

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

FORM 12b-25

NOTIFICATION OF LATE FILING

(Check one): Form 10-K Form 20-F Form 11-K Form 10-Q
 Form 10-D Form N-SAR Form N-CSR

For Period Ended: December 31, 2021

- 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:

Read Instruction (on back page) Before Preparing Form. Please Print or Type.
Nothing in this form shall be construed to imply that the Commission has verified any information contained herein.

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

Kaleido Biosciences, Inc.

Full name of Registrant

N/A

Former Name if Applicable

65 Hayden Avenue

Address of Principal Executive Office (Street and Number)

Lexington, Massachusetts 02421

City, State and Zip Code

PART II — RULE 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 reasons 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.

(Attach extra sheets if needed.)

Due to technical difficulties encountered while submitting its Annual Report on Form 10-K for the year ended December 31, 2021 (the "10-K") with the Securities and Exchange Commission (the "SEC") through third-party filing software, the registrant's submission of the 10-K was not received by the SEC until after 5:30 p.m. on March 31, 2022. The 10-K was accepted by the SEC after 5:30 p.m. on March 31, 2022.

PART IV — OTHER INFORMATION

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

William Duke, Jr.

(Name)

617

(Area Code)

890-5772

(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 the 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.

Kaleido Biosciences, Inc.

(Name of Registrant as Specified in Charter)

Has caused this notification to be signed on its behalf by the undersigned thereunto duly authorized.

Date: March 31, 2022

By: /s/ William Duke, Jr.

Name: William Duke, Jr.

Title: Chief Financial Officer

INSTRUCTION: The form may be signed by an executive officer of the registrant or by any other duly authorized representative. The name and title of the person signing the form shall be typed or printed beneath the signature. If the statement is signed on behalf of the registrant by an authorized representative (other than an executive officer), evidence of the representative's authority to sign on behalf of the registrant shall be filed with the form.
