

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

Form S-3

REGISTRATION STATEMENT
UNDER THE SECURITIES ACT OF 1933

ARCADIA BIOSCIENCES, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of incorporation or organization)

81-0571538
(I.R.S. Employer Identification No.)

202 Cousteau Place, Suite 105
Davis, CA 95618
(530) 756-7077
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Stanley E. Jacot, Jr.
President and Chief Executive Officer
202 Cousteau Place, Suite 105
Davis, CA 95618
(530) 756-7077

(Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Agent for Service)

Copies to:

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Chief Financial Officer
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400 Capitol Mall, Suite 1100
Sacramento, CA 95814

Approximate date of commencement of proposed sale to the public: From time to time after this registration statement becomes effective.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act of 1933, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of “large accelerated filer”, “accelerated filer”, “smaller reporting company” and “emerging growth company” in Rule 12b-2 of the Securities Exchange Act of 1934.

Large accelerated filer

Accelerated filer

Non-accelerated filer

Small reporting company

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for comply with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of Securities Act.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment that specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act or until this Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

The information in this prospectus is not complete and may be changed. We may not sell these securities or accept an offer to buy these securities until the Securities and Exchange Commission declares our registration statement effective. This prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED APRIL 21, 2022

Prospectus



\$50,000,000

**Common Stock
Preferred Stock
Warrants
Units**

From time to time in one or more offerings, we may offer and sell up to an aggregate amount of \$50,000,000 of any combination of the securities described in this prospectus, either individually or in combination. We may also offer common stock upon conversion of preferred stock, or common stock or preferred stock upon the exercise of warrants.

We may offer securities through underwriting syndicates managed or co-managed by one or more underwriters or dealers, through agents or directly to purchasers. The prospectus supplement for each offering of securities will describe in detail the plan of distribution for that offering. For general information about the distribution of securities offered, please see "Plan of Distribution" in this prospectus.

Each time our securities are offered, we will provide a prospectus supplement containing more specific information about the particular offering and attach it to this prospectus. The prospectus supplements may also add, update or change information contained in this prospectus.

This prospectus may not be used to offer or sell our securities, unless accompanied by a prospectus supplement relating to the offered securities.

Our common stock is currently listed on the Nasdaq Capital Market under the symbol "RKDA." On April 20, 2022, the last reported sale price of our common stock was \$1.10. The aggregate market value of our outstanding common stock held by non-affiliates is approximately \$55,093,000, which was calculated in accordance with General Instruction I.B.6 of Form S-3, based on 21,027,676 shares of common stock outstanding held by non-affiliates, at the closing share price of \$2.62 on March 24, 2022, which was the highest closing price of our common stock reported on the NASDAQ Capital Market within the last 60 days prior to the date of this filing. We have not offered any securities pursuant to General Instruction I.B.6 of Form S-3 during the twelve calendar months prior to and including the date of this prospectus.

Investing in our securities involves a high degree of risk. You should review carefully the risks and uncertainties described under the heading "Risk Factors" on page 3 of this prospectus and any similar section contained in the applicable prospectus supplement and in any free writing prospectuses we have authorized for use in connection with a specific offering, and under similar headings in the documents that are incorporated by reference into this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities, or passed upon the adequacy or accuracy of this prospectus or any accompanying prospectus supplement. Any representation to the contrary is a criminal offense.

The date of this prospectus is _____, 2022.

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ABOUT THIS PROSPECTUS

This prospectus is part of a shelf registration statement that we filed with the Securities and Exchange Commission, or the SEC, using a “shelf” registration process. Under this shelf registration process, we may sell any combination of the securities described in this prospectus in one or more offerings from time to time having an aggregate initial offering price of \$50,000,000. This prospectus provides you only with a general description of the securities we may offer. Each time we offer securities, we will provide you with a prospectus supplement that will contain more specific information about the securities being offered and the terms of that offering. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to these offerings and securities. We may also add, update or change in the prospectus supplement any of the information contained in this prospectus or in the documents that we have incorporated by reference into this prospectus, including, without limitation, a discussion of any risk factors or other special considerations that apply to these offerings or securities or the specific plan of distribution. If there is any inconsistency between the information in this prospectus and a prospectus supplement or any related free writing prospectus or information incorporated by reference having a later date, you should rely on the information in that prospectus supplement or any related free writing prospectus we may authorize to be provided to you or incorporated information having a later date. This prospectus may not be used to consummate a sale of securities, unless it is accompanied by a prospectus supplement.

This prospectus does not contain all the information provided in the registration statement we filed with the SEC. You should read this prospectus, and any accompanying prospectus supplement and any related free writing prospectus, together with additional information incorporated by reference as described under the headings “Where You Can Find More Information” and “Incorporation of Certain Information by Reference,” before you invest in any of the securities being offered hereby.

You should rely only on the information contained in or incorporated by reference into this prospectus and any applicable prospectus supplement, along with the information contained in any free writing prospectuses that we have authorized for use in connection with a specific offering. We have not authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. We take no responsibility for, and can provide no assurances as to the reliability of, any information not contained in this prospectus, any applicable prospectus supplement or any related free writing prospectus that we may authorize to be provided to you. No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus, any applicable prospectus supplement or any related free writing prospectus. This prospectus is not an offer to sell securities, and it is not soliciting an offer to buy securities, in any jurisdiction where the offer or sale is not permitted. The information appearing in this prospectus, the applicable prospectus supplement or any related free writing prospectus is accurate only as of the date on the front of the document (unless the information specifically indicates that another date applies), and any information that we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus, any applicable prospectus supplement or any related free writing prospectus, or any sale of a security. Our business, financial condition, results of operations and prospects may have changed since those dates.

This prospectus contains summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of some of the documents referred to herein have been filed, will be filed, or will be incorporated by reference as exhibits to the registration statement of which this prospectus is a part, and you may obtain copies of those documents as described below under “Where You Can Find More Information.” **THIS PROSPECTUS MAY NOT BE USED TO CONSUMMATE A SALE OF SECURITIES, UNLESS IT IS ACCOMPANIED BY A PROSPECTUS SUPPLEMENT.**

Unless otherwise stated or the context requires otherwise, references in this prospectus to “Arcadia Biosciences,” the “company,” or the “Company,” “we,” “us,” or “our” refer to Arcadia Biosciences, Inc. and our subsidiaries, taken together. The Arcadia Biosciences logo and other trademarks or service marks of the Company appearing in this prospectus are the property of Arcadia Biosciences, Inc. All other brand names or trademarks appearing in this prospectus are the property of their respective owners.

ABOUT ARCADIA BIOSCIENCES, INC.

We are a producer and marketer of innovative, plant-based health and wellness products using science-based approaches to develop high value crop improvements primarily in wheat, hemp and soy, designed to enhance farm economics by improving the performance of crops in the field, as well as their value as food ingredients, health and wellness products, and their viability for industrial applications. We have used advanced breeding techniques to develop these proprietary innovations which we are now commercializing through the sales of seed and grain, food ingredients and products, hemp extracts, trait licensing and royalty agreements.

We were founded in 2002, and our principal executive offices are located at 202 Cousteau Place, Suite 105, Davis, CA 95618. Our telephone number is (530) 756-7077. Our website is located at www.arcadiabio.com. Information contained on, or that can be accessed through, our website is not part of this prospectus.

DESCRIPTION OF SECURITIES WE MAY OFFER

We may offer shares of our common stock, shares of our preferred stock, warrants to purchase common stock or preferred stock or units to purchase shares of common stock, preferred stock, warrants or a combination of these securities, with a total value up to \$50,000,000 from time to time under this prospectus at prices and on terms to be determined by market conditions at the time of offering. This prospectus provides you with a general description of the securities we may offer. See “Description of Capital Stock,” “Description of Warrants,” and “Description of Units” below. Each time we offer a type or series of securities, we will provide a prospectus supplement that will describe the specific amounts, prices and other important terms of the securities, including, to the extent applicable:

- designation or classification;
- aggregate principal amount or aggregate offering price;
- rates and times of payment of dividends, if any;
- redemption, conversion or sinking fund terms, if any;
- voting or other rights, if any;
- conversion prices, if any; and
- important federal income tax considerations.

The prospectus supplement and any related free writing prospectus also may supplement, or, as applicable, add, update or change information contained in this prospectus or in documents we have incorporated by reference. However, no prospectus supplement or free writing prospectus will offer a security that is not registered and described in this prospectus at the time of the effectiveness of the registration statement of which this prospectus is a part.

The terms of any particular offering, the initial offering price and the net proceeds to us will be contained in the prospectus supplement, information incorporated by reference or free writing prospectus relating to such offering.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

Some of the statements in this prospectus and in any prospectus supplement we may file constitute “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. These statements relate to future events concerning our business and to our future revenues, operating results and financial condition. In some cases, you can identify forward-looking statements by terminology such as “may,” “will,” “could,” “would,” “should,” “expect,” “plan,” “anticipate,” “intend,” “believe,” “estimate,” “forecast,” “predict,” “propose,” “potential” or “continue,” or the negative of those terms or other comparable terminology.

Any forward-looking statements contained in this prospectus or any prospectus supplement are only estimates or predictions of future events based on information currently available to our management and management's current beliefs about the potential outcome of future events. Whether these future events will occur as management anticipates, whether we will achieve our business objectives, and whether our revenues, operating results or financial condition will improve in future periods are subject to numerous risks. There are a number of important factors that could cause actual results to differ materially from the results anticipated by these forward-looking statements. These important factors include those that we discuss under the heading "Risk Factors" and in other sections of our Annual Report on Form 10-K for the year ended December 31, 2021, as filed with the Securities and Exchange Commission (SEC), as well as in our other reports filed from time to time with the SEC that are incorporated by reference into this prospectus. You should read these factors and the other cautionary statements made in this prospectus and in the documents we incorporate by reference into this prospectus as being applicable to all related forward-looking statements wherever they appear in this prospectus or the documents we incorporate by reference into this prospectus. If one or more of these factors materialize, or if any underlying assumptions prove incorrect, our actual results, performance or achievements may vary materially from any future results, performance or achievements expressed or implied by these forward-looking statements. We undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

RISK FACTORS

Any investment in our common stock or other securities involves a high degree of risk. Investors should carefully consider the risks and uncertainties described under the heading "Risk Factors" contained in the applicable prospectus supplement and any related free writing prospectus, and discussed in the documents incorporated or deemed to be incorporated by reference herein, including the risks and uncertainties discussed under "Risk Factors" in our most recent Annual Report on Form 10-K and in subsequent filings that are incorporated herein by reference, together with the other information contained in this prospectus, before deciding whether to purchase the securities offered hereby. Our business, financial condition, results of operations and prospects could be materially and adversely affected by these risks if any of them actually occur. The risks and uncertainties described in these documents are not the only ones we face. Additional risks not currently known to us or other factors not perceived by us to present significant risks to our business at this time also could adversely affect our business, operating results and financial condition, as well as adversely affect the value of an investment in our securities. This prospectus also contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including the risks described elsewhere in this prospectus and in the documents incorporated or deemed to be incorporated by reference herein. For more information, see the section entitled "Where You Can Find More Information."

USE OF PROCEEDS

Except as otherwise provided in the applicable prospectus supplement or in any free writing prospectuses, we intend to use the net proceeds from the sale of the securities offered by this prospectus and from the exercise of any warrants issued pursuant hereto, for general corporate purposes, including capital expenditures related to our growth. We may also use a portion of the net proceeds to acquire or invest in businesses whom, from time to time, we engage and explore the possibility of strategic partnering or investment.

The intended application of proceeds from the sale of any particular offering of securities using this prospectus will be described in the accompanying prospectus supplement relating to such offering. The precise amount and timing of the application of these proceeds will depend upon a number of factors, such as funding requirements, timing and progress of research, development and commercialization efforts, and the availability and costs of other funds. We may temporarily invest the net proceeds in investment-grade, interest-bearing securities until they are used for their stated purpose. We have not determined the amount of net proceeds to be used specifically for such purposes. As a result, management will retain broad discretion over the use of net proceeds from the sale of securities offered hereby.

DESCRIPTION OF CAPITAL STOCK

General

The following description of common stock and preferred stock, together with the additional information we include in any applicable prospectus supplements or related free writing prospectuses, summarizes the material terms and provisions of the common stock and preferred stock that we may offer under this prospectus but is not complete. For the complete terms of our common stock and preferred stock, please refer to our certificate of incorporation, as the same may be amended from time to time, any certificates of designation for our preferred stock, and our bylaws, as amended from time to time. For directions on obtaining these documents, please refer to “Where You Can Find More Information” in this prospectus. The Delaware General Corporation Law, or DGCL, may also affect the terms of these securities. While the terms we have summarized below will apply generally to any future common stock, preferred stock or warrants that we may offer, we will describe the particular terms of any series of these securities in more detail in the applicable prospectus supplement. If we so indicate in a prospectus supplement, the terms of any securities we offer under that prospectus supplement may differ from the terms we describe below.

As of the date of this prospectus, our authorized capital stock consisted of 150,000,000 shares of common stock, \$0.001 par value per share, and 20,000,000 shares of preferred stock, \$0.001 par value per share. Our board of directors may establish the rights and preferences of the preferred stock from time to time. As of April 18, 2022, there were approximately 22,188,918 shares of our common stock outstanding and no shares of preferred stock outstanding.

As of April 18, 2022 we had outstanding options to acquire 1,708,155 shares of our common stock with a weighted average exercise price of \$4.44 per share. In addition, as of April 18, 2022 there were warrants outstanding for the purchase of an aggregate of 11,350,011 shares of common stock with a weighted average exercise price of \$4.36 per share.

Common Stock

We may issue shares of our common stock from time to time. Holders of our common stock are entitled to one vote per share for each share held of record on all matters submitted to a vote of stockholders and do not have cumulative voting rights. Our certificate of incorporation does not provide for cumulative voting. Subject to preferences that may be applicable to any outstanding preferred stock, the holders of our common stock are entitled to receive ratably such dividends, if any, as may be declared by our board of directors, or the Board, out of legally available funds. However, the current policy of the Board is to retain earnings, if any, for the operation and expansion of the company. Upon liquidation, dissolution or winding-up, the holders of our common stock are entitled to share ratably in all of our assets which are legally available for distribution, after payment of or provision for all liabilities and the liquidation preference of any outstanding preferred stock. The holders of our common stock have no preemptive, subscription, redemption or conversion rights. Our common stock is currently listed on the Nasdaq Capital Market under the symbol “RKDA.”

Preferred Stock

Our certificate of incorporation provides that the Board is authorized, without further action by the stockholders (unless such stockholder action is required by applicable law or the rules of any stock exchange or market on which our securities are then traded), to provide for the issuance of shares of preferred stock in one or more series and, by filing a certificate of designation pursuant to the applicable law of the State of Delaware, to establish from time to time for each such series the number of shares to be included in each such series and to fix the designations, powers, rights and preferences of the shares of each such series, and the qualifications, limitations and restrictions thereof, which may include, among others, dividend rights, voting rights, liquidation preferences, conversion rights, preemptive rights, and the number of shares constituting any series or the designation of any series, any or all of which may be greater than the rights of the common stock. Any convertible preferred stock we may issue will be convertible into our common stock or our other securities. Conversion may be mandatory or at the holder’s option and would be at prescribed conversion rates. We will describe in the applicable prospectus supplement the terms of the series of preferred stock being offered, including, to the extent applicable:

- the designation of the series, which may be by distinguishing number, letter or title;

- the number of shares of the series, which number the Board may thereafter (except where otherwise provided in the certificate of designation) increase or decrease (but not below the number of shares thereof then outstanding);
- the purchase price;
- whether dividends, if any, shall be paid, and, if paid, the date or dates upon which, or other times at which, such dividends shall be payable, whether such dividends shall be cumulative or noncumulative, the rate of such dividends (which may be variable) and the relative preference in payment of dividends of such series;
- whether shares of such series shall be redeemable, the time or times when, and the price or prices at which, shares of such series shall be redeemable, the redemption price and the terms and conditions of redemption;
- the terms and amounts of any sinking fund or similar fund provided for the purchase or redemption of shares of the series;
- the amounts payable on shares of such series and the rights of holders of such shares in the event of any voluntary or involuntary liquidation, dissolution or winding up of the affairs of our corporation;
- whether the shares of the series shall be convertible into shares of any other class or series, or convertible into or exchangeable for any other security, of our corporation or any other corporation, and, if so, the specification of such other class or series of such other security, the conversion or exchange price or prices, or rate or rates, any adjustments thereto, the date or dates on which such shares shall be convertible or exchangeable and other terms and conditions upon which such conversion may be made;
- the preemptive or preferential rights, if any, of the holders of shares of such series to subscribe for, purchase, receive, or otherwise acquire any part of any new or additional issue of stock of any class, whether now or hereafter authorized, or of any bonds, debentures, notes, or any of other securities, whether or not convertible into shares of common stock;
- if applicable, material U.S. federal income tax considerations applicable to the preferred stock;
- restrictions on the issuance of shares of the same series or of any other class or series; and
- the voting rights, if any, and whether full or limited, of the holders of shares of the series, which may include no voting rights, one vote per share, or such higher or lower number of votes per share as may be designated by the Board.

Preferred stock may be issued in the future in connection with acquisitions, financings, or other matters as the Board deems appropriate. In the event that any shares of preferred stock are to be issued, a certificate of designation containing the rights, privileges and limitations of such series of preferred stock may be filed with the Secretary of State of Delaware. The effect of such preferred stock is that, subject to federal securities laws and Delaware law, the Board alone may be able to authorize the issuance of preferred stock, which could have the effect of delaying, deferring or preventing a change in control of us without further action by the stockholders, and may adversely affect the other rights of the holders of our common stock. The issuance of preferred stock with voting and conversion rights may also adversely affect the voting power of holders of our common stock, including the loss of voting control to others. We do not have any shares of our preferred stock presently outstanding.

The issuance of preferred stock, while providing desirable flexibility in connection with possible acquisitions and other corporate purposes, could have the effect of making it more difficult for a third party to acquire, or of discouraging a third party from acquiring, a majority of our outstanding voting stock. The effects of issuing preferred stock could include one or more of the following:

- decreasing the amount of earnings and assets available for distribution to holders of common stock;
- diluting the voting power of the common stock;
- impairing the liquidation rights of the common stock; or
- delaying, deferring or preventing changes in our control or management.

Anti-Takeover Effects of Certain Provisions of our Certificate of Incorporation, Bylaws and the DGCL

Our certificate of incorporation and our bylaws contain certain provisions that could have the effect of delaying, deterring or preventing another party from acquiring control of us. These provisions and certain provisions of Delaware law, which are summarized below, are expected to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed, in part, to encourage persons seeking to acquire control of us to negotiate first with our board of directors. We believe that the benefits of increased protection of our potential ability to negotiate more favorable terms with an unfriendly or unsolicited acquirer outweigh the disadvantages of discouraging a proposal to acquire us.

Undesignated Preferred Stock

As discussed above, our board of directors will have the ability to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to change control of us. These and other provisions may have the effect of deterring hostile takeovers or delaying changes in control or management of our company.

Limits on Ability of Stockholders to Act by Written Consent or Call a Special Meeting

Our certificate of incorporation provides that our stockholders may not act by written consent, which may lengthen the amount of time required to take stockholder actions. As a result, a holder controlling a majority of our capital stock would not be able to amend our bylaws or remove directors without holding a meeting of our stockholders called in accordance with our bylaws.

In addition, our bylaws provide that special meetings of the stockholders may be called only by the majority of our board of directors. Stockholders may not call a special meeting, which may delay the ability of our stockholders to force consideration of a proposal or for holders controlling a majority of our capital stock to take any action, including the removal of directors.

Requirements for Advance Notification of Stockholder Nominations and Proposals

Our bylaws require advance notice procedures with respect to stockholder proposals and the nomination of candidates for election as directors, other than nominations made by or at the direction of our board of directors or a committee of our board of directors. These provisions may have the effect of precluding the conduct of certain business at a meeting if the proper procedures are not followed. These provisions may also discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of our company.

Board Classification

Our board of directors is divided into three classes, one class of which is elected each year by our stockholders. The directors in each class will serve three-year terms. A third party may be discouraged from making a tender offer or otherwise attempting to obtain control of us as it is more difficult and time consuming for stockholders to replace a majority of the directors on a classified board.

No Cumulative Voting

Our certificate of incorporation and bylaws does not permit cumulative voting in the election of directors. Cumulative voting allows a stockholder to vote a portion or all of its shares for one or more candidates for seats on the board of directors. Without cumulative voting, a minority stockholder may not be able to gain as many seats on our board of directors as the stockholder would be able to gain if cumulative voting were permitted. The absence of cumulative voting makes it more difficult for a minority stockholder to gain a seat on our board of directors to influence our board's decision regarding a takeover.

Amendment of Charter and Bylaws Provisions

The amendment of the above provisions of our certificate of incorporation requires approval by holders of at least two-thirds of our outstanding capital stock entitled to vote generally in the election of directors. The amendment of our bylaws requires approval by the holders of at least two-thirds of our outstanding capital stock entitled to vote generally in the election of directors.

Delaware Anti-Takeover Statute

We are subject to the provisions of Section 203 of the DGCL regulating corporate takeovers. In general, Section 203 prohibits a publicly-held Delaware corporation from engaging, under certain circumstances, in a business combination with an interested stockholder for a period of three years following the date the person became an interested stockholder unless:

- prior to the date of the transaction, our board of directors approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;
- upon completion of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, calculated as provided under Section 203; or
- at or subsequent to the date of the transaction, the business combination is approved by our board of directors and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least two-thirds of the outstanding voting stock which is not owned by the interested stockholder.

Generally, a business combination includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. An interested stockholder is a person who, together with affiliates and associates, owns or, within three years prior to the determination of interested stockholder status, did own 15% or more of a corporation's outstanding voting stock. We expect the existence of this provision to have an anti-takeover effect with respect to transactions our board of directors does not approve in advance. We anticipate that Section 203 may also discourage attempts that might result in a premium over the market price for the shares of common stock held by stockholders.

The provisions of Delaware law and the provisions of our certificate of incorporation and bylaws, as amended upon the completion of this offering, could have the effect of discouraging others from attempting hostile takeovers and, as a consequence, they might also inhibit temporary fluctuations in the market price of our common stock that often result from actual or rumored hostile takeover attempts. These provisions might also have the effect of preventing changes in our management. It is possible that these provisions could make it more difficult to accomplish transactions that stockholders might otherwise deem to be in their best interests.

Forum Selection

Our amended and restated certificate of incorporation provides that unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware is the sole and exclusive forum for:

- any derivative action or proceeding brought on our behalf;
- any action asserting a breach of fiduciary duty owed by any of our directors, officers or other employees to us or our stockholders;
- any action asserting a claim against us arising pursuant to any provisions of the DGCL, our amended and restated certificate of incorporation or our amended and restated bylaws; or
- any action asserting a claim against us that is governed by the internal affairs doctrine.

These exclusive-forum provisions may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees, which may discourage lawsuits against us and our directors, officers and other employees. Furthermore, the enforceability of similar choice of forum provisions in other companies' charter documents has been challenged in legal proceedings, and it is possible that a court could find these types of provisions to be inapplicable or unenforceable. If a court were to find either exclusive-forum provision in our amended and restated certificate of incorporation to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving the dispute in other jurisdictions, which could harm our business.

These exclusive-forum provisions are not intended to apply to any causes of action arising under the Securities Act or the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction.

Transfer Agent and Registrar

The Transfer Agent and Registrar for our common stock is American Stock Transfer & Trust Company, LLC. The transfer agent for any series of preferred stock that we may offer under this prospectus will be named and described in the prospectus supplement related to that series.

DESCRIPTION OF WARRANTS

The following description, together with the additional information we may include in any applicable prospectus supplements, summarizes the material terms and provisions of the warrants that we may offer under this prospectus and the related warrant agreements and warrant certificates. While the terms summarized below will apply generally to any warrants that we may offer, we will describe the particular terms of any series of warrants in more detail in the applicable prospectus supplement, information incorporated by reference or a free writing prospectus. If we so indicate in the prospectus supplement, information incorporated by reference or free writing prospectus, the terms of any warrants offered under that prospectus supplement, information incorporated by reference and free writing prospectus may differ from the terms described below. If there are differences between that prospectus supplement, information incorporated by reference or free writing prospectus and this prospectus, such prospectus supplement, information incorporated by reference or free writing prospectus will control. Thus, the statements we make in this section may not apply to a particular series of warrants. Specific warrant agreements will contain additional important terms and provisions and will be incorporated by reference as an exhibit to the registration statement which includes this prospectus. The following description, and any description of the warrants included in a prospectus supplement, may not be complete and is subject to and qualified in its entirety by reference to the terms and provisions of the applicable warrant agreement, which we will file with the SEC in connection with any offering of warrants.

We may issue warrants for the purchase of common stock, preferred stock, or units, in one or more series. We may issue warrants independently or together with common stock, preferred stock and/or units, and the warrants may be attached to or separate from these securities.

We will evidence each series of warrants by warrant certificates that we may issue under a separate agreement. We may enter into the warrant agreement with a warrant agent which may be a bank or other institution that we select. We may also choose to act as our own warrant agent. We will indicate the name and address of any such warrant agent in the applicable prospectus supplement relating to a particular series of warrants.

We will describe in the applicable prospectus supplement, information incorporated by reference or free writing prospectus the terms of the series of warrants, including:

- the title of the warrants;
- the offering price and aggregate number of warrants offered;
- the currency for which the warrants may be purchased;
- if applicable, the designation and terms of the securities with which the warrants are issued and the number of warrants issued with each such security or each principal amount of such security;
- if applicable, the date on and after which the warrants and the related securities will be separately transferable;
- if applicable, the minimum or maximum amount of such warrants which may be exercised at any one time;
- in the case of warrants to purchase common stock or preferred stock, the number of shares of common stock or preferred stock, as the case may be, purchasable upon the exercise of one warrant and the price at which these shares may be purchased upon such exercise;

- the warrant agreement under which the warrants will be issued;
- the effect of any merger, consolidation, sale or other disposition of our business on the warrant agreement and the warrants;
- anti-dilution provisions of the warrants, if any;
- the terms of any rights to redeem or call the warrants;
- any provisions for changes to or adjustments in the exercise price or number of securities issuable upon exercise of the warrants;
- the dates on which the right to exercise the warrants will commence and expire or, if the warrants are not continuously exercisable during that period, the specific date or dates on which the warrants will be exercisable;
- the manner in which the warrant agreement and warrants may be modified;
- the identities of the warrant agent and any calculation or other agent for the warrants;
- a discussion of any material or special U.S. federal income tax consequences of holding or exercising the warrants;
- the terms of the securities issuable upon exercise of the warrants;
- information with respect to book-entry procedures, if any;
- any securities exchange or quotation system on which the warrants or any securities deliverable upon exercise of the warrants may be listed; and
- any other specific terms, preferences, rights or limitations of or restrictions on the warrants.

Unless otherwise described in an applicable prospectus supplement, information incorporated by reference or free writing prospectus, before exercising their warrants, holders of warrants will not have any of the rights of holders of the securities purchasable upon such exercise, including, in the case of warrants to purchase common stock or preferred stock, the right to receive dividends, if any, or, payments upon our liquidation, dissolution or winding up, or to exercise voting rights, if any.

Exercise of Warrants

Each warrant will entitle the holder to purchase the securities that we specify in the applicable prospectus supplement, information incorporated by reference or free writing prospectus, at the exercise price that we describe therein. Unless we otherwise specify in the applicable prospectus supplement, information incorporated by reference or free writing prospectus, holders of the warrants may exercise the warrants at any time up to the close of business on the expiration date that we set forth in the applicable prospectus supplement, information incorporated by reference or free writing prospectus. After the close of business on the expiration date, unexercised warrants will become void.

A warrant will entitle the holder to purchase for cash an amount of securities at an exercise price that will be stated in, or that will be determinable as described in, the applicable prospectus supplement, information incorporated by reference or free writing prospectus. Warrants may be exercised, redeemed, as set forth in the applicable offering material.

Upon receipt of the required payment and the warrant certificate properly completed and duly executed at the corporate trust office of the warrant agent or any other office indicated in the applicable prospectus supplement, information incorporated by reference or free writing prospectus, we will issue and deliver the securities purchasable upon such exercise. If fewer than all of the warrants represented by the warrant certificate are exercised, then we will issue a new warrant certificate for the remaining amount of warrants. If we so indicate in the applicable prospectus supplement, information incorporated by reference or free writing prospectus, holders of the warrants may surrender securities as all or part of the exercise price for warrants.

Warrant Agreement

We may issue the warrants in one or more series under one or more warrant agreements, each to be entered into between us and a warrant agent, which may include a bank, trust company or other financial institution as warrant agent. We may add, replace or terminate warrant agents from time to time. We may also choose to act as our own warrant agent or may choose one of our subsidiaries to do so.

The warrant agent under a warrant agreement will act solely as our agent in connection with the warrants issued under that agreement, and will not assume any obligation or relationship of agency or trust with any holder of any warrant. Unless otherwise provided in the applicable warrant or warrant agreement, any holder of warrants may, without the consent of the related warrant agent or the holder of any other warrant, enforce by appropriate legal action, on its own behalf, its right to exercise those warrants in accordance with their terms.

Form, Exchange and Transfer

We may issue the warrants in registered form or bearer form. Warrants issued in registered form, *i.e.*, book-entry form, will be represented by a global security registered in the name of a depository, which will be the holder of all the warrants represented by the global security. Those investors who own beneficial interests in a global warrant will do so through participants in the depository's system, and the rights of these indirect owners will be governed solely by the applicable procedures of the depository and its participants. In addition, we may issue warrants in non-global form, *i.e.*, bearer form. If any warrants are issued in non-global form, warrant certificates may be exchanged for new warrant certificates of different denominations, and holders may exchange, transfer or exercise their warrants at the warrant agent's office or any other office indicated in the applicable prospectus supplement, information incorporated by reference or free writing prospectus.

No warrant agreement will be qualified as an indenture, and no warrant agent will be required to qualify as a trustee, under the Trust Indenture Act of 1939. Therefore, holders of warrants issued under a warrant agreement will not have the protection of the Trust Indenture Act with respect to their warrants.

DESCRIPTION OF UNITS

We may issue units comprised of one or more of the other securities described in this prospectus in any combination. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately, at any time or at any time before a specified date.

The following description is a summary of selected provisions relating to units that we may offer. The summary is not complete. When units are offered in the future, a prospectus supplement, information incorporated by reference or a free writing prospectus, as applicable, will explain the particular terms of those securities and the extent to which these general provisions may apply. The specific terms of the units as described in a prospectus supplement, information incorporated by reference, or free writing prospectus will supplement and, if applicable, may modify or replace the general terms described in this section.

This summary and any description of units in the applicable prospectus supplement, information incorporated by reference or free writing prospectus is subject to and is qualified in its entirety by reference to the unit agreement, collateral arrangements and depository arrangements, if applicable. We will file each of these documents, as applicable, with the SEC and incorporate them by reference as an exhibit to the registration statement of which this prospectus is a part on or before the time we issue a series of units. See "Where You Can Find More Information" and "Incorporation of Documents by Reference" above for information on how to obtain a copy of a document when it is filed.

The applicable prospectus supplement, information incorporated by reference or free writing prospectus will describe:

- the designation and terms of the units and of the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;
- any unit agreement under which the units will be issued;
- any provisions for the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units; and
- whether the units will be issued in fully registered or global form.

The applicable provisions described in this section, as well as those described under “Description of Capital Stock” and “Description of Warrants” above, will apply to each unit and to each security included in each unit, respectively.

PLAN OF DISTRIBUTION

We may sell the securities being offered pursuant to this prospectus to or through underwriters or dealers, through agents, or directly to one or more purchasers (including our affiliates and shareholders), through a specific bidding or auction process, a rights offering or otherwise, through a combination of these methods or through any other methods described in a prospectus supplement. The applicable prospectus supplement will describe the terms of the offering of the securities, including, to the extent applicable:

- the name or names of any underwriters, if any, and if required, any dealers or agents;
- the purchase price of the securities or other consideration therefor, and the proceeds we will receive from the sale;
- any over-allotment option under which the underwriter may purchase additional securities from us;
- any underwriting discounts, concessions, commissions and other items constituting underwriters’ compensation;
- any public offering price;
- any discounts or concessions allowed or reallocated or paid to dealers;
- the nature of the underwriter’s or agent’s obligations, if any, to take the securities; and
- any securities exchange or market on which the securities may be listed.

The distribution of securities may be effected, from time to time, in one or more transactions, including:

- block transactions (which may involve crosses) and transactions on the Nasdaq Capital Market or any other organized market where the securities may be traded;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its own account pursuant to a prospectus supplement;
- ordinary brokerage transactions and transactions in which a broker-dealer solicits purchasers;
- sales “at the market” to or through a market maker or into an existing trading market, on an exchange or otherwise; and
- sales in other ways not involving market makers or established trading markets, including direct sales to purchasers.

The securities may be sold at a fixed price or prices, which may be changed, or at market prices prevailing at the time of sale, at prices relating to the prevailing market prices, or at negotiated prices. The consideration may be cash or another form negotiated by the parties.

We may also make direct sales through subscription rights distributed to our existing shareholders on a pro rata basis, which may or may not be transferable. In any distribution of subscription rights to our shareholders, if all of the underlying securities are not subscribed for, we may then sell the unsubscribed securities directly to third parties or may engage the services of one or more underwriters, dealers or agents, including standby underwriters, to sell the unsubscribed securities to third parties.

Some or all of the securities that we offer through this prospectus may be new issues of securities with no established trading market. Any underwriters to whom we sell our securities for public offering and sale may make a market in those securities, but they will not be obligated to do so and they may discontinue any market making at any time without notice. Accordingly, we cannot assure you of the liquidity of, or continued trading markets for, any securities that we offer.

Only underwriters named in the prospectus supplement are underwriters of the securities offered by the prospectus supplement.

If underwriters are used in an offering, we will execute an underwriting agreement with such underwriters and will specify the name of each underwriter and the terms of the transaction (including any underwriting discounts and other terms constituting compensation of the underwriters and any dealers) in a prospectus supplement. The securities may be offered to the public either through underwriting syndicates represented by managing underwriters or directly by one or more investment banking firms or others, as designated. If an underwriting syndicate is used, the managing underwriter(s) will be specified on the cover of the prospectus supplement. If underwriters are used in the sale, the offered securities will be acquired by the underwriters for their own accounts and may be resold from time to time in one or more transactions, including negotiated transactions, at a fixed public offering price or at varying prices determined at the time of sale, or under delayed delivery contracts or other contractual commitments. Any public offering price and any discounts or concessions allowed or reallocated or paid to dealers may be changed from time to time. We may use underwriters with whom we have a material relationship. We will describe in the prospectus supplement, naming the underwriter, the nature of any such relationship. Unless otherwise set forth in the prospectus supplement, the obligations of the underwriters to purchase the offered securities will be subject to conditions precedent and the underwriters will be obligated to purchase all of the offered securities if any are purchased.

We may grant to the underwriters options to purchase additional securities to cover over-allotments, if any, at the public offering price, with additional underwriting commissions or discounts, as may be set forth in a related prospectus supplement. The terms of any over-allotment option will be set forth in the prospectus supplement for those securities.

If we use a dealer in the sale of the securities being offered pursuant to this prospectus or any prospectus supplement, we or an underwriter will sell the securities to the dealer, as principal. The dealer may then resell the securities to the public at varying prices to be determined by the dealer at the time of resale. To the extent required, we will set forth in the prospectus supplement, document incorporated by reference or free writing prospectus, as applicable, the name of the dealer and the terms of the transactions.

We may directly solicit offers to purchase the securities and may make sales of securities directly to institutional investors or others. These persons may be deemed to be underwriters with respect to any resale of the securities. To the extent required, the prospectus supplement, document incorporated by reference or free writing prospectus, as applicable, will describe the terms of any such sales, including the terms of any bidding or auction process, if used.

We may sell the securities directly or through agents we designate from time to time. We will name any agent involved in the offering and sale of securities and we will describe any commissions we will pay the agent in the prospectus supplement. Unless the prospectus supplement states otherwise, any agent will act on a best-efforts basis for the period of its appointment.

We may authorize agents or underwriters to solicit offers by institutional investors to purchase securities from us at the public offering price set forth in the prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. We will describe the conditions to these contracts and the commissions we must pay for solicitation of these contracts in the prospectus supplement.

In connection with the sale of the securities, underwriters, dealers or agents may receive compensation from us or from purchasers of the securities for whom they act as agents in the form of discounts, concessions, commissions or other payments. Underwriters may sell the securities to or through dealers, and those dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters or commissions from the purchasers for whom they may act as agents. Underwriters, dealers and agents that participate in the distribution of the securities, and any institutional investors or others that purchase securities directly and then resell the securities, may be deemed to be underwriters, and any discounts or commissions received by them from us and any profit on the resale of the securities by them may be deemed to be underwriting discounts and commissions under the Securities Act. If such persons were deemed to be underwriters, they may be subject to statutory liabilities under the Securities Act.

We may provide agents and underwriters with indemnification against particular civil liabilities, including liabilities under the Securities Act, or contribution with respect to payments that the agents or underwriters may make with respect to such liabilities. Agents and underwriters may engage in transactions with, or perform services for, us in the ordinary course of business. In addition, the agents' and underwriters' commissions, discounts or concessions may qualify as underwriters' compensation under the Securities Act and the rules of the Financial Industry Regulatory Authority, Inc., or FINRA.

In addition, we may enter into derivative transactions with third parties (including the writing of options), or sell securities not covered by this prospectus to third parties in privately negotiated transactions. If the applicable prospectus supplement indicates, in connection with such a transaction, the third parties may, pursuant to this prospectus and the applicable prospectus supplement, sell securities covered by this prospectus and the applicable prospectus supplement. If so, the third party may use securities borrowed from us or others to settle such sales and may use securities received from us to close out any related short positions. We may also loan or pledge securities covered by this prospectus and the applicable prospectus supplement to third parties, who may sell the loaned securities or, in an event of default in the case of a pledge, sell the pledged securities pursuant to this prospectus and the applicable prospectus supplement. The third party in such sale transactions will be an underwriter and will be identified in the applicable prospectus supplement or in a post-effective amendment.

To facilitate an offering of a series of securities, persons participating in the offering may engage in transactions that stabilize, maintain, or otherwise affect the market price of the securities. This may include over-allotments or short sales of the securities, which involves the sale by persons participating in the offering of more securities than have been sold to them by us. In those circumstances, such persons would cover such over-allotments or short positions by purchasing in the open market or by exercising the over-allotment option granted to those persons. In addition, those persons may stabilize or maintain the price of the securities by bidding for or purchasing securities in the open market or by imposing penalty bids, whereby selling concessions allowed to underwriters or dealers participating in any such offering may be reclaimed if securities sold by them are repurchased in connection with stabilization transactions. The effect of these transactions may be to stabilize or maintain the market price of the securities at a level above that which might otherwise prevail in the open market. Such transactions, if commenced, may be discontinued at any time. We make no representation or prediction as to the direction or magnitude of any effect that the transactions described above, if implemented, may have on the price of our securities.

Any common stock sold pursuant to a prospectus supplement will be eligible for quotation and trading on the Nasdaq Capital Market. Any underwriters to whom securities are sold by us for public offering and sale may make a market in the securities, but such underwriters will not be obligated to do so and may discontinue any market making at any time without notice. Any person participating in the distribution of common stock registered under the registration statement that includes this prospectus will be subject to applicable provisions of the Securities Exchange Act of 1934, as amended, or the Exchange Act, and the applicable SEC rules and regulations, including, among others, Regulation M, which may limit the timing of purchases and sales of any of our common stock by any such person. Furthermore, Regulation M may restrict the ability of any person engaged in the distribution of our common stock to engage in market-making activities with respect to our common stock. These restrictions may affect the marketability of our common stock and the ability of any person or entity to engage in market-making activities with respect to our common stock. Any underwriters or agents that are qualified market makers on the Nasdaq Capital Market may engage in passive market making transactions in the common stock on the Nasdaq Capital Market in accordance with Regulation M under the Exchange Act, during the business day prior to the

pricing of the offering, before the commencement of offers or sales of the common stock. Passive market makers must comply with applicable volume and price limitations and must be identified as passive market makers. In general, a passive market maker must display its bid at a price not in excess of the highest independent bid for such security; if all independent bids are lowered below the passive market maker's bid, however, the passive market maker's bid must then be lowered when certain purchase limits are exceeded. Passive market making may stabilize the market price of the securities at a level above that which might otherwise prevail in the open market and, if commenced, may be discontinued at any time.

In order to comply with the securities laws of some states, if applicable, the securities offered pursuant to this prospectus will be sold in those states only through registered or licensed brokers or dealers. In addition, in some states securities may not be sold, unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and complied with.

In compliance with the guidelines of the Financial Industry Regulatory Authority ("FINRA"), the aggregate maximum discount, commission or agency fees or other items constituting underwriting compensation to be received by any FINRA member or independent broker-dealer will not exceed 8% of any offering pursuant to this prospectus and any applicable prospectus supplement, as the case may be.

If more than 10% of the net proceeds of any offering of securities made under this prospectus will be received by FINRA members participating in the offering or affiliates or associated persons of such FINRA members, the offering will be conducted in accordance with FINRA Conduct Rule 5110(h).

If the aggregate market value of our voting and non-voting common equity held by non-affiliates is less than \$75,000,000, and if required by the rules of the SEC, the amount of securities we may offer hereunder will be limited such that the aggregate market value of securities sold by us during a period of 12 calendar months cannot exceed one-third of the aggregate market value of the voting and non-voting common equity held by non-affiliates.

To the extent required, this prospectus may be amended or supplemented from time to time to describe a specific plan of distribution.

LEGAL MATTERS

The validity of the issuance of the securities offered hereby will be passed upon for us by Weintraub Tobin Chediak Coleman Grodin Law Corporation.

EXPERTS

The financial statements of Arcadia Biosciences, Inc. incorporated by reference in this Prospectus, have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report. Such financial statements are incorporated by reference in reliance upon the report of such firm, given their authority as experts in accounting and auditing.

The consolidated financial statements of Rever Holdings, LLC for the year ended December 31, 2020, and the related notes for such financial statements have been audited by Armanino LLP, independent certified public accountants, as stated in their report, and are incorporated in this Prospectus by reference to the Company's Current Report on Form 8-K/A filed with the SEC on August 2, 2021. Such financial statements are incorporated by reference in reliance upon the report of such firm given their authority as experts in accounting and auditing.

The financial statements for the Coconut Water Line of LiveZola, LLC for the year ended December 31, 2020, and the related notes for such financial statements have been audited by CohnReznick LLP, independent auditors, as stated in their report, and are incorporated in this Prospectus by reference to the Company's Current Report on Form 8-K/A filed with the SEC on August 2, 2021. Such financial statements are incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We are required to file annual, quarterly and special reports, proxy statements and other information with the SEC. Our filings with the SEC are also available to the public at the SEC's Internet web site at <http://www.sec.gov>.

We have filed a registration statement, of which this prospectus is a part, covering the securities offered hereby. As allowed by SEC rules, this prospectus does not include all of the information contained in the registration statement and the included exhibits, financial statements and schedules. You are referred to the registration statement, the included exhibits, financial statements and schedules for further information. This prospectus is qualified in its entirety by such other information.

We are subject to the information and periodic reporting requirements of the Securities Exchange Act of 1934, as amended, or the Exchange Act, and, in accordance therewith, file periodic reports, proxy statements and other information with the SEC. Such periodic reports, proxy statements and other information are available to the public over the Internet at the website of the SEC referred to above. We maintain a website at <http://www.arcadiabio.com>. The reference to our website address does not constitute incorporation by reference of the information contained on our website, and you should not consider the contents of our website in making an investment decision with respect to our common stock.

INCORPORATION OF DOCUMENTS BY REFERENCE

The SEC allows us to "incorporate by reference" information that we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is an important part of this prospectus. Information in this prospectus supersedes information incorporated by reference that we filed with the SEC prior to the date of this prospectus, while information that we file later with the SEC will automatically update and supersede the information in this prospectus. We also incorporate by reference into this prospectus the documents listed below and any future filings made by us with the SEC (other than Current Reports or portions thereof furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items and other portions of documents that are furnished, but not filed, pursuant to applicable rules promulgated by the SEC) that are filed by us with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (i) after the date of the initial filing of the registration statement of which this prospectus is a part and prior to effectiveness of the registration statement, and (ii) after the effectiveness of the registration statement but prior to the termination of the offering of the common stock covered by this prospectus:

- Our annual report on Form 10-K for the year ended December 31, 2021, filed on March 31, 2022;
- Our current reports on Form 8-K filed with the SEC on August 2, 2021, February 7, 2022 and March 30, 2022;
- Our definitive Proxy Statement on Schedule 14a for our 2022 Annual Meeting of Stockholders, filed with the SEC on April 19, 2022 (to the extent incorporated by reference into Part III of our Annual Report on Form 10-K for the fiscal year ended December 31, 2021); and
- The description of our common stock contained in our Form 8-A/A filed on May 14, 2015, including any amendment or report filed for the purpose of updating such description.

We will provide to each person, including any beneficial owner, to whom a prospectus is delivered, without charge upon written or oral request, a copy of any or all of the documents that are incorporated by reference into this prospectus but not delivered with the prospectus, including exhibits which are specifically incorporated by reference into such documents. You should direct any requests for documents by writing us at Arcadia Biosciences, Inc., 202 Cousteau Place, Suite 105, Davis, CA 95618, Attention: Corporate Secretary, Telephone (530) 756-7077.

You should rely only on the information provided in and incorporated by reference into this prospectus or any prospectus supplement. We have not authorized anyone else to provide you with different information. You should not assume that the information in this prospectus or any prospectus supplement is accurate as of any date other than the date on the front cover of these documents.

Any statement contained herein or in a document incorporated or deemed to be incorporated by reference into this document will be deemed to be modified or superseded for purposes of the document to the extent that a statement contained in this document or any other subsequently filed document that is deemed to be incorporated by reference into this document modifies or supersedes the statement.

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

The following table sets forth an estimate of the fees and expenses relating to the issuance and distribution of the securities being registered hereby, other than underwriting discounts and commissions, all of which shall be borne by the Registrant.

SEC registration fee	\$	4,635
FINRA fee	\$	*
Transfer agent's fees and expenses	\$	*
Legal fees and expenses	\$	*
Printing fees and expenses	\$	*
Accounting fees and expenses	\$	*
Miscellaneous fees and expenses	\$	*
TOTAL:	\$	*

* Estimated fees and expenses are not presently known.

Item 15. Indemnification of Officers and Directors.

The Registrant's certificate of incorporation contains provisions that eliminate, to the maximum extent permitted by the General Corporation Law of the State of Delaware, the personal liability of the Registrant's directors and executive officers for monetary damages for breach of their fiduciary duties as directors or officers. The Registrant's certificate of incorporation and bylaws provide that the Registrant must indemnify its directors and executive officers and may indemnify its employees and other agents to the fullest extent permitted by the General Corporation Law of the State of Delaware.

Sections 145 and 102(b)(7) of the General Corporation Law of the State of Delaware provide that a corporation may indemnify any person made a party to an action by reason of the fact that he or she was a director, executive officer, employee or agent of the corporation or is or was serving at the request of a corporation against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by him or her in connection with such action if he or she acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the best interests of the corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful, except that, in the case of an action by or in right of the corporation, no indemnification may generally be made in respect of any claim as to which such person is adjudged to be liable to the corporation.

The Registrant has entered into indemnification agreements with its directors and executive officers, in addition to the indemnification provided for in its certificate of incorporation and bylaws, and intends to enter into indemnification agreements with any new directors and executive officers in the future.

The Registrant has purchased and intends to maintain insurance on behalf of each and any person who is or was a director or officer of the Registrant against any loss arising from any claim asserted against him or her and incurred by him or her in any such capacity, subject to certain exclusions.

Securities and Exchange Commission Position Regarding Indemnification Liabilities Arising Under the Securities Act

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers or persons controlling the Registrant pursuant to the foregoing provisions, the Registrant has been informed that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Item 16. Exhibits.

a) Exhibits.

Exhibit Number	Exhibit Description	Incorporated by Reference			Filed Herewith
		Form	File No.	Filing Date	
1.1*	Form of Underwriting Agreement.				
3.1	Amended and Restated Certificate of Incorporation of Registrant.	8-K	001-37383	3.1	5/26/2015
3.2	Certificate of Amendment to the Amended and Restated Certificate of Incorporation of Registrant.	10-Q	001-37383	3.1	8/10/2017
3.3	Amendment to the Amended and Restated Certificate of Incorporation of Registrant.	10-Q	001-37383	3.1	1/23/2018
3.4	Amended and Restated Bylaws of Registrant.	8-K	001-37383	3.2	5/26/2015
4.1	Form of Registrant's common stock certificate.	S-3	333-224061	4.1	3/30/2018
4.2*	Form of Warrant.				
4.3*	Form of Unit.				
4.4*	Form of Certificate of Designation.				
4.5*	Form of Preferred Stock Certificate.				
4.6*	Form of Common Stock Warrant Agreement and Warrant Certificate.				
4.7*	Form of Preferred Stock Warrant Agreement and Warrant Certificate.				
4.8*	Form of Unit Agreement.				
5.1	Opinion of Weintraub Tobin Chediak Coleman Grodin Law Corporation.				X
23.1	Consent of Deloitte & Touche LLP, independent registered public accounting firm.				X
23.2	Consent of Armanino LLP.				X

Exhibit Number	Exhibit Description	Incorporated by Reference			Filed Herewith
		Form	File No.	Exhibit	
23.3	Consent of CohnReznick LLP.				X
23.4	Consent of Weintraub Tobin Chediak Coleman Grodin Law Corporation (included in Exhibit 5.1).				X
24.1	Powers of attorney (included in the signature page to this Registration Statement).				X
107	Filing Fee Table.				X

* To the extent applicable, to be filed by an amendment or as an exhibit to a Current Report on Form 8-K or other document filed under the Securities Exchange Act of 1934, as amended, and incorporated by reference herein.

Item 17. Undertakings.

(a) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act;

(ii) To reflect in the prospectus any facts or events arising after the effective date of this registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this registration statement.

Notwithstanding the foregoing, any increase or decrease in the volume of securities offered (if the total dollar value of the securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in this registration statement or any material change to such information in this registration statement;

provided, however, that the undertakings set forth in paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) above do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") that are incorporated by reference in this registration statement or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of this registration statement;

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability under the Securities Act to any purchaser:

(i) If the registrant is relying on Rule 430B;

(A) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of this registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(B) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii) or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act shall be deemed to be part of and included in the registration statement as of the earlier of the date of the Securities Act prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date; or

(ii) If the registrant is subject to Rule 430C, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness.

Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

(5) That, for the purpose of determining liability of the registrant under the Securities Act to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;

(ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;

(iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and

(iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

(6) That, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to section 13(a) or section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(7) That, for purposes of determining any liability under the Securities Act, (i) the information omitted from the form of prospectus filed as part of the registration statement in reliance upon Rule 430A and contained in the form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be a part of the registration statement as of the time it was declared effective; and (ii) each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Form S-3 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Davis, State of California, on this 21st day of April 2022.

ARCADIA BIOSCIENCES, INC.

By: /s/ PAMELA HALEY

Name: Pamela Haley

Title: Chief Financial Officer

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints each of Stanley E. Jacot, Jr. and Pamela Haley, his or her true and lawful attorney-in-fact and agent with full power of substitution and re-substitution, for him/her and in his name, place and stead, in any and all capacities to sign any or all amendments (including, without limitation, post-effective amendments) to this Registration Statement, any related Registration Statement filed pursuant to Rule 462(b) under the Securities Act of 1933 and any or all pre- or post-effective amendments thereto, and to file the same, with all exhibits thereto, and all other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully for all intents and purposes as he or she might or could do in person, hereby ratifying and confirming that said attorney-in-fact and agent, or any substitute or substitutes for him or her, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, the following persons in the capacities and on the dates indicated have signed this Registration Statement below.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ STANLEY E. JACOT, JR.</u> Stanley E. Jacot, Jr.	President and Chief Executive Officer (principal executive officer)	April 21, 2022
<u>/s/ PAMELA HALEY</u> Pamela Haley	Chief Financial Officer (principal financial and accounting officer)	April 21, 2022
<u>/s/ KEVIN COMCOWICH</u> Kevin Comcowich	Director	April 21, 2022
<u>/s/ ALBERT D. BOLLES</u> Albert D. Bolles	Director	April 21, 2022
<u>/s/ DEBORAH D. CAROSELLA</u> Deborah D. Carosella	Director	April 21, 2022
<u>/s/ LILIAN SHACKELFORD MURRAY</u> Lilian Shackelford Murray	Director	April 21, 2022
<u>/s/ GREGORY D. WALLER</u> Gregory D. Waller	Director	April 21, 2022
<u>/s/ AMY YODER</u> Amy Yoder	Director	April 21, 2022

April 21, 2022

Arcadia Biosciences, Inc.
202 Cousteau Place, Suite 105
Davis, CA 95618

RE: Arcadia Biosciences, Inc. Shelf Registration Statement on Form S-3

Ladies and Gentlemen:

We act as counsel for Arcadia Biosciences, Inc., a Delaware corporation (the “**Company**”). We are furnishing this opinion at your request in connection with the Company’s Registration Statement filed with the Securities and Exchange Commission (the “**SEC**”) under the Securities Act of 1933, as amended (the “**Securities Act**”). The Registration Statement is being filed to register an aggregate of up to \$50,000,000 of (i) shares of common stock, \$0.001 par value (“**Common Stock**”); (ii) shares of preferred stock, \$0.001 par value (“**Preferred Stock**”); (iii) warrants to purchase Common Stock or Preferred Stock, or a combination thereof (“**Warrants**”); and (iv) units consisting of Common Stock, Preferred Stock, or Warrants or any combination of these securities (“**Units**”). The Common Stock, Preferred Stock, Warrants, and Units are hereinafter referred to collectively as the “**Shelf Securities**.” The Shelf Securities may be issued and sold from time to time as set forth in the Registration Statement, and any amendment thereto, the base prospectus (“**Base Prospectus**”) and any supplements thereto (“**Prospectus Supplement**”) or term sheets to be filed pursuant to the rules and regulations promulgated under the Securities Act.

The Warrants, either individually, or in combination with other Shelf Securities, may be issued under a separate warrant agency agreement (a “**Warrant Agreement**”) to be entered into between the Company and one or more entities acting as warrant agent. The Units may be issued under a unit agreement (the “**Unit Agreement**”) between the Company and a unit agent to be specified therein, if any. The Warrant Agreement and Unit Agreement are referred to herein collectively as “**Governing Documents**.”

In connection with these opinions, we have examined the Registration Statement and the Base Prospectus and such matters of fact and questions of law as we have considered appropriate for purposes of these opinions. As to certain factual matters, we have relied upon a certificate of an officer of the Company and have not independently sought to verify such matters. In addition, in rendering these opinions, we have assumed: (i) the genuineness and authenticity of all signatures on original documents; (ii) the authenticity of all documents submitted to us as originals; (iii) the conformity to originals of all documents submitted to us as copies; (iv) the accuracy, completeness, and authenticity of certificates of public officials; (v) the due authorization, execution, and delivery of all documents where authorization, execution, and delivery are prerequisites to the effectiveness of such documents; (vi) that no documents submitted to us have been amended or terminated orally or in writing, except as has been disclosed to us in writing; and (vii) that each of the officers and directors of the Company has

properly exercised his or her fiduciary duties. Our knowledge of the Company and its legal and other affairs is limited by the scope of our engagement, which scope includes the delivery of this opinion letter. We do not represent the Company with respect to all legal matters or issues. The Company may employ other independent counsel and, to our knowledge, handles certain legal matters and issues without the assistance of independent counsel.

We are qualified to carry on the practice of law in the State of California. Our opinions below are expressed only with respect to the laws of the State of Delaware and the Federal laws of the United States. We express no opinion as to whether the laws of any particular jurisdiction are applicable to the subject matter hereof. We are not rendering any opinion as to compliance with any federal or state law, rule or regulation relating to securities, or to the sale or issuance thereof.

Our opinions are expressed in effect on the date hereof. We have no responsibility or obligation to (i) update these opinions; (ii) take into account or inform the addressee or any other person of any changes in law, facts or other developments subsequent to this date that do or may affect the opinions we express; or (iii) advise the addressee or any other person of any other change in any matter addressed in these opinions. Nor do we have any responsibility or obligation to consider the applicability or correctness of these opinions to any person other than the addressee.

Our opinions expressed herein are based on the following assumptions:

(a) at or prior to the time of the delivery of the Shelf Securities, the Registration Statement, including all necessary post-effective amendments, will have become effective under the Securities Act and such effectiveness will not have been terminated or rescinded;

(b) an appropriate Prospectus Supplement with respect to any offered Shelf Securities will have been prepared and filed in compliance with the Securities Act and the applicable rules and regulations thereunder;

(c) the Shelf Securities will be offered, issued and sold in compliance with applicable United States Federal and state securities laws and in the manner stated in the Registration Statement, the Base Prospectus and the appropriate Prospectus Supplement with respect to the Shelf Securities to be offered in the future;

(d) if the offered Shelf Securities are to be sold pursuant to a definitive purchase, subscription, underwriting or similar agreement, such agreement will have been duly authorized, executed and delivered by the Company and the other parties thereto;

(e) at the time of any offering or sale of any Common Stock, Preferred Stock, Warrants, or Units consisting of Common Stock, Preferred Stock, or Warrants exercisable, exchangeable or convertible into Common Stock, in whole or in part, (together, "**Convertible Securities**") and as of the date of the issuance of any Common Stock issuable upon exercise of

any Convertible Securities, there will be sufficient Common Stock authorized and unissued under the Company's then operative charter documents and not otherwise reserved for issuance;

(f) at the time of issuance and sale of any Common Stock or Preferred Stock, a sufficient number of shares of Common Stock or Preferred Stock is authorized and reserved or available for issuance and that prior to any offering and sale of the Common Stock or Preferred Stock, the Company's board of directors ("**Board**") will duly authorize the price at which the Common Stock or Preferred Stock are to be issued and sold;

(g) any Common Stock issuable upon exercise of offered Convertible Securities will have been duly authorized, created and reserved for issuance upon such exercise;

(h) at the time of the issuance of any Shelf Securities, the Company validly exists and is duly qualified and in good standing under the laws of its jurisdiction of incorporation and has the necessary corporate power and authority to issue such Shelf Securities and to execute and deliver any applicable Governing Document;

(i) any applicable Governing Document will have been duly authorized, executed and delivered by the parties thereto (other than the Company), as applicable, and constitutes legally valid and binding obligations of the parties thereto (other than the Company), enforceable against each of them in accordance with its terms;

(j) the terms of the offered Shelf Securities and of their issuance and sale have been duly established in conformity with the Company's charter documents, so as not to violate any applicable law or Governing Document, or result in a default under or breach of any agreement or instrument binding upon the Company, and so as to comply with any requirement or restriction imposed by any court or governmental body having jurisdiction over the Company and the parties (other than the Company) to a Governing Document, as applicable;

(k) the Board will have taken all necessary corporate action, including the adoption of a resolution or resolutions of the Board in form and content as required by applicable law, to approve the issuance and terms of the offered Shelf Securities, the consideration to be received therefor, the applicable Governing Documents, if any, and the execution thereof, and related matters (the "**Authorization**");

(l) the Company will have received the agreed upon consideration for the issuance of the offered Shelf Securities and such Shelf Securities will have been delivered by or on behalf of the Company against payment therefor; and

(m) the offered Shelf Securities will have been duly authorized, established, certificated, executed, delivered, countersigned and registered, as applicable, in accordance with the provisions of the Company's charter documents, applicable law, applicable Governing Documents, if any, and the Authorization;

Subject to the foregoing and the other matters set forth herein, we are of the opinion that, as of the date hereof:

1. With respect to the Common Stock, when issued, sold and delivered in the manner and for the consideration stated in the applicable definitive purchase, underwriting or similar agreement approved by the Board, upon payment of the consideration provided therein to the Company, or upon conversion, exchange or exercise of any other security in accordance with the terms of such security or the instrument governing such security providing for such conversion, exchange or exercise as approved by the Board, for the consideration approved by the Board, each share of Common Stock will be validly issued, fully paid and non-assessable.

2. With respect to the Preferred Stock, when issued, sold and delivered in the manner and for the consideration stated in the applicable definitive purchase, underwriting or similar agreement approved by the Board, upon payment of the consideration provided therein to the Company, or upon conversion, exchange or exercise of any other security in accordance with the terms of such security or the instrument governing such security providing for such conversion, exchange or exercise as approved by the Board, for the consideration approved by the Board, each share of Preferred Stock will be validly issued, fully paid and non-assessable.

3. With respect to the Warrants, when (a) one or more agreements (incorporating the provisions as are contained in a document which will be filed as an exhibit to or incorporated by reference in the Registration Statement) have been duly executed and delivered by the Company and a warrant agent, if required, and (b) the Warrants have been issued, sold and delivered in the manner and for the consideration stated in the applicable definitive purchase, underwriting or similar agreement as approved by the Board, for the consideration approved by the Board, the Warrants will be valid and binding obligations of the Company enforceable against the Company in accordance with their terms;

4. With respect to the Units, assuming the (a) taking of all necessary corporate action to authorize and approve the issuance, execution and terms of any Units, the related Unit Agreements and any securities which are components of the Units, the terms of the offering thereof and related matters, (b) due execution, countersignature (where applicable), authentication, issuance and delivery of the Units, the Unit Agreements, and the Shelf Securities that are components of such Units, in each case upon the payment of the consideration therefor provided for in the applicable definitive purchase, underwriting or similar agreement approved by the Board, and otherwise in accordance with the provisions of the applicable Warrant Agreement, in the case of Warrants, such Units will be validly issued and will entitle the holders thereof to the rights specified in the Unit Agreements.

The opinions expressed above are subject to the following qualifications:

(i) the enforceability of any agreement may be limited by bankruptcy, insolvency, reorganization, fraudulent conveyance, moratorium or other similar laws now or hereafter in effect relating to creditors' rights generally;

(ii) the enforceability of the obligations of a party under any agreement is subject to general principles of equity (regardless of whether enforceability is considered in a proceeding at law or in equity), including, without limitation:

- (a) concepts of materiality, reasonableness, good faith and fair dealing in performance and enforcement of a contract required of the party seeking its enforcement;
 - (b) the discretion exercisable by a court with respect to equitable remedies, such as specific performance and injunction;
 - (c) the discretion exercisable by a court with respect to stays of enforcement proceedings and execution of judgment; and
 - (d) the effect of vitiating factors, such as mistake, misrepresentation, fraud, duress or undue influence.
- (iii) we express no opinion as to the enforceability of any term providing for the severance of void, illegal or unenforceable provisions from the remaining provisions of an agreement;
 - (iv) we express no opinion as to the enforceability of any term providing that modifications, amendments or waivers are not binding, unless in writing;
 - (v) we express no opinion with respect to rights to indemnity and contribution;
 - (vi) a court may reserve to itself the right to decline jurisdiction in any action if the court is an inconvenient forum to hear the action or if concurrent proceedings are being brought elsewhere, notwithstanding any waiver of the right to raise such objection or defense thereto;
 - (vii) the right to exercise any unilateral or unfettered discretion pursuant to an agreement will not prevent a court from requiring such discretion to be exercised reasonably; and
 - (viii) public policy considerations which may limit the rights or parties to obtain remedies.

This opinion letter has been prepared for your use in connection with the Registration Statement and is expressed as of the date hereof. Our opinions are expressly limited to the matters set forth above and we render no opinion, whether by implication or otherwise, as to any other matters relating to the Company.

We hereby consent to the filing of this opinion letter as an exhibit to the Registration Statement and to the reference to this firm on the cover page and under the caption "Legal Matters" in the Prospectus. In giving this consent, we do not hereby agree that we are within the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the SEC promulgated thereunder.

Very truly yours,

/s/ Weintraub Tobin Chediak Coleman Grodin Law Corporation

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement on Form S-3 of our report dated March 31, 2022 relating to the financial statements of Arcadia Biosciences, Inc., appearing in the Annual Report on Form 10-K of Arcadia Biosciences, Inc. for the year ended December 31, 2021. We also consent to the reference to us under the heading "Experts" in such Registration Statement.

/s/ Deloitte & Touche LLP

Phoenix, Arizona
April 21, 2022

CONSENT OF INDEPENDENT CERTIFIED PUBLIC ACCOUNTANTS

We consent to the incorporation by reference in this Registration Statement on Form S-3 of Arcadia Biosciences, Inc. of our report dated July 28, 2021 with respect to the consolidated financial statements of Rever Holdings, LLC. for the year ended December 31, 2020 appearing in the Current Report on Form 8-K/A of Arcadia Biosciences, Inc. on August 2, 2021. We also consent to the reference to us under the heading "Experts" in the Prospectus, which is part of this Registration Statement.

/s/ Armanino LLP

Bellevue, Washington
April 21, 2022

INDEPENDENT AUDITOR'S CONSENT

We consent to the incorporation by reference in this Registration Statement on Form S-3 of our report dated July 9, 2021, with respect to the financial statements of the Coconut Water Line of Live Zola, LLC, appearing in the Current Report on Form 8-K/A of Arcadia Biosciences, Inc. filed on August 2, 2021. We also consent to the reference to us under the heading "Experts" in the Prospectus, which is part of this Registration Statement.

/s/ CohnReznick LLP

Los Angeles, California
April 21, 2022

Calculation of Filing Fee Tables

Form S-3
(Form Type)Arcadia Biosciences, Inc.
(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered and Carry Forward Securities

	Security Type	Security Class Title	Fee Calculation Or Carry Forward Rule	Amount Registered	Proposed Maximum Offering Price Per Unit	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee	Carry Forward Form Type	Carry Forward File Number	Carry Forward Initial Effective date	Filing Fee Previously Paid In Connection with Unsold Securities to be Carried Forward
Newly Registered Securities												
Fees to Be Paid	—	—	—	—	—	—	—	—				
	Equity	Common Stock, \$0.001 par value per share (1)	457(o)	(2)	(3)	(3)	—	—				
	Equity	Preferred Stock, \$0.001 par value per share (1)	457(o)	(2)	(3)	(3)	—	—				
	Other	Warrants (4)	457(o)	(2)	(3)	(3)	—	—				
	Other	Units (5)	457(o)	(2)	(3)	(3)	—	—				
	Unallocated (Universal) Shelf	—	457(o)	(2)	Unallocated (Universal) Shelf	\$50,000,000	\$0.0000927	\$4,635				
Fees Previously Paid	—	—	—	—	—	—	—	—				
Carry Forward Securities												
Carry Forward Securities	—	—	—	—	—	—	—	—	—	—	—	—
	Total Offering Amounts					\$50,000,000		\$4,635				
	Total Fees Previously Paid							—				
	Total Fee Offsets							—				
	Net Fees Due							\$4,635				

- (1) Includes an indeterminate number of shares of common stock or preferred stock as may be sold from time to time, at indeterminate prices.
- (2) Pursuant to Rule 457(i) under the Securities Act of 1933, as amended, or the Securities Act, the securities registered hereunder include such indeterminate number of securities as may be issued upon conversion or exchange of any preferred stock, warrants or units registered hereunder that provide for conversion or exchange, upon exercise of warrants or pursuant to the anti-dilution provisions of any such securities.

- (3) The proposed maximum per unit and aggregate offering prices per class of securities will be determined from time to time by the registrant in connection with the issuance by the registrant of the securities registered under this registration statement and is not specified as to each class of security pursuant to Instruction 2.A.iii.b. to the Calculation of Filing Fee Tables and Related Disclosure on Form S-3 under the Securities Act.
- (4) Any securities registered hereunder with respect to the primary offering may be sold separately or as units with other securities registered hereunder. The proposed maximum offering price per unit will be determined by the registrant in connection with the issuance of the securities. In no event will the aggregate offering price of all securities issued from time to time pursuant to this registration statement exceed \$50,000,000.
- (5) Each unit will be issued under a unit agreement and will represent an interest in two or more securities, which may or may not be separable from one another.