UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, DC 20549 SCHEDULE 13G Under the Securities Exchange Act of 1934 (Amendment No.)* Arcadia Biosciences, Inc. (Name of Issuer) Common Stock (Title of Class of Securities) 039014204 (CUSIP Number) December 31, 2023 (Date of Event Which Requires Filing of this Statement) Check the appropriate box to designate the rule pursuant to which this Schedule is filed: [] Rule 13d-1(b) [X] Rule 13d-1(c) [] Rule 13d-1(d) *The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page. The information required in the remainder of this cover page shall not be deemed to be filed for the purpose of Section 18 of the Securities Exchange Act of 1934 (Act) or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes). ? CUSIP No. 039014204 1. NAME OF REPORTING PERSONS Sabby Volatility Warrant Master Fund, Ltd. 2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

(a) [_]

(b) [X]

4. CITIZENSHIP OR PLACE OF ORGANIZATION

Cayman Islands

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH

5. SOLE VOTING POWER

0

6. SHARED VOTING POWER

97,305

7. SOLE DISPOSITIVE POWER

0

8. SHARED DISPOSITIVE POWER

97,305

9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

97,305

10. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

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[_]
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11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

8.76

12. TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

CO?

CUSIP No. 039014204

1. NAME OF REPORTING PERSONS

Sabby Management, LLC

2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

(a) [_]

(b) [X]

3. SEC USE ONLY

[_]

10. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

97,305

9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

97,305

8. SHARED DISPOSITIVE POWER

0

7. SOLE DISPOSITIVE POWER

97,305

6. SHARED VOTING POWER

0

5. SOLE VOTING POWER

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH

Delaware, USA

11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

8.76

12. TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) OO

CUSIP No. 039014204

1. NAME OF REPORTING PERSONS

Hal Mintz

2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS)

(a) [_]

(b) [X]

3. SEC USE ONLY

4. CITIZENSHIP OR PLACE OF ORGANIZATION

USA

5. SOLE VOTING POWER

0

6. SHARED VOTING POWER

97,305

7. SOLE DISPOSITIVE POWER

0

8. SHARED DISPOSITIVE POWER

97,305

9. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

97,305

10. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

[_]

11. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

12. TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) IN? CUSIP No. 039014204 Item 1. (a). Name of Issuer: Arcadia Biosciences, Inc. (b). Address of issuer's principal executive offices: 202 COUSTEAU PLACE, SUITE 105 DAVIS, CA, 95618 Item 2. (a). Name of person filing: Sabby Volatility Warrant Master Fund, Ltd. Sabby Management, LLC Hal Mintz (b). Address or principal business office or, if none, residence:

Sabby Volatility Warrant Master Fund, Ltd. c/o Ogier Fiduciary Services (Cayman) Limited 89 Nexus Way, Camana Bay Grand Cayman KY1-9007 Cayman Islands Sabby Management, LLC 115 Hidden Hills Dr. Spicewood, TX 78669

Hal Mintz c/o Sabby Management, LLC 115 Hidden Hills Dr. Spicewood, TX 78669 Sabby Volatility Warrant Master Fund, Ltd. - Cayman Islands Sabby Management, LLC - Delaware, USA Hal Mintz - USA

(d). Title of class of securities:

Common stock (the Common Stock)

(e). CUSIP No.:

039014204

Item 3. If This Statement is filed pursuant to Section 240.13d-1(b) or 240.13d-2(b), or (c), check whether the person filing is a (a) [_] Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o).

(b)
[_]
Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c).

(c)
[_]
Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C.
78c).

(d)
[_]
Investment company registered under section 8 of the Investment Company
Act of 1940 (15 U.S.C. 80a-8).

(e)
[_]
An investment adviser in accordance with Section 240.13d-1(b)(1)(ii)(E);

(f)
[_]
An employee benefit plan or endowment fund in accordance with Section
240.13d-1(b)(1)(ii)(F);

(g)
[_]
A parent holding company or control person in accordance with Section
240.13d-1(b)(1)(ii)(G);

(h) [] A savings association as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C.1813); (i) [_] A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3); (j) [_] A non-U.S. institution in accordance with Section 240.13d-1(b)(1)(ii)(J); (k) [_] Group, in accordance with Section 240.13d-1(b)(1)(ii)(K). If filing as a non-U.S. institution in accordance with Section 240.13d-1(b)(1)(ii)(J), please specify the type of institution: Item 4. Ownership. Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1. (a) Amount beneficially owned: Sabby Volatility Warrant Master Fund, Ltd. - 97,305 Sabby Management, LLC - 97,305 Hal Mintz - 97,305 (b) Percent of class: Sabby Volatility Warrant Master Fund, Ltd. - 8.76% Sabby Management, LLC - 8.76% Hal Mintz - 8.76% ((c) Number of shares as to which the person has: Sabby Volatility Warrant Master Fund, Ltd. ((i) Sole power to vote or to direct the vote 0

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( (ii)
Shared power to vote or to direct the vote
97,305
,
( (iii)
Sole power to dispose or to direct the disposition of
0
,
( (iv)
Shared power to dispose or to direct the disposition of
97,305
••
Sabby Management, LLC
 (i)
Sole power to vote or to direct the vote
0
,
( (ii)
Shared power to vote or to direct the vote
97,305
,
( (iii)
Sole power to dispose or to direct the disposition of
0
,
( (iv)
Shared power to dispose or to direct the disposition of
97,305
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Hal Mintz ((i) Sole power to vote or to direct the vote 0 ((ii) Shared power to vote or to direct the vote 97**,**305 , ((iii) Sole power to dispose or to direct the disposition of 0 , ((iv) Shared power to dispose or to direct the disposition of 97,305 . .

As calculated in accordance with Rule 13d-3 of the Securities Exchange Act of 1934, as amended, (i) Sabby Volatility Warrant Master Fund, Ltd. beneficially owns 97,305 shares of the Issuer's common stock (Common Stock), representing approximately 8.76% of the Common Stock, and (ii) Sabby Management, LLC and Hal Mintz each beneficially own 97,305 shares of the Common Stock, representing approximately 8.76% of the Common Stock. Sabby Management, LLC and Hal Mintz do not directly own any shares of Common Stock, but each indirectly owns 97,305 shares of Common Stock. Sabby Management, LLC, a Delaware limited liability company, indirectly owns 97,305 shares of Common Stock because it serves as the investment manager of Sabby Volatility Warrant Master Fund, Ltd. Mr. Mintz indirectly owns 97,305 shares of Common Stock in his capacity as manager of Sabby Management, LLC.

Item 5. Ownership of Five Percent or Less of a Class.

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following []. ? Item 6. Ownership of More Than Five Percent on Behalf of Another Person.

Not applicable

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on by the Parent Holding Company or Control Person.

Not applicable

Item 8. Identification and Classification of Members of the Group.

Not applicable

Item 9. Notice of Dissolution of Group.

Not applicable

? Item 10. Certification.

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

? SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

January 3, 2024

(Date)

Sabby Volatility Warrant Master Fund, Ltd.

By: /s/ Harry Thompson Name: Harry Thompson Title: Authorized Person of TDF Management Ltd., a Director

Sabby Management, LLC*

By: /s/ Robert Grundstein Name: Robert Grundstein Title: Chief Operating Officer

/s/ Hal Mintz* Hal Mintz

*This Reporting Person disclaims beneficial ownership over the securities reported herein except to the extent of its pecuniary interest therein.

The original statement shall be signed by each person on whose behalf the statement is filed or his authorized representative. If the statement is signed on behalf of a person by his authorized representative other than an executive officer or general partner of the filing person, evidence of the representative's authority to sign on behalf of such person shall be filed with the statement, provided, however, that a power of attorney for this purpose which is already on file with the Commission may be incorporated by reference. The name and any title of each person who signs the statement shall be typed or printed beneath his signature.

Note. Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See s.240.13d-7 for other parties for whom copies are to be sent.

Attention. Intentional misstatements or omissions of fact constitute Federal criminal violations (see 18 U.S.C. 1001).

EXHIBIT 1

JOINT FILING AGREEMENT

The undersigned hereby agree that this Statement on Schedule 13G with respect to the beneficial ownership of shares of Common Stock of Arcadia Biosciences, Inc. is filed jointly, on behalf of each of them.

Dated: January 3, 2024

Sabby Volatility Warrant Master Fund, Ltd.

By: /s/ Harry Thompson Name: Harry Thompson Title: Authorized Person of TDF Management Ltd., a Director Sabby Management, LLC

By: /s/ Robert Grundstein Name: Robert Grundstein Title: Chief Operating Officer

/s/ Hal Mintz Hal Mintz