

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

Pre-Effective Amendment No. 2

to

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
(Address of Principal Executive Offices) (Zip Code)

Matthew T. Plavan
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 Executive Officer
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Davis, CA 95618

Michael De Angelis, Esq.
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475 Sansome Street, Suite 1800
San Francisco, CA 94111

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
Non-accelerated filer

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.

CALCULATION OF REGISTRATION FEE

Title of each class of securities to be registered	Amount to be registered (1)	Proposed maximum offering price per share(2)	Aggregate maximum offering price	Amount of registration fee (2)(3)
Common Stock, \$0.001 value per share	2,135,449	\$3.705	\$7,911,839	\$1,026.95

- (1) Represents shares of common stock, par value \$0.001 per share, which may be sold by the selling stockholders named in this registration statement. Pursuant to Rule 416 under the Securities Act of 1933, as amended, this registration statement also covers an indeterminate amount of shares of common stock as may become issuable to prevent dilution resulting from stock splits, stock dividends or similar events.
- (2) Calculated pursuant to Rule 457(c) of the Securities Act of 1933, as amended, solely for the purpose of computing the amount of the registration fee, on the basis of the average of the high and low prices of the registrant's common stock quoted on The Nasdaq Stock Market on August 7, 2020.
- (3) Fees of \$783.72 paid with previous filings.

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 which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

Prospectus

ARCADIA BIOSCIENCES, INC.
2,135,449
Common Stock

This prospectus covers the sale or other disposition from time to time of up to 2,135,449 shares of our common stock, \$0.001 par value per share, by the selling shareholders identified in this prospectus, including their transferees, pledgees, donees or successors. The selling shareholders may, from time to time, sell, transfer, or otherwise dispose of any or all of their shares of common stock or interests in shares of common stock on any stock exchange, market, or trading facility on which the shares are traded or in private transactions. These dispositions may be at fixed prices, at prevailing market prices at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale, or at negotiated prices.

We are not offering any shares of our common stock for sale under this prospectus. We will not receive any of the proceeds from the sale or other disposition of the shares of our common stock by the selling shareholders.

Our common stock is listed on the NASDAQ Capital Market under the symbol "RKDA." On August 7, 2020, the last reported sale price of our common stock was \$3.72 per share.

INVESTING IN OUR SECURITIES INVOLVES RISKS. YOU SHOULD REVIEW CAREFULLY THE RISKS AND UNCERTAINTIES DESCRIBED UNDER THE HEADING "RISK FACTORS" CONTAINED HEREIN AND IN OUR ANNUAL REPORT ON FORM 10-K FOR THE YEAR ENDED DECEMBER 31, 2019, AS WELL AS OUR SUBSEQUENTLY FILED PERIODIC AND CURRENT REPORTS, WHICH WE FILE WITH THE SECURITIES AND EXCHANGE COMMISSION AND ARE INCORPORATED BY REFERENCE INTO THIS PROSPECTUS. YOU SHOULD READ THE ENTIRE PROSPECTUS CAREFULLY BEFORE YOU MAKE YOUR INVESTMENT DECISION.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED THESE SECURITIES OR DETERMINED IF THIS PROSPECTUS IS TRUTHFUL OR COMPLETE. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this prospectus is _____, 2020.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS	1
ABOUT THIS PROSPECTUS	1
ABOUT ARCADIA BIOSCIENCES	1
PRIVATE PLACEMENT	2
WHERE YOU CAN FIND ADDITIONAL INFORMATION	2
INCORPORATION OF INFORMATION BY REFERENCE	2
RISK FACTORS	3
SELLING SHAREHOLDERS	3
DESCRIPTION OF OUR COMMON STOCK	5
USE OF PROCEEDS	7
PLAN OF DISTRIBUTION	7
LEGAL MATTERS	9
EXPERTS	9
INTERESTS OF NAMED EXPERTS AND COUNSEL	9

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, 2019, 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.

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the SEC using a “shelf” registration or continuous offering process.

You should read this prospectus and the information and documents incorporated by reference carefully. Such documents contain important information you should consider when making your investment decision. See “Where You Can Find Additional Information” and “Incorporation of Information by Reference” in this prospectus.

You should rely only on the information provided in this prospectus or documents incorporated by reference into this prospectus. We have not authorized anyone to provide you with different information. This prospectus covers offers and sales of our common stock only in jurisdictions in which such offers and sales are permitted. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or of any sale of our common stock. You should not assume that the information contained in this prospectus is accurate as of any date other than the date on the front cover of this prospectus, or that the information contained in any document incorporated by reference is accurate as of any date other than the date of the document incorporated by reference, regardless of the time of delivery of this prospectus or any sale of a security.

In this prospectus, we refer to Arcadia Biosciences, Inc. as “we,” “us,” “our,” the “Company” or “RKDA.” You should rely only on the information we have provided or incorporated by reference in this prospectus, any applicable prospectus supplement and any related free writing prospectus. We have not authorized anyone to provide you with different information. 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.

ABOUT ARCADIA BIOSCIENCES, INC.

We are a consumer-driven, agricultural food ingredient company. We aim to create value across the agricultural production and supply chain beginning with enhanced crop productivity for farmers and ultimately to deliver accelerated innovation in nutritional quality consumer foods. We use state of the art gene-editing technology and advanced breeding techniques to naturally enhance the nutritional quality of grains and oilseeds to address the rapidly evolving trends in consumer health and nutrition. In addition, we have developed a broad pipeline of high value crop productivity traits designed to enhance farm economics.

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.

PRIVATE PLACEMENT OF SECURITIES

On May 14, 2020, we entered into agreements with several existing accredited investors to exercise certain outstanding warrants to purchase up to an aggregate of 1,392,345 shares of the Company's common stock at a reduced exercise price per share of \$4.90 (the "Existing May 2020 Warrants"). In consideration for the immediate exercise of the Existing May 2020 Warrants for cash, the exercising holders received new unregistered warrants to purchase up to an aggregate of 1,392,345 shares of common stock (the "May 2020 Warrants") at an exercise price of \$4.775 per share and an exercise period of five years from the date of issuance. The exercise and the issuance of the May 2020 Warrants closed on May 18, 2020. In connection with this transaction, we also issued to certain designees of H.C. Wainwright unregistered warrants (the "Wainwright May 2020 Warrants"), for the purchase of a total of 69,617 shares of our common stock at an exercise price per share of \$6.125 pursuant to the terms of our letter agreement with H.C. Wainwright. The Wainwright May 2020 Warrants are exercisable for five years from the date of issuance.

On July 6, 2020, we entered into a letter agreement ("Letter Agreement") with an existing accredited investor to exercise certain outstanding warrants to purchase up to an aggregate of 641,416 shares of the Company's common stock at a reduced exercise price per share of \$3.975 (the "Existing June 2020 Warrants"). In consideration for the immediate exercise of the Existing June 2020 Warrants for cash, the exercising holder received new unregistered warrants to purchase up to an aggregate of 641,416 shares of common stock (the "June 2020 Warrants") at an exercise price of \$3.85 per share and an exercise period of five and one-half years from the date of issuance. The exercise and the issuance of the June 2020 Warrants closed on July 8, 2020. In connection with this transaction, we also issued to certain designees of H.C. Wainwright unregistered warrants (the "Wainwright June 2020 Warrants"), for the purchase of a total of 32,071 shares of our common stock at an exercise price per share of \$4.9688 pursuant to the terms of our letter agreement with H.C. Wainwright. The Wainwright June 2020 Warrants are exercisable for five years from the date of issuance.

The shares underlying the May 2020 Warrants, the June 2020 Warrants, the Wainwright May 2020 Warrants and the Wainwright June 2020 Warrants, or together the Warrants, are being registered for resale hereunder.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We filed a registration statement on Form S-3 with the SEC under the Securities Act of 1933, as amended (Securities Act), with respect to the securities covered by this prospectus. This prospectus, which is a part of the registration statement, does not contain all of the information set forth in the registration statement or the exhibits and schedules filed therewith. For further information with respect to us and the securities covered by this prospectus, please see the registration statement and the exhibits filed with the registration statement. A copy of the registration statement and the exhibits filed with the registration statement may be inspected without charge at the Public Reference Room maintained by the SEC, located at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for more information about the operation of the Public Reference Room. The SEC also maintains an Internet website that contains reports, proxy and information statements and other information regarding registrants that file electronically with the SEC. The address of the website is <http://www.sec.gov>.

We are subject to the information and periodic reporting requirements of the Securities Exchange Act of 1934, as amended (Exchange Act) and, in accordance therewith, we file periodic reports, proxy statements and other information with the SEC. Such periodic reports, proxy statements and other information are available for inspection and copying at the Public Reference Room and website of the SEC referred to above. We maintain a website at <http://www.arcadiabio.com>. You may access our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed pursuant to Sections 13(a) or 15(d) of the Exchange Act with the SEC free of charge at our website as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC. Our website and the information contained on that site, or connected to that site, are not incorporated into and are not a part of this prospectus.

INCORPORATION OF INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" the information we file with it, which means that we can disclose important information to you by referring you to those documents. The information we incorporate by reference is an important part of this prospectus, and certain information that we will later file with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below, as well as any future filings made with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act from the date of the initial registration statement and prior to the effectiveness of this registration statement, and any filings made after the date of this prospectus until we sell all of the securities under this prospectus, except that we do not incorporate any document or portion of a document that was furnished and deemed by the rules of the SEC not to have been filed:

- Our annual report on [Form 10-K](#) for the fiscal year ended December 31, 2019, filed with the SEC on March 25, 2020;

- Our quarterly reports on Form 10-Q for the quarters ended March 31, 2020 and June 30, 2020, filed with the SEC on [May 13, 2020](#) and August 13, 2020, respectively;
- Our current reports on Form 8-K filed with the SEC on [April 21, 2020](#), [May 14, 2020](#), [May 18, 2020](#), and [June 3, 2020](#), [July 2, 2020](#), [July 6, 2020](#), and [July 8, 2020](#);
- [Definitive Proxy Statement on Schedule 14A](#) filed with the SEC on April 17, 2020 for our annual meeting of shareholders held on June 1, 2020; and
- The description of our common stock contained in our [Form 8-A/A](#) filed on May 14, 2015.

Additionally, all reports and other documents subsequently filed by us pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act after (i) the date of the initial registration statement and prior to effectiveness of the registration statement; and (ii) the date of this prospectus and prior to the termination or completion of this offering, shall be deemed to be incorporated by reference in this prospectus and to be part hereof from the date of filing of such reports and other documents. Any information that we subsequently file with the SEC that is incorporated by reference as described above will automatically update and supersede any previous information that is part of this prospectus.

We hereby undertake to provide without charge to each person, including any beneficial owner, to whom a copy of this prospectus is delivered, upon written or oral request of any such person, a copy of any and all of the information that has been or may be incorporated by reference in this prospectus, other than exhibits to such documents. Requests for such copies should be directed to our Corporate Secretary at 202 Cousteau Place, Suite 105, Davis, CA 95618, Telephone (530) 750-7191.

RISK FACTORS

An investment in our common stock involves risks. Prior to making a decision about investing in our common stock, you should consider carefully the risks together with all of the other information contained or incorporated by reference in this prospectus, including any risks described in the section entitled "Risk Factors" contained in any supplements to this prospectus and in our Annual Report on Form 10-K for the fiscal year ended December 31, 2019 and in our subsequent filings with the SEC. Each of the referenced risks and uncertainties could adversely affect our business, operating results and financial condition, as well as adversely affect the value of an investment in our securities. Additional risks not known to us or that we believe are immaterial may also adversely affect our business, operating results and financial condition and the value of an investment in our securities.

SELLING SHAREHOLDERS

We are registering the shares of common stock in order to permit the selling shareholders to offer the shares for resale from time to time. Except for the ownership of shares of capital stock and as described below, each selling shareholder has not had any material relationship with us within the past three years. The table below lists each selling shareholder and other information regarding the beneficial ownership of the shares of common stock by each selling shareholder. The second column lists the number of shares of common stock beneficially owned by each selling shareholder, based on its ownership of the shares of common stock, as of June 23, 2020. The third column lists the shares of common stock being offered by this prospectus by each selling shareholder. The fourth and fifth columns assume the sale of all of the shares offered by each selling shareholder pursuant to this prospectus. The selling shareholders may sell all, some or none of their shares in this offering. See "Plan of Distribution." The total number of outstanding shares of common stock as of August 7, 2020 was 10,699,577.

Name of Selling Stockholder	Shares Beneficially Owned Before this Offering	Shares to be Sold in this Offering	Shares Beneficially Owned After Offering	
			Number	Percentage
Sabby Volatility Warrant Master Fund, Ltd. (1)	535,903	1,039,228	516,153	4.40%
Hudson Bay Master Fund, Ltd. (2)	890,049	248,633	641,416	5.53%
CVI Investments, Inc. (3)	561,950	372,950	182,915	1.63%
Intracoastal Capital, LLC (4)	625,865	372,950	252,915	2.23%
Michael Vasinkevich (5)	210,834	65,208	145,626	1.33%
Noam Rubinstein (6)	102,930	32,031	70,899	*
Craig Schwabe (7)	3,432	3,432	-	*
Charles Worthman (8)	3,267	1,017	2,250	*

* Represents beneficial ownership of less than one percent.

- (1) Sabby Management, LLC is the investment manager of Sabby Volatility Warrant Master Fund, Ltd. and shares voting and investment power with respect to these shares in this capacity. As manager of Sabby Management, LLC, Hal Mintz also shares voting and investment power on behalf of Sabby Volatility Warrant Master Fund, Ltd. Each of Sabby Management, LLC and Hal Mintz disclaims beneficial ownership over the securities listed except to the extent of their pecuniary interest therein. The address of principal business office of Sabby Volatility Warrant Master Fund, Ltd., Sabby Management, LLC and Hal Mintz is 10 Mountainview Road, Suite 205, Upper Saddle River, New Jersey 07458. Sabby Volatility Warrant Master Fund, Ltd. is not a registered broker-dealer or an affiliate of a registered broker-dealer. Includes (i) 516,153 shares of common stock and 1,039,228 shares of common stock issuable upon exercise of warrants. The aggregate beneficial ownership of Sabby Volatility Master Fund, Ltd. is subject to a 4.99% ownership blocker.
- (2) Hudson Bay Capital Management LP, the investment manager of Hudson Bay Master Fund Ltd., has voting and investment power over these securities. Sander Gerber is the managing member of Hudson Bay Capital GP LLC, which is the general partner of Hudson Bay Capital Management LP. Sander Gerber disclaims beneficial ownership over these securities. Includes 890,049 shares of common stock issuable upon exercise of warrants. The aggregate beneficial ownership of Hudson Bay Master Fund Ltd. is subject to a 9.99% ownership blocker.
- (3) Heights Capital Management, Inc., the authorized agent of CVI Investments, Inc. ("CVI"), has discretionary authority to vote and dispose of the shares held by CVI and may be deemed to be the beneficial owner of these shares. Martin Kobinger, in his capacity as Investment Manager of Heights Capital Management, Inc., may also be deemed to have investment discretion and voting power over the shares held by CVI. Mr. Kobinger disclaims any such beneficial ownership of the shares. CVI is affiliated with one or more FINRA members, none of whom are currently expected to participate in the sales of securities pursuant to the prospectus contained in this registration statement. Includes 555,865 shares of common stock issuable upon exercise of Warrants.
- (4) Mitchell P. Kopin ("Mr. Kopin") and Daniel B. Asher ("Mr. Asher"), each of whom are managers of Intracoastal Capital LLC ("Intracoastal"), have shares voting control and investment discretion over the securities reported herein that are held by Intracoastal. As a result, each of Mr. Kopin and Mr. Asher may be deemed to have beneficial ownership (as determined under Section 13(d) of the Securities and Exchange Act of 1934, as amended, of the securities reported herein that are held by Intracoastal. Includes 625,865 shares of common stock issuable upon exercise of Warrants.
- (5) Includes 210,834 shares of common stock issuable upon exercise of Warrants. Mr. Vasinkevich is affiliated with Wainwright, which served as the placement agent for the March 2018 Purchase Agreement, and the June 2018, June 2019, and September 2019 Offerings.

- (6) Includes 102,930 shares of common stock issuable upon exercise of Warrants. Mr. Rubinstein is affiliated with Wainwright, which served as the placement agent for the March 2018 Purchase Agreement, and the June 2018, June 2019, and September 2019 Offerings.
- (7) Includes 3,432 shares of common stock issuable upon exercise of Warrants. Mr. Schwabe is affiliated with Wainwright, which served as the placement agent for the March 2018 Purchase Agreement, and the June 2018, June 2019, and September 2019 Offerings.
- (8) Includes 3,267 shares of common stock issuable upon exercise of Warrants. Mr. Worthman is affiliated with Wainwright, which served as the placement agent for the March 2018 Purchase Agreement, and the June 2018, June 2019, and September 2019 Offerings.

DESCRIPTION OF OUR CAPITAL STOCK

The selling shareholders may, from time to time, sell, transfer, or otherwise dispose of any or all of their shares of common stock or interests in shares of common stock on any stock exchange, market, or trading facility on which the shares are traded or in private transactions at fixed prices, at prevailing market prices at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale, or at negotiated prices. This prospectus provides you with a general description of the common stock the selling shareholders may offer.

The description below of our capital stock and provisions of our articles of incorporation and bylaws are summaries and are qualified by reference to the articles of incorporation and the bylaws. These documents are filed as exhibits to the registration statement of which this prospectus is a part.

Our authorized capital stock consists of 150,000,000 shares of common stock, \$0.001 par value, and 20,000,000 shares of Preferred Stock, \$0.001 par value. As of August 7, 2020, there were no outstanding shares of Preferred Stock and 10,699,577 outstanding shares of common stock.

Common Stock

Subject to preferences that may be applicable to any outstanding preferred stock, the holders of common stock are entitled to receive ratably dividends, if any, as may be declared from time to time by the board of directors out of funds legally available for that purpose. In the event of our liquidation, dissolution or winding up, whether voluntary or involuntary, the holders of common stock are entitled to share ratably in all assets remaining after payment of liabilities, subject to prior distribution rights of preferred stock, if any, then outstanding. The common stock has no preemptive or conversion rights or other subscription rights. There are no redemption or sinking fund provisions applicable to the common stock. All outstanding shares of common stock are fully paid and nonassessable, and the shares of common stock to be issued upon the closing of this offering will be fully paid and nonassessable.

The holders of common stock are entitled to one vote per share on all matters to be voted upon by the shareholders. Under certain circumstances, California law permits the holders of our common stock to cumulate their votes for the election of directors, in which case holders of less than a majority of the outstanding shares of our common stock could elect one or more of our directors. Holders of our common stock have no preemptive, subscription, or redemption rights. The outstanding shares of common stock are fully paid and nonassessable. The rights and privileges of holders of common stock are subject to, and may be adversely affected by, the rights of holders of shares of preferred stock that we may designate and issue in the future.

Preferred Stock

The board of directors has the authority, without further action by the stockholders, to issue up to 20,000,000 shares of preferred stock, \$0.001 par value per share, in one or more series. The board of directors will also have the authority to designate the rights, preferences, privileges and restrictions of each such series, including dividend rights, dividend rates, conversion rights, voting rights, terms of redemption, redemption prices, liquidation preferences, and the number of shares constituting any series.

The issuance of preferred stock may have the effect of delaying, deferring or preventing a change in control of the company without further action by the stockholders. The issuance of preferred stock with voting and conversion rights may also adversely affect the voting power of the holders of common stock. In certain circumstances, an issuance of preferred stock could have the effect of decreasing the market price of the common stock. As of the closing of the offering, no shares of preferred stock will be outstanding. We currently have no plans to issue any shares of preferred stock.

Anti-Takeover Effects of Provisions of our Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws

Our amended and restated certificate of incorporation and our amended and restated 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 amended and restated 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 amended and restated bylaws provides 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 amended and restated 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 amended and restated certificate of incorporation and amended and restated 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 amended and restated 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 amended and restated certificate of incorporation and amended and restated 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.

Listing

Our common stock is listed on the NASDAQ Capital Market under the symbol "RKDA".

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is American Stock Transfer & Trust Company.

USE OF PROCEEDS

We are registering shares of our common stock pursuant to registration rights granted to the selling stockholders. We will not receive any of the proceeds from any sale or other disposition of the common stock covered by this prospectus. All proceeds from the sale of the common stock will be paid directly to the selling stockholders. We will receive proceeds upon the cash exercise of the warrants for which the underlying shares of common stock are being registered hereunder. Assuming full cash exercise of the warrants, we would receive proceeds of approximately \$9.2 million. We currently intend to use the cash proceeds from any warrant exercise for working capital and general corporate purposes.

PLAN OF DISTRIBUTION

Each Selling Stockholder (the "Selling Stockholders") of the securities and any of their pledgees, assignees and successors-in-interest may, from time to time, sell any or all of their securities covered hereby on the Nasdaq Capital Market or any other stock exchange, market or trading facility on which the securities are traded or in private transactions. These sales may be at fixed or negotiated prices. A Selling Stockholder may use any one or more of the following methods when selling securities:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;

- block trades in which the broker-dealer will attempt to sell the securities as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- settlement of short sales;
- in transactions through broker-dealers that agree with the Selling Stockholders to sell a specified number of such securities at a stipulated price per security;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- a combination of any such methods of sale; or
- any other method permitted pursuant to applicable law.

The Selling Stockholders may also sell securities under Rule 144 or any other exemption from registration under the Securities Act of 1933, as amended (the "Securities Act"), if available, rather than under this prospectus.

Broker-dealers engaged by the Selling Stockholders may arrange for other brokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the Selling Stockholders (or, if any broker-dealer acts as agent for the purchaser of securities, from the purchaser) in amounts to be negotiated, but, except as set forth in a supplement to this Prospectus, in the case of an agency transaction not in excess of a customary brokerage commission in compliance with FINRA Rule 2440; and in the case of a principal transaction a markup or markdown in compliance with FINRA IM-2440.

In connection with the sale of the securities or interests therein, the Selling Stockholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the securities in the course of hedging the positions they assume. The Selling Stockholders may also sell securities short and deliver these securities to close out their short positions, or loan or pledge the securities to broker-dealers that in turn may sell these securities. The Selling Stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or create one or more derivative securities which require the delivery to such broker-dealer or other financial institution of securities offered by this prospectus, which securities such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The Selling Stockholders and any broker-dealers or agents that are involved in selling the securities may be deemed to be "underwriters" within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the securities purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. Each Selling Stockholder has informed the Company that it does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the securities.

The Company is required to pay certain fees and expenses incurred by the Company incident to the registration of the securities. The Company has agreed to indemnify the Selling Stockholders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act.

We agreed to keep this prospectus effective until the earlier of (i) the date on which the securities may be resold by the Selling Stockholders without registration and without regard to any volume or manner-of-sale limitations by reason of Rule 144, without the requirement for the Company to be in compliance with the current public information under Rule 144 under the Securities Act or any other rule of similar effect or (ii) all of the securities have been sold pursuant to this prospectus or Rule 144 under the Securities Act or any other rule of similar effect. The resale securities will be sold only through registered or licensed brokers or dealers if required under applicable state securities laws. In addition, in certain states, the resale securities covered hereby 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 is complied with.

Under applicable rules and regulations under the Exchange Act, any person engaged in the distribution of the resale securities may not simultaneously engage in market making activities with respect to the common stock for the applicable restricted period, as defined in Regulation M, prior to the commencement of the distribution. In addition, the Selling Stockholders will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including Regulation M, which may limit the timing of purchases and sales of the common stock by the Selling Stockholders or any other person. We will make copies of this prospectus available to the Selling Stockholders and have informed them of the need to deliver a copy of this prospectus to each purchaser at or prior to the time of the sale (including by compliance with Rule 172 under the Securities Act).

LEGAL MATTERS

Weintraub Tobin Chediak Coleman Grodin Law Corporation will pass upon legal matters in connection with the validity of the common stock offered hereby.

EXPERTS

The financial statements incorporated in this Prospectus by reference from the Company's Annual Report on Form 10-K, have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report, which is incorporated herein by reference. Such financial statements have been so incorporated in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

INTERESTS OF NAMED EXPERTS AND COUNSEL

Except as noted below, no expert or counsel named in this prospectus as having prepared or certified any part of this prospectus or having given an opinion upon the validity of the securities being registered or upon other legal matters in connection with the registration or offering of the securities was employed on a contingency basis, or had, or is to receive, in connection with the offering, a substantial interest, direct or indirect, in the registrant or any of its parents or subsidiaries. Nor was any such person connected with the registrant or any of its parents or subsidiaries as a promoter, managing or principal underwriter, voting trustee, director, officer, or employee.

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution

The estimated expenses payable by the registrant in connection with the issuance and distribution of the securities being registered are as follows:

SEC Registration Fee	\$	1,028
Legal Fees and Expenses *		25,000
Accounting Fees and Expenses *		24,000
Total	\$	<u>50,028</u>

* Estimated solely for the purposes of this Item. Actual expenses may vary.

Item 15. Indemnification of Directors and Officers

On completion of this offering, the Registrant's amended and restated certificate of incorporation will contain 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 amended and restated certificate of incorporation and bylaws will 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 amended and restated 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.

Item 16. Exhibits

Exhibit Number	Exhibit Description	Incorporated by Reference			Filed Herewith
		Form	File No.	Filing Date	
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

Exhibit Number	Exhibit Description	Incorporated by Reference			Filed Herewith	
		Form	File No.	Exhibit		
3.3	Amendment to the Amended and Restated Certificate of Incorporation of Registrant.	8-K	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 New Warrant issued on May 18, 2020	8-K	001-37383	4.1	5/18/2020	
4.3	Form of Wainwright Warrant issued on May 18, 2020	8-K	001-37383	4.2	5/18/2020	
5.1	Opinion of Weintraub Tobin Chediak Coleman Grodin Law Corporation.					X
10.1	Form of Letter Agreement, dated as of May 14, 2020	8-K	001-37383	10.1	5/18/2020	
23.1	Consent of Deloitte & Touche LLP, independent registered public accounting firm.					X
23.2	Consent of Weintraub Tobin Chediak Coleman Grodin Law Corporation (included in Exhibit 5.1).					X
24.1	Power of attorney (included in the signature page to this Registration Statement).					X

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 of 1933.

(ii) To reflect in the prospectus any facts or events arising after the effective date of the 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 the registration statement.

Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of 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.

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

Provided, however, that paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) above do not apply if the registration statement is on Form S-3 or Form F-3 and 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 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, 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 of 1933 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 the 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 of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of 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 of 1933 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.

(b) The undersigned registrant hereby undertakes 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.

(c) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act of 1933 shall be deemed to be part of this registration statement as of the time it was declared effective.

(d) The undersigned registrant hereby undertakes that, for the purpose of determining any liability under the Securities Act of 1933, 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 of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the provisions described in Item 15 above, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the 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 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 Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Davis, State of California, on this 13th day of August, 2020.

ARCADIA BIOSCIENCES, INC.

By: /s/ PAMELA HALEY
Name: Pamela Haley
Title: Chief Financial Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each individual whose signature appears below constitutes and appoints Matthew T. Plavan and as attorney-in-fact, with the power of substitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement, and to file the same, with all exhibits thereto and all documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that such attorneys-in-fact and agents or any of them, or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ MATTHEW T. PLAVAN</u> Matthew T. Plavan	President and Chief Executive Officer and Director (principal executive officer)	August 13, 2020
<u>/s/ PAMELA HALEY</u> Pamela Haley	Chief Financial Officer (principal financial and accounting officer)	August 13, 2020
<u>/s/ *</u> Kevin Comcowich	Director	August 13, 2020
<u>/s/ *</u> Albert D. Bolles	Director	August 13, 2020
<u>/s/ *</u> Lilian Shackelford Murray	Director	August 13, 2020
<u>/s/ *</u> Gregory D. Waller	Director	August 13, 2020
<u>/s/ *</u> Amy Yoder	Director	August 13, 2020
* by <u>Matthew T. Plavan</u> Power of Attorney		

August 13, 2020

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

Re: Registration Statement on Form S-3

Ladies and Gentlemen:

You have requested our opinion with respect to certain matters in connection with the filing with the Securities and Exchange Commission (the "**Commission**"), by Arcadia Biosciences, Inc., a Delaware corporation (the "**Company**"), of a Registration Statement on Form S-3 (the "**Registration Statement**"), including a related prospectus to be filed with the Commission pursuant to Rule 424(b) of Regulation C (the "**Prospectus**") under the Securities Act of 1933, as amended, relating to the resale from time to time by the selling stockholders named in the Registration Statement (the "**Selling Stockholders**") of up to 2,135,449 shares of the Company's common stock, \$0.001 par value per share (the "**Shares**"), in the manner set forth in the Registration Statement. The Shares consist of up to 2,135,449 shares of common stock issuable upon the exercise of outstanding warrants of the Company (the "**Warrants**"), as described in the Registration Statement.

In connection with this opinion, we have examined and relied upon the Registration Statement and related Prospectus; the Company's certificate of incorporation, as amended and restated to date; the Company's Bylaws as in effect on the date hereof; the Warrants; and certain resolutions and minutes of meetings of the Board of Directors of the Company relating to the issuance of the Warrants, the Shares and the Registration Statement. We have considered such matters of law and of fact, including the examination of originals or copies, certified or otherwise identified to our satisfaction, of such records, documents, certificates, and other instruments of the Company, certificates of officers, directors and representatives of the Company, certificates of public officials, and such other documents as in our judgment are necessary or appropriate to enable us to render the opinion expressed below. As to matters of fact material to our opinions, we have relied, without independent verification, on certificates and other inquiries of officers of the Company. We have assumed without investigation the genuineness and authenticity of all documents submitted to us as originals, the conformity to originals of all documents submitted to us

as copies thereof, and the due execution and delivery of all documents where due execution and delivery are a prerequisite to the effectiveness thereof, the accuracy and completeness of all records made available to us by the Company, and that all offers and sales of the Shares will be made in compliance with the securities laws of the states having jurisdiction thereof. We have also assumed that (i) the Registration Statement and any amendments thereto (including post-effective amendments) have become effective and will continue to be effective at the time of the resale of any Shares, (ii) if necessary, a prospectus supplement will have been prepared and filed with the Commission describing any Shares offered thereby or any Selling Stockholders, (iii) all Shares will be sold in the manner stated in the Registration Statement and, if necessary, the applicable prospectus supplement, and (iv) at the time of the offering, there will not have occurred any changes in the law affecting the authorization, execution, delivery, validity or enforceability of the Shares.

The opinions set forth in this letter are limited solely to the federal laws of the United States of America and the State of California, and we express no opinion as to the laws of any other jurisdiction.

Based upon the foregoing, and in reliance thereon, we are of the opinion that when the Shares are issued upon exercise of the Warrants in accordance with the terms of the Warrants, upon receipt of the consideration contemplated thereby, such Shares will be validly issued, fully paid and nonassessable.

We consent to the reference to our firm under the caption "Legal Matters" in the Prospectus included in the Registration Statement and to the filing of this opinion as an exhibit to the Registration Statement. In giving our consent, we do not admit that we are "experts" within the meaning of Section 11 of the Securities Act or within the category of persons whose consent is required by Section 7 of the Securities Act or the rules and regulations of the Commission.

Very truly yours,

/s/ Weintraub Tobin Chediak Coleman Grodin Law Corporation
WEINTRAUB TOBIN CHEDIAK COLEMAN GRODIN LAW CORPORATION

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Amendment No. 2 to Registration Statement No. 333-239641 on Form S-3 of our report dated March 25, 2020 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, 2019. We also consent to the reference to us under the heading "Experts" in such Registration Statement.

/s/ Deloitte & Touche LLP

Phoenix, Arizona
August 13, 2020