEC FILE NUMBER
001-38022

CUSIP NUMBER
576810303

NOTIFICATION OF LATE FILING

(Check one):

Form 10-K
 Form N-SAR

Form 20-F
 Form N-CSR

Form 11-K

Form 10-Q

Form 10-D

For Period Ended: December 31, 2024

- Transition Report on Form 10-K
 Transition Report on Form 20-F
 Transition Report on Form 11-K
 Transition Report on Form 10-Q
 Transition Report on Form N-SAR

For the Transition Period Ended:

If the notification relates to a portion of the filing checked above, identify the Item(s) to which the notification relates:

PART I — REGISTRANT INFORMATION

Matinas Biopharma Holdings, Inc.

Full Name of Registrant

N/A

Former Name if Applicable

1545 Route 206 South, Suite 302

Address of Principal Executive Office (*Street and Number*)

Bedminster, New Jersey 07921

City, State and Zip Code

PART II — RULES 12b-25(b) AND (c)

If the subject report could not be filed without unreasonable effort or expense and the registrant seeks relief pursuant to Rule 12b-25(b), the following should be completed. (Check box if appropriate)

- (a) The reason described in reasonable detail in Part III of this form could not be eliminated without unreasonable effort or expense;
- (b) The subject annual report, semi-annual report, transition report on Form 10-K, Form 20-F, Form 11-K, Form N-SAR or Form N-CSR, or portion thereof, will be filed on or before the fifteenth calendar day following the prescribed due date; or the subject quarterly report or transition report on Form 10-Q or subject distribution report on Form 10-D, or portion thereof, will be filed on or before the fifth calendar day following the prescribed due date; and
- (c) The accountant's statement or other exhibit required by Rule 12b-25(c) has been attached if applicable.

PART III — NARRATIVE

State below in reasonable detail the reasons why Forms 10-K, 20-F, 11-K, 10-Q, 10-D, N-SAR, N-CSR, or the transition report or portion thereof, could not be filed within the prescribed time period.

Matinas Biopharma Holdings, Inc. (the "Company") is unable to file its Annual Report on Form 10-K for the period ended December 31, 2024 (the "Form 10-K"), by the prescribed due date without unreasonable effort or expense because of the circumstances described below.

The Company plans to file its Form 10-K with the Securities and Exchange Commission ("SEC") as soon as practicable and within the fifteen calendar day period provided by Rule 12b-25 for delayed filings. The Company requires additional time to complete the review of its financial statements for the quarter and year ended December 31, 2024, and the Company cannot, without unreasonable effort or expense, file the Form 10-K on the original due date. The Company anticipates that it will be able to file the Form 10-K within the extension period provided under Rule 12b-25.

PART IV — OTHER INFORMATION

(1) Name and telephone number of person to contact in regard to this notification

Keith A. Kucinski

(Name)

908

(Area Code)

505-0960

(Telephone Number)

(2) Have all other periodic reports required under Section 13 or 15(d) of the Securities Exchange Act of 1934 or Section 30 of the Investment Company Act of 1940 during the preceding 12 months or for such shorter period that the registrant was required to file such report(s) been filed? If answer is no, identify report(s).

Yes NO

(3) Is it anticipated that any significant change in results of operations from the corresponding period for the last fiscal year will be reflected by the earnings statements to be included in the subject report or portion thereof?

Yes NO

If so, attach an explanation of the anticipated change, both narratively and quantitatively, and, if appropriate, state the reasons why a reasonable estimate of the results cannot be made.

Matinas Biopharma Holdings, Inc.
(Name of Registrant as Specified in Charter)

has caused this notification to be signed on its behalf by the undersigned hereunto duly authorized.

Date: March 31, 2025

By: /s/ Keith Kucinski
Keith A. Kucinski
Chief Financial Officer
