

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

May 8, 2015

Eric J. Rey President and Chief Executive Officer Arcadia Biosciences, Inc. 202 Cousteau Place, Suite 105 Davis, CA 95618

> Re: Arcadia Biosciences, Inc. Amendment No. 2 to Registration Statement on Form S-1

> > Filed April 30, 2015 File No. 333-202124

Dear Mr. Rey:

We have reviewed your amended registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

Prospectus Summary, page 1

- 1. Please briefly disclose in the Summary that up to 72% of the company's stock will be held by Moral Compass Corporation and Mandela Capital following the offering.
- 2. Further, please disclose in the Summary the dilution that will occur as a result of the disparity between the price that the public shareholders are likely to pay in the offering and the net book value of the shares.

Use of Proceeds, page 38

3. Please state the respective amounts for the estimated expenses and underwriting discounts and commissions in arriving at the estimated net proceeds of the offering.

Eric J. Rey Arcadia Biosciences, Inc. May 5, 2015 Page2

Capitalization, page 39

4. Please revise the pro forma information here and elsewhere in the filing as appropriate to reflect the debt activity subsequent to December 31, 2014, as disclosed under Liquidity and Capital Resources and note 16 of the notes to the financial statements, including all related impacts on cash.

Index to Consolidated Financial Statements, page F-1

5. Please note the requirement pursuant to Rule 8-08 of Regulation S-X to update the financial statements included in the filing should the filing not become effective on or before May 14, 2015.

You may contact Stephen Kim at (202) 551-3291 or Doug Jones at (202) 551-3309 if you have questions regarding comments on the financial statements and related matters. Please contact Julie Griffith at (202) 551-3267 or me at (202) 551-3611 with any other questions.

Sincerely,

/s/ A.N. Parker

Anne Nguyen Parker Assistant Director

Cc: Karen Dempsey
Orrick, Herrington & Sutcliffe LLP