

**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**  
**WASHINGTON, DC 20549**

**FORM 10-Q**

(Mark One)

**QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended **September 30, 2021**

OR

**TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission File Number: **001-37383**

**Arcadia Biosciences, Inc.**

(Exact Name of Registrant as Specified in its Charter)

**Delaware**

(State or other jurisdiction of  
incorporation or organization)

**202 Cousteau Place, Suite 105**

**Davis, CA**

(Address of Principal Executive Offices)

**81-0571538**

(I.R.S. Employer  
Identification No.)

**95618**

(Zip Code)

**Registrant's telephone number, including area code: (530) 756-7077**

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common	RKDA	NASDAQ CAPITAL MARKET

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes  No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes  No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, 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 Exchange Act.

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
Emerging growth company	<input type="checkbox"/>		

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes  No

As of November 8, 2021, the registrant had 22,184,235 shares of common stock outstanding, \$0.001 par value per share.

Arcadia Biosciences, Inc.  
FORM 10-Q FOR THE QUARTER ENDED September 30, 2021

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**ITEM 1. CONDENSED CONSOLIDATED FINANCIAL STATEMENTS**

**Arcadia Biosciences, Inc.**  
**Condensed Consolidated Balance Sheets**  
**(Unaudited)**  
*(In thousands, except share data)*

	September 30, 2021	December 31, 2020
<b>Assets</b>		
Current assets:		
Cash and cash equivalents	\$ 35,526	\$ 14,042
Short-term investments	—	11,625
Accounts receivable	1,453	1,406
Inventories, net — current	5,447	3,812
Prepaid expenses and other current assets	1,408	811
Total current assets	43,834	31,696
Restricted cash	—	2,001
Property and equipment, net	2,634	3,539
Right of use asset	3,486	5,826
Inventories, net — noncurrent	3,539	3,485
Goodwill	1,648	408
Intangible assets, net	3,905	370
Other noncurrent assets	182	23
Total assets	\$ 59,228	\$ 47,348
<b>Liabilities and stockholders' equity</b>		
Current liabilities:		
Accounts payable and accrued expenses	\$ 5,004	\$ 4,105
Amounts due to related parties	51	80
Debt — current	36	1,141
Unearned revenue — current	—	8
Operating lease liability — current	1,134	717
Other current liabilities	264	263
Total current liabilities	6,489	6,314
Debt — noncurrent	78	2,105
Operating lease liability — noncurrent	2,562	5,389
Common stock warrant liabilities	7,736	2,708
Other noncurrent liabilities	2,140	2,280
Total liabilities	19,005	18,796
Commitments and contingencies (Note 17)		
Stockholders' equity:		
Common stock, \$0.001 par value—150,000,000 shares authorized as of September 30, 2021 and December 31, 2020; 22,184,235 and 13,450,861 shares issued and outstanding as of September 30, 2021 and December 31, 2020, respectively	63	54
Additional paid-in capital	257,009	239,496
Accumulated other comprehensive income	(24)	—
Accumulated deficit	(217,203)	(211,825)
Total Arcadia Biosciences stockholders' equity	39,845	27,725
Non-controlling interest	378	827
Total stockholders' equity	40,223	28,552
Total liabilities and stockholders' equity	\$ 59,228	\$ 47,348

See accompanying notes to the unaudited condensed consolidated financial statements.

Arcadia Biosciences, Inc.

Condensed Consolidated Statements of Operations and Comprehensive Loss

(Unaudited)

(In thousands, except share and per share data)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
<b>Revenues:</b>				
Product	\$ 2,324	\$ 245	\$ 4,506	\$ 630
License	17	10	17	110
Royalty	35	16	86	58
Contract research and government grants	—	43	—	106
Total revenues	2,376	314	4,609	904
<b>Operating expenses:</b>				
Cost of product revenues	2,511	1,841	4,954	3,463
Research and development	1,038	1,762	3,328	5,999
Impairment of intangible assets	120	—	120	—
Change in fair value of contingent consideration	—	—	(140)	—
Write-down of fixed assets	1,108	—	1,319	—
Selling, general and administrative	6,312	4,292	16,750	11,689
Total operating expenses	11,089	7,895	26,331	21,151
Loss from operations	(8,713)	(7,581)	(21,722)	(20,247)
Interest expense	(15)	(23)	(23)	(32)
Other (expense) income, net	(7)	—	10,214	83
Change in fair value of common stock warrant liabilities	4,777	1,130	4,601	6,212
Loss on extinguishment of warrant liability	—	(682)	—	(635)
Gain on extinguishment of PPP loan	1,123	—	1,123	—
Issuance and offering costs	—	—	(769)	—
Net loss before income taxes	(2,835)	(7,156)	(6,576)	(14,619)
Income tax provision	(1)	(9)	(1)	(15)
Net loss	(2,836)	(7,165)	(6,577)	(14,634)
Net loss attributable to non-controlling interest	(661)	(774)	(1,199)	(1,081)
Net loss attributable to common stockholders	\$ (2,175)	\$ (6,391)	\$ (5,378)	\$ (13,553)
<b>Net loss per share attributable to common stockholders:</b>				
Basic and diluted	\$ (0.10)	\$ (0.60)	\$ (0.26)	\$ (1.42)
<b>Weighted-average number of shares used in per share calculations:</b>				
Basic and diluted	22,177,423	10,719,618	20,976,105	9,570,259
<b>Other comprehensive loss, net of tax</b>				
Unrealized losses on investment securities	—	—	—	(1)
Foreign currency translation adjustment	(12)	—	(24)	—
Other comprehensive loss	(12)	—	(24)	(1)
Comprehensive loss attributable to common stockholders	\$ (2,187)	\$ (6,391)	\$ (5,402)	\$ (13,554)

See accompanying notes to the unaudited condensed consolidated financial statements.

**Arcadia Biosciences, Inc.**  
**Condensed Consolidated Statements of Stockholders' Equity**  
**(Unaudited)**

*(In thousands, except share data)*

	Common Stock		Additional Paid-In Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Non- Controlling Interest	Total Stockholders' Equity
	Shares	Amount					
Balance at December 31, 2020	13,450,861	\$ 54	\$ 239,496	\$ (211,825)	\$ —	\$ 827	\$ 28,552
Issuance of shares related to the January 2021 PIPE	7,876,784	8	15,508	—	—	—	15,516
Offering costs related to the January 2021 PIPE	—	—	(2,084)	—	—	—	(2,084)
Issuance of placement agent warrants related to issuance of January 2021 PIPE	—	—	942	—	—	—	942
Issuance of shares related to employee stock purchase plan	8,604	—	21	—	—	—	21
Non-controlling interest capital contribution	—	—	—	—	—	750	750
Stock-based compensation	—	—	325	—	—	—	325
Net income	—	—	—	2,058	—	(377)	1,681
Balance at March 31, 2021	21,336,249	\$ 62	\$ 254,208	\$ (209,767)	\$ —	\$ 1,200	\$ 45,704
Issuance of shares at closing of Arcadia Wellness acquisition	827,401	1	2,052	—	—	—	2,053
Foreign currency translation adjustment	—	—	—	—	(12)	—	(12)
Stock-based compensation	—	—	356	—	—	—	356
Net loss	—	—	—	(5,261)	—	(161)	(5,422)
Balance at June 30, 2021	22,163,650	\$ 63	\$ 256,616	\$ (215,028)	\$ (12)	\$ 1,039	\$ 42,678
Issuance of shares related to employee stock purchase plan	6,585	—	17	—	—	—	17
Foreign currency translation adjustment	—	—	—	—	(12)	—	(12)
Stock-based compensation	—	—	354	—	—	—	354
Issuance of shares related to exercise of Service and Performance Warrants	14,000	—	22	—	—	—	22
Net loss	—	—	—	(2,175)	—	(661)	(2,836)
Balance at September 30, 2021	22,184,235	\$ 63	\$ 257,009	\$ (217,203)	\$ (24)	\$ 378	\$ 40,223

  

	Common Stock		Additional Paid-In Capital	Accumulated Deficit	Accumulated Other Comprehensive (Loss) Income	Non- Controlling Interest	Total Stockholders' Equity
	Shares	Amount					
Balance at December 31, 2019	8,646,149	\$ 49	\$ 214,826	\$ (207,171)	\$ 1	\$ 621	\$ 8,326
Issuance of shares related to employee stock purchase plan	7,946	—	14	—	—	—	14
Stock-based compensation	—	—	772	—	—	—	772
Unrealized losses on available-for-sale securities	—	—	—	—	(1)	—	(1)
Non-controlling interest contributions	—	—	—	—	—	689	689
Net income (loss)	—	—	—	2,525	—	(102)	2,423
Balance at March 31, 2020	8,654,095	\$ 49	\$ 215,612	\$ (204,646)	\$ —	\$ 1,208	\$ 12,223
Issuance of shares related to exercise of June 2018 Warrants	1,392,345	1	5,568	—	—	—	5,569
Issuance of investor warrants related to May 2020 Warrant Transaction	—	—	4,415	—	—	—	4,415
Issuance of placement agent warrants related to issuance of May 2020 Warrants	—	—	215	—	—	—	215
Stock-based compensation	—	—	595	—	—	—	595
Non-controlling interest contributions	—	—	—	—	—	493	493
Net loss	—	—	—	(9,688)	—	(205)	(9,893)
Balance at June 30, 2020	10,046,440	\$ 50	\$ 226,405	\$ (214,334)	\$ —	\$ 1,496	\$ 13,617
Issuance of shares related to exercise of March 2018 PIPE	641,416	1	2,443	—	—	—	2,444
Issuance of investor warrants related to July 2020 Warrant Transaction	—	—	2,059	—	—	—	2,059
Issuance of placement agent warrants related to issuance of July 2020 Warrants	—	—	101	—	—	—	101
Issuance of shares related to employee stock purchase plan	11,721	—	37	—	—	—	37
Stock-based compensation	—	—	477	—	—	—	477
Shares of common stock issued at closing of ISI transaction	132,626	—	432	—	—	—	432
Net loss	—	—	—	(6,391)	—	(774)	(7,165)
Balance at September 30, 2020	10,832,203	\$ 51	\$ 231,954	\$ (220,725)	\$ —	\$ 722	\$ 12,002

See accompanying notes to the unaudited condensed consolidated financial statements.

**Arcadia Biosciences, Inc.**  
**Condensed Consolidated Statements of Cash Flows**  
(Unaudited)  
(In thousands)

	Nine Months Ended September 30,	
	2021	2020
<b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>		
Net loss	\$ (6,577)	\$ (14,634)
Adjustments to reconcile net loss to cash used in operating activities:		
Change in fair value of common stock warrant liabilities	(4,601)	(6,212)
Loss (gain) on extinguishment of warrant liability	—	635
Change in fair value of contingent consideration	(140)	—
Issuance and offering costs	769	—
Depreciation	737	395
Amortization of intangible assets	99	—
Lease amortization	914	745
Impairment of intangible assets	120	—
Loss (gain) on disposal of fixed assets	17	(8)
Net amortization of investment premium	—	(44)
Stock-based compensation	1,035	1,844
Realized gain on corporate securities	(10,222)	—
Write-down of fixed assets	1,319	—
Write-down of inventory and prepaid production costs	1,802	3,063
Gain on extinguishment of PPP loan	(1,123)	—
Changes in operating assets and liabilities:		
Accounts receivable	(47)	229
Inventories	(2,651)	(9,609)
Prepaid expenses and other current assets	(452)	(1,157)
Other noncurrent assets	(159)	(15)
Accounts payable and accrued expenses	972	2,026
Amounts due to related parties	(29)	(11)
Unearned revenue	(8)	(42)
Other current liabilities	1	(43)
Operating lease payments	(984)	(629)
Net cash used in operating activities	<u>(19,208)</u>	<u>(23,467)</u>
<b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>		
Proceeds from sale of property and equipment	2	8
Purchases of property and equipment	(919)	(2,038)
Acquisitions, net of cash acquired	(4,250)	(500)
Purchases of investments	—	(1,292)
Proceeds from sales and maturities of investments	21,845	18,250
Net cash provided by investing activities	<u>16,678</u>	<u>14,428</u>
<b>CASH FLOWS FROM FINANCING ACTIVITIES:</b>		
Proceeds from issuance of common stock and warrants from January 2021 PIPE securities purchase agreement	25,147	—
Payments of offering costs relating to January 2021 PIPE securities purchase agreement	(1,912)	—
Proceeds from the exercise of warrants	22	9,372
Proceeds from borrowings	—	3,108
Payment of transaction costs relating to extinguishment of warrant liability	—	(863)
Principal payments on debt	(2,032)	(26)
Proceeds from ESPP purchases	39	51
Capital contributions received from non-controlling interest	750	1,182
Net cash provided by financing activities	<u>22,014</u>	<u>12,824</u>
Effects of foreign currency translation on cash and cash equivalents	(1)	—
Net increase in cash, cash equivalents and restricted cash	19,483	3,785
Cash, cash equivalents and restricted cash — beginning of period	16,043	8,417
Cash, cash equivalents and restricted cash — end of period	<u>\$ 35,526</u>	<u>\$ 12,202</u>
<b>SUPPLEMENTAL DISCLOSURES OF CASH FLOW INFORMATION:</b>		
Cash paid for income taxes	<u>\$ 1</u>	<u>\$ 1</u>
Cash paid for interest	<u>\$ 25</u>	<u>\$ 7</u>
<b>NONCASH INVESTING AND FINANCING ACTIVITIES:</b>		
Fixed assets acquired with notes payable	<u>\$ —</u>	<u>\$ 37</u>
Common stock warrants issued to placement agent and included in offering costs related to May 2020 Warrant Transaction	<u>\$ —</u>	<u>\$ 215</u>
Common stock warrants issued to placement agent and included in offering costs related to July 2020 Warrant Transaction	<u>\$ —</u>	<u>\$ 101</u>
Shares of common stock issued at closing of Arcadia Wellness transaction	<u>\$ 2,053</u>	<u>\$ —</u>
Common stock warrants issued to placement agent and included in offering costs related to January 2021 PIPE securities purchase agreement	<u>\$ 942</u>	<u>\$ —</u>
Right of use assets obtained in exchange for new operating lease liabilities	<u>\$ 1,662</u>	<u>\$ 4,157</u>
Purchases of fixed assets included in accounts payable and accrued expenses	<u>\$ —</u>	<u>\$ —</u>

See accompanying notes to the unaudited condensed consolidated financial statements.

**Arcadia Biosciences, Inc.**  
**Notes to Condensed Consolidated Financial Statements**  
**(Unaudited)**

**1. Description of Business and Basis of Presentation**

***Organization***

Arcadia Biosciences, Inc. (the “Company”), was incorporated in Arizona in 2002 and maintains its headquarters in Davis, California, with additional facilities in Phoenix, Arizona, American Falls, Idaho, Molokai, Hawaii, Albany, Oregon, Chatsworth, California, and Barcelona, Spain. The Company was reincorporated in Delaware in March 2015.

The Company is a producer and marketer of innovative, plant-based health and wellness products. Its history as a leader in science-based approaches to developing high-value crop improvements designed to ameliorate farm economics by enhancing the performance of crops in the field, as well as their value as food ingredients and health and wellness products, has laid the foundation for its path forward. The Company used advanced breeding techniques to develop these proprietary innovations which are now being commercialized through the sales of seed and grain, as well as food ingredients and products. The recent acquisition of the assets of Lief Holdings, LLC (“Lief”), EKO Holdings, LLC (“Eko”) and Live Zola, LLC (“Zola”) adds bath and body care products, as well as coconut water, to the Company’s portfolio.

In May 2021, the Company’s wholly owned subsidiary Arcadia Wellness, LLC (“Arcadia Wellness” or “AW”, see Note 7), acquired the businesses of Eko, Lief, and Zola. The acquisition includes consumer CBD brands like Soul Spring™, a CBD-infused botanical therapy brand in the natural category, Saavy Naturals™, a line of all-natural body care products and Provault™, a CBD-infused sports performance formula made with natural ingredients, providing effective support and recovery for athletes. Also included in the purchase is Zola, a coconut water sourced exclusively with sustainably grown coconuts from Thailand. Key personnel have joined Arcadia Wellness.

In April 2021, the Company’s wholly owned subsidiary Arcadia SPA, S.L. (“Arcadia Spain” or “ASPA”), acquired the assets of Agrasys S.A. (“Agrasys”), a food ingredients company based in Barcelona, Spain. The physical and intellectual property assets enable Arcadia to commercialize Tritordeum, a proprietary cereal grain that is a combination of durum wheat and wild barley, resulting in a nutritious grain high in fiber, protein and lutein. The Company completed the transaction through Arcadia SPA, S.L., a newly formed company based in Spain, and key Agrasys personnel have joined Arcadia Spain to operate the Tritordeum business in Europe.

On August 9, 2019, the Company entered into a joint venture agreement with Legacy Ventures Hawaii, LLC (“Legacy,” see Note 9) to grow, extract, and sell hemp products. The partnership Archipelago Ventures Hawaii, LLC (“Archipelago”), combines the Company’s extensive genetic expertise and resources with Legacy’s experience in hemp extraction and sales. During the three months ended September 30, 2021, Arcadia and Legacy mutually agreed to wind down the cultivation activities of Archipelago, due to the saturated hemp market.

***Basis of Presentation and Principles of Consolidation***

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States (“GAAP”) for interim financial statements and are in the form prescribed by the Securities and Exchange Commission (the “SEC”) in instructions to Form 10-Q and Rule 10-01 of Regulation S-X. In the opinion of management, the accompanying condensed consolidated financial statements reflect all adjustments, consisting of normal recurring adjustments, considered necessary for a fair statement of the Company’s financial position, results of operations and cash flows for the periods indicated. All material intercompany accounts and transactions have been eliminated in consolidation. The accompanying unaudited condensed consolidated financial statements include the accounts of the Company, Arcadia Wellness, Arcadia Spain, and Archipelago.

The Company uses a qualitative approach in assessing the consolidation requirement for variable interest entities (“VIEs”). This approach focuses on determining whether the Company has the power to direct the activities of the VIE that most significantly affect the VIE’s economic performance and whether the Company has the obligation to absorb losses, or the right to receive benefits, that could potentially be significant to the VIE.

For all periods presented, the Company has determined that it is the primary beneficiary of Archipelago, a joint venture, as it has a controlling interest in Archipelago. Accordingly, the Company consolidates Archipelago in the condensed consolidated financial statements after eliminating intercompany transactions. For consolidated joint ventures, the non-controlling partner's share of the assets, liabilities and operations of the joint venture is included in non-controlling interests as equity of the Company. The non-controlling partner's interest is generally computed as the joint venture partner's ownership percentage of Archipelago. Net loss attributable to non-controlling interest of \$661,000 and \$1,199,000 is recorded as an adjustment to net loss to arrive at net loss attributable to common stockholders for the three and nine months ended September 30, 2021, respectively. The non-controlling partner's equity interests are presented as non-controlling interests on the condensed consolidated balance sheets as of September 30, 2021.

The functional currency of the foreign subsidiary Arcadia Spain is its local currency (i.e., the Euro). Accordingly, period-end exchange rates are applied to translate its assets and liabilities and average transaction exchange rates to translate its revenues, expenses, gains, and losses into U.S. dollars. Gains and losses arising from the remeasurement of assets and liabilities were \$12,000 and \$24,000 for the three and nine months ended September 30, 2021, and \$0 for the three and nine months ended September 30, 2020.

The information included in these condensed consolidated financial statements and notes thereto should be read in conjunction with Management's Discussion and Analysis of Financial Condition and Results of Operations included herein and Management's Discussion and Analysis of Financial Condition and Results of Operations and the condensed consolidated financial statements and notes thereto for the fiscal year ended December 31, 2020 included in the Company's Annual Report on Form 10-K, filed with the SEC on March 31, 2021.

### **Liquidity, Capital Resources, and Going Concern**

The accompanying condensed consolidated financial statements have been prepared on a going concern basis, which contemplates the realization of assets and the satisfaction of liabilities during the normal course of business. Since inception, the Company has financed its operations primarily through equity and debt financings. As of September 30, 2021, the Company had an accumulated deficit of \$217.2 million, and cash and cash equivalents of \$35.5 million. For the nine months ended September 30, 2021, the Company had a net loss of \$6.6 million and net cash used in operations of \$19.2 million. For the twelve months ended December 31, 2020, the Company had net losses of \$6.0 million and net cash used in operations of \$30.2 million.

With cash and cash equivalents of \$35.5 million as of September 30, 2021, the Company believes that its existing cash and cash equivalents will be sufficient to meet its anticipated cash requirements for at least through November 2022.

As is disclosed in Notes 12 and 13, on January 25, 2021, the Company entered into a securities purchase agreement with certain institutional and accredited investors relating to the issuance and sale in a private placement of shares of Company common stock and warrants for an aggregate of \$25.1 million, exclusive of any related transaction fees.

The Company sold all of the 1,875,000 shares of Bioceres ("BIOX") stock acquired in the November 2020 Bioceres transaction. All of the shares of BIOX were sold in June 2021 and generated a one-time impact on liquidity in the amount of \$22.2 million of gross proceeds.

The Company may seek to raise additional funds through debt or equity financings. The Company may also consider entering into additional partner arrangements. The sale of additional equity would result in dilution to the Company's stockholders. The incurrence of debt would result in debt service obligations, and the instruments governing such debt could provide for additional operating and financing covenants that would restrict operations. If the Company does require additional funds and is unable to secure adequate additional funding at terms agreeable to the Company, the Company may be forced to reduce spending, extend payment terms with suppliers, liquidate assets, or suspend or curtail planned development programs. Any of these actions could materially harm the business, results of operations and financial condition.

## **2. Recent Accounting Pronouncements**

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*. Additionally, the FASB issued ASU No. 2019-04, *Codification Improvements to Topic 326* in April 2019 and ASU 2019-05, *Financial Instruments – Credit Losses (Topic 326) – Targeted Transition Relief* in May 2019. The amendments affect loans, debt securities, trade receivables, net investments in leases, off-balance-sheet credit exposures, reinsurance receivables, and any other financial assets not excluded from the scope that have the contractual right to receive cash. In November 2019, the FASB issued ASU No. 2019-10, which defers the effective date of ASU No. 2016-13 for smaller reporting companies to fiscal years beginning after December 15, 2022, including interim periods within those fiscal years. The Company is currently evaluating the impact of the adoption of ASU No. 2016-13 on the consolidated financial statements.

In December 2019, the FASB issued ASU No. 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes*. The amendments simplify the accounting for income taxes by removing certain exceptions to the general principles in Topic 740 and clarifying other areas of existing guidance. The amendments are effective for all entities for fiscal years beginning after



December 15, 2020. The Company adopted ASU No. 2019-12 on January 1, 2021 with an immaterial impact on the Company's disclosures.

In August 2020, the FASB issued ASU No. 2020-06, *Debt—Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging—Contracts in Entity's Own Equity (Subtopic 815-40)*. The Board is issuing this Update to address issues identified as a result of the complexity associated with applying GAAP for certain financial instruments with characteristics of liabilities and equity. In addressing the complexity, the Board focused on amending the guidance on convertible instruments and the guidance on the derivatives scope exception for contracts in an entity's own equity. The amendments in this Update are effective for public business entities that meet the definition of a smaller reporting company, as defined by the SEC, for fiscal years beginning after December 15, 2023, including interim periods within those fiscal years. The Company is currently evaluating the impact of the adoption of ASU No. 2020-06 on the consolidated financial statements.

In May 2021, the FASB issued ASU No. 2021-04, *Earnings Per Share (Topic 260), Debt—Modifications and Extinguishments (Subtopic 470-50), Compensation—Stock Compensation (Topic 718), and Derivatives and Hedging—Contracts in Entity's Own Equity (Subtopic 815-40): Issuer's Accounting for Certain Modifications or Exchanges of Freestanding Equity-Classified Written Call Options*. The amendments in this Update clarify and reduce diversity in an issuer's accounting for modifications or exchanges of freestanding equity-classified written call options (for example, warrants) that remain equity classified after modification or exchange. The amendments in this Update affect all entities that issue freestanding written call options that are classified in equity. The amendments in this Update are effective for all entities for fiscal years beginning after December 15, 2021, including interim periods within those fiscal years. The Company is currently evaluating the impact of the adoption of ASU No. 2021-04 on the consolidated financial statements.

### 3. Inventory

Inventory costs are tracked on a lot-identified basis and are included as cost of product revenues when sold. Inventories are stated at the lower of cost or net realizable value. The Company makes adjustments to inventory when conditions indicate that the net realizable value may be less than cost due to physical deterioration, obsolescence, changes in price levels, or other factors. Additional adjustments to inventory are made for excess and slow-moving inventory on hand that is not expected to be sold within a reasonable timeframe to reduce the carrying amount to its estimated net realizable value. The write-downs to inventory are included in cost of product revenues and are based upon estimates about future demand from the Company's customers and distributors and market conditions. The Company recorded write-downs of wheat and hemp seed inventories of \$818,000 and \$1.8 million during the three and nine months ended September 30, 2021, respectively. The Company recorded write-downs of wheat inventories, hemp seed inventories, and prepaid production costs of \$1.5 million and \$3.1 million for the three and nine months ended September 30, 2020, respectively. If there are significant changes in demand and market conditions, substantial future write-downs of inventory may be required, which would materially increase the Company's expenses in the period the write down is taken and materially affect the Company's operating results.

Inventories, net consist of the following (in thousands):

	September 30, 2021	December 31, 2020
Raw materials	\$ 2,465	\$ 966
Goods in process	982	1,921
Finished goods	5,539	4,410
Inventories	<u>\$ 8,986</u>	<u>\$ 7,297</u>

### 4. Property and Equipment, Net

Property and equipment, net consisted of the following (in thousands):

	September 30, 2021	December 31, 2020
Laboratory equipment	\$ 2,771	\$ 2,951
Software and computer equipment	605	591
Machinery and equipment	1,805	2,046
Furniture and fixtures	213	181
Vehicles	478	428
Leasehold improvements	2,263	2,229
Property and equipment, gross	8,135	8,426
Less accumulated depreciation and amortization	(5,501)	(4,887)
Property and equipment, net	<u>\$ 2,634</u>	<u>\$ 3,539</u>

Depreciation expense was \$737,000 and \$395,000 for the nine months ended September 30, 2021 and 2020, respectively.

As of September 30, 2021, and December 31, 2020, respectively, there was \$312,000 and \$239,000 of construction in progress included in property and equipment that had not been placed into service and was not subject to depreciation.

During the three months ended March 31, 2021, the State of Hawaii's Senate decided not to vote on a CBD processing bill in 2021, hence the earliest vote could happen in 2022, and its effectiveness into law will most likely be pushed to 2023. During the three months ended September 30, 2021, Arcadia and Legacy mutually agreed to wind down the cultivation activities of Archipelago, due to the saturated hemp market. As a result of the regulatory challenges and unfavorable market conditions, we assessed Archipelago's fixed assets for impairment through an asset recoverability test, and recorded write-downs in the amount of \$1.1 million and \$1.3 million for the three and nine months ended September 30, 2021, calculating the fair value using prices for similar assets.

## 5. Investments and Fair Value Instruments

### Investments

The investments are carried at fair value, based on quoted market prices or other readily available market information. Unrealized and realized gains and losses are recognized as other income in the condensed consolidated statements of operations and comprehensive loss.

The Company classified its investments in corporate securities of BIOX as short-term investments. The Company recorded realized gains of \$10.2 million for the nine months ended September 30, 2021, associated with the sale of all corporate securities in other income, net, in the condensed consolidated statements of operations and comprehensive loss.

The following tables summarize the amortized cost and fair value of the investment securities portfolio at September 30, 2021 and December 31, 2020.

<i>(Dollars in thousands)</i>	Amortized Cost	Unrealized Gains	Unrealized Losses	Estimated Fair Value
<b>September 30, 2021</b>				
Cash equivalents:				
Money market funds	32,440	—	—	32,440
Total Assets at Fair Value	<u>\$ 32,440</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 32,440</u>

<i>(Dollars in thousands)</i>	Amortized Cost	Unrealized Gains	Unrealized Losses	Estimated Fair Value
<b>December 31, 2020</b>				
Cash equivalents:				
Money market funds	\$ 12,082	\$ —	\$ —	\$ 12,082
Short-term investments:				
Corporate securities	10,969	656	—	11,625
Total Assets at Fair Value	<u>\$ 23,051</u>	<u>\$ 656</u>	<u>\$ —</u>	<u>\$ 23,707</u>

The Company did not have any investment categories that were in a continuous unrealized loss position for more than twelve months as of September 30, 2021.

### Fair Value Measurement

The fair value of the investment securities at September 30, 2021 were as follows:

<i>(Dollars in thousands)</i>	Fair Value Measurements at September 30, 2021			
	Level 1	Level 2	Level 3	Total
<b>Assets at Fair Value</b>				
Cash equivalents:				
Money market funds	32,440	—	—	32,440
Total Assets at Fair Value	<u>\$ 32,440</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 32,440</u>

The fair value of the investment securities at December 31, 2020 were as follows:

(Dollars in thousands)	Fair Value Measurements at December 31, 2020			
	Level 1	Level 2	Level 3	Total
<b>Assets at Fair Value</b>				
Cash equivalents:				
Money market funds	\$ 12,082	\$ —	\$ —	\$ 12,082
Short-term investments:				
Corporate securities	11,625	—	—	11,625
<b>Total Assets at Fair Value</b>	<b>\$ 23,707</b>	<b>\$ —</b>	<b>\$ —</b>	<b>\$ 23,707</b>

The Company uses the market approach technique to value its financial instruments and there were no changes in valuation techniques during 2021 or 2020. The Company's financial instruments consist primarily of cash and cash equivalents, accounts receivable, accounts payable, accrued liabilities, and notes payable. For accounts receivable, accounts payable, accrued liabilities, and notes payable the carrying amounts of these financial instruments as of September 30, 2021 and December 31, 2020 were considered representative of their fair values due to their short term to maturity or repayment. Cash equivalents are carried at cost, which approximates their fair value.

The Company's Level 3 liabilities consist of a contingent liability resulting from the Anawah acquisition, as described in Note 17, a contingent liability resulting from the Industrial Seed Innovations acquisition, as described in Note 6, and common stock warrant liabilities related to the March 2018, the June 2019, the September 2019, and the January 2021 Offerings described in Note 13.

The contingent liability related to the Anawah acquisition was measured and recorded on a recurring basis as of September 30, 2021 and December 31, 2020, using unobservable inputs, namely the Company's ability and intent to pursue certain specific products developed using technology acquired in the purchase. A significant deviation in the Company's ability and/or intent to pursue the technology acquired in the purchase could result in a significantly lower (higher) fair value measurement. The contingent liability related to the Industrial Seed Innovations ("ISI") acquisition was measured and recorded on a recurring basis as of September 30, 2021 and December 31, 2020, using unobservable inputs, namely ISI's forecasted revenue. A significant deviation in ISI's forecasted revenue could result in a significantly lower (higher) fair value measurement.

The warrant liabilities were measured and recorded on a recurring basis using the Black-Scholes Model with the following assumptions at September 30, 2021 and December 31, 2020:

	January 2021 Warrants		September 2019 Warrants		June 2019 Warrants		March 2018 Warrants	
	September 30, 2021	December 31, 2020	September 30, 2021	December 31, 2020	September 30, 2021	December 31, 2020	September 30, 2021	December 31, 2020
Remaining term (in years)	4.83	—	3.45	4.20	3.21	3.96	1.47	2.22
Expected volatility	126.9 %	—	109.3 %	135.0 %	108.4 %	135.0 %	81.0 %	130.0 %
Risk-free interest rate	0.9 %	—	0.6 %	0.3 %	0.6 %	0.3 %	0.2 %	0.1 %
Expected dividend yield	0 %	—	0 %	0 %	0 %	0 %	0 %	0 %

The significant input used in the fair value measurement of the Company's Level 3 warrant liabilities is volatility. A significant increase (decrease) in volatility could result in a significantly higher (lower) fair value measurement.

The following table sets forth the establishment of the Company's Level 3 liabilities, as well as a summary of the changes in the fair value and other adjustments (in thousands):

(Dollars in thousands)	Common Stock Warrant Liability - March 2018 Purchase Agreement	Common Stock Warrant Liability - June 2019 Offering	Common Stock Warrant Liability - September 2019 Offering	Common Stock Warrant Liability - January 2021 Offering	Contingent Liabilities	Total
Balance as of December 31, 2020	\$ 662	\$ 832	\$ 1,214	\$ -	\$ 2,280	\$ 4,987
Initial recognition	—	—	—	9,631	—	9,631
Change in fair value and other adjustments	(611)	(368)	(570)	(3,054)	(140)	(4,742)
Balance as of September 30, 2021	\$ 51	\$ 464	\$ 644	\$ 6,577	\$ 2,140	\$ 9,876

## 6. Industrial Seed Innovations Acquisition

In August 2020, the Company acquired by merger Industrial Seed Innovations (“ISI”), an Oregon-based industrial hemp breeding and seed company. As a result of the acquisition, the Company acquired ISI’s commercial and genetic assets, including seed varieties, germplasm library and intellectual property. ISI’s Rogue and Umpqua seed varieties are now part of Arcadia’s portfolio, alongside the Company’s GoodHemp line of genetically superior hemp seeds, transplants, and extracts. The acquisition has significantly broadened and accelerated commercialization of Arcadia’s hemp-related breeding platform, as well as established a breeding research and development facility in the Pacific Northwest, a key production area in the hemp industry.

The acquisition was recorded as a business combination, in accordance with ASC Topic 805. The purchase price consideration for the acquisition totaled an estimated \$1,212,000, of which \$500,000 in cash and \$432,000, in the form of 132,626 shares of the Company’s common stock, was paid during the month of August 2020. The remaining amount of \$280,000 will be recognized in two annual installments, each of up to 132,626 shares of the Company’s common stock, subject to the achievement of revenue milestones in 2021 and 2022, and is recorded as a contingent liability at fair value in the condensed consolidated balance sheets as of September 30, 2021. The cash consideration paid for the acquisition was funded by cash on hand.

Acquisition costs are not included as components of consideration transferred and instead are accounted for as expenses in the period in which the costs are incurred. The Company incurred costs related to the ISI acquisition of approximately \$67,000 included in selling, general and administrative expenses in the Company’s condensed consolidated statements of operations and comprehensive loss for the quarter ended September 30, 2020.

The pro forma impact of the acquisition to the historical financial results was determined not to be significant.

The following table presents the allocation of the purchase price of ISI assets acquired, based on their fair values.

	<b>Purchase Price Allocation</b>
Inventory	\$ 511
Intangible assets, net	400
Goodwill	408
Deferred tax liability	(107)
<b>Total consideration allocated</b>	<b>\$ 1,212</b>

A deferred tax liability arising from the difference between book purchase price allocation and tax basis has been assessed in the amount of \$107,000. Deferred tax liabilities are required to be recorded in purchase accounting independently of whether the acquiror has a valuation allowance on its own net deferred tax assets. As a result, the combined entity now has additional deferred tax liabilities available to reduce the amount of valuation allowance necessary. Future reversals of existing taxable temporary differences are an objective source of future taxable income. Accordingly, the purchase accounting deferred tax liabilities enabled the realization of a portion of the existing deferred tax assets, thus allowing for a reduction in the valuation allowance. The reduction in the valuation allowance is not accounted for as part of the purchase accounting but is recognized in the condensed consolidated statements of operations and comprehensive loss as a discrete tax benefit in the income tax provision.

The former shareholders of ISI remain responsible for ISI's pre-acquisition liabilities. Pursuant to the definitive acquisition agreement, the Company entered into a lease agreement with ISI for the use of land, equipment, greenhouses and buildings. The lease was effective upon the execution of the definitive acquisition agreement and has a term of 3 years with the option to renew for three additional 3-year terms.

## 7. Arcadia Wellness Acquisition

On May 17, 2021, the Company's wholly owned subsidiary Arcadia Wellness, acquired the assets of Eko, Lief, and Zola. The acquisition included consumer CBD brands like Soul Spring™, the CBD-infused botanical therapy brand, Saavy Naturals™, a line of all-natural body care products and Provault™, a CBD-infused sports performance formula. Also included in the purchase was Zola, a coconut water sourced from Thailand. Key personnel have joined Arcadia Wellness.

The acquisition was recorded as a business combination, in accordance with ASC Topic 805. The purchase price consideration for the acquisition totaled an estimated \$6.1 million, of which \$4.0 million in cash and \$2.1 million in the form of 827,401 shares of the Company's common stock, was paid during the month of May 2021. The cash consideration paid for the acquisition was funded by cash on hand.

Acquisition costs are not included as components of consideration transferred and instead are accounted for as expenses in the period in which the costs are incurred. The Company incurred costs related to the Arcadia Wellness acquisition of approximately \$850,000 included in selling, general and administrative expenses in the Company's condensed consolidated statements of operations and comprehensive loss for the nine months ended September 30, 2021.

The Company performed a preliminary allocation of purchase price as of the acquisition date based on management's estimates of fair value. The Company believes its estimates and assumptions are reasonable; however, the initial estimated purchase price allocation is subject to change as the Company finalizes its determination relating to the valuation of the assets acquired, finalization of key assumptions, approaches and judgments with respect to intangible assets acquired. Accordingly, future adjustments may impact the initial estimated amount of goodwill and other allocated amounts represented in the table below. The final determination of the fair value of the assets acquired will be completed as soon as the necessary information is available, but no later than one year from the acquisition date.

The following table presents the preliminary allocation of the purchase price of the assets acquired, based on their fair values at September 30, 2021.

	<b>Purchase Price Allocation</b>
Inventory	\$ 840
Prepaid and other current assets	62
Fixed assets	308
Deposits	82
Customer list	360
Trade names and trademarks	2,900
Formulations	260
Goodwill	1,240
<b>Total consideration allocated</b>	<b>\$ 6,052</b>

The former shareholders of Eko, Lief, and Zola remain responsible for their pre-acquisition liabilities. Following the definitive acquisition agreement, the Company entered into a lease agreement for the use of offices, production equipment acquired, and storage warehouses. The lease was effective on May 17, 2021 and has a term of 3 years.

For the period from May 17 to September 30, 2021, the Company recognized approximately \$2.6 million of revenue and \$1.0 million of net loss relating to Arcadia Wellness, which included charges for the amortization of acquired intangible assets.

Acquired intangible assets of \$3.5 million include trade names and trademarks of \$2.9 million (indefinite useful life), customer list of \$360,000 (fifteen-year useful life) and formulations of \$260,000 (ten-year useful life).

The total weighted average amortization period for the acquired intangibles is 12.9 years.

The acquisition produced \$1.2 million of goodwill. The goodwill is attributable to a combination of Arcadia Wellness's expectation regarding a more meaningful engagement by the customers due to the scale of the combined Company, and other synergies. Goodwill will be tested for impairment at least annually (more frequently if certain indicators are present). Goodwill arising from the Arcadia Wellness acquisition is not deductible for tax purposes.

### Supplemental Pro-Forma Results of Operations (Unaudited)

The following unaudited pro-forma condensed consolidated results of operations for the three and nine months ended September 30, 2021 and 2020, have been prepared as if the acquisition of Arcadia Wellness had occurred on January 1, 2020 and includes adjustments for amortization of intangibles, and the addition to basic and diluted weighted average number of shares outstanding.

	For the three months ended September 30,		For the nine months ended September 30,	
	2021 (Pro forma)	2020 (Pro forma)	2021 (Pro forma)	2020 (Pro forma)
Total revenues	\$ 2,376	\$ 2,461	\$ 6,892	\$ 6,323
Net income (loss)	(2,836)	(7,523)	(8,296)	(15,601)
Net income (loss) attributable to common stockholders	\$ (2,175)	\$ (6,749)	\$ (7,109)	\$ (14,520)
Weighted average shares - Basic and diluted	22,177,423	11,547,018	21,286,380	10,397,659
Net income (loss) per share attributable to common stockholders:				
Basic and diluted	\$ (0.10)	\$ (0.58)	\$ (0.33)	\$ (1.40)

### 8. Intangible assets, net

The Company's intangible assets, net as of September 30, 2021, consist of the following:

	September 30, 2021			December 31, 2020		
	Gross Carrying Amount	Accumulated Amortization and Impairment (1)	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Amortized intangible assets						
Intellectual property	\$ 796	\$ 191	\$ 605	\$ 310	\$ 27	\$ 283
Customer lists	400	31	369	40	3	37
Total amortizable intangible assets	\$ 1,196	\$ 222	\$ 974	\$ 350	\$ 30	\$ 320
Indefinite-lived intangible assets						
Brands and trademarks	\$ 2,950	\$ 19	\$ 2,931	\$ 50	\$ —	\$ 50
Total intangible asset, net	\$ 4,146	\$ 241	\$ 3,905	\$ 400	\$ 30	\$ 370

(1) During the three months ended September 30, 2021, we estimated an overall decrease in our sales forecast for ISI seeds, related to the saturated hemp seed market. As a result, we performed a quantitative intangible assets recoverability test. We used an undiscounted cash flow approach to develop the estimated fair value of our acquired intellectual property, customer lists, brands and trademarks. As a result of this assessment, we recorded an impairment of intangible assets in the amount of \$120,000 in the condensed consolidated statements of operations and comprehensive loss for the three months ended September 30, 2021.

Intellectual property and customer lists will be amortized based on their useful lives ranging between 4 and 15 years. As of September 30, 2021, future amortization of intellectual property and customer lists is as follows:

<b>Year Ending December 31,</b>	
2021 (excluding the nine months ended September 30, 2021)	\$ 30
2022	122
2023	122
2024	122
2025	73
Thereafter	505
<b>Total</b>	<b>\$ 974</b>

## **9. Consolidated Joint Venture**

In 2019, the Company and Legacy Ventures Hawaii, LLC, a Nevada limited liability company (“Legacy”), formed Archipelago Ventures Hawaii, LLC, a Delaware limited liability company and entered into a Limited Liability Company Operating Agreement (the “Operating Agreement”). The Company and Legacy formed Archipelago to develop, extract and commercialize hemp-derived products from industrial hemp grown in Hawaii.

Pursuant to the Operating Agreement, a joint operating committee consisting of two individuals appointed by the Company and two individuals appointed by Legacy will manage Archipelago. As of September 30, 2021, the Company and Legacy hold 55.10% and 44.90% interests in Archipelago, respectively, and have made capital contributions to Archipelago of \$3,701,000 and \$3,016,000, respectively, as determined by the joint operating committee. The Operating Agreement includes indemnification rights, non-competition obligations, and certain rights and obligations in connection with the transfer of membership interests, including rights of first refusal.

The Company consolidates Archipelago in the condensed consolidated financial statements after eliminating intercompany transactions. Net loss attributable to non-controlling interest of \$661,000 and \$1,199,000 is recorded as an adjustment to net loss to arrive at net loss attributable to common stockholders for the three and nine months ended September 30, 2021, respectively. Legacy’s equity interests are presented as non-controlling interests on the condensed consolidated balance sheets. Refer to Note 1 for basis of presentation.

In October 2021, Arcadia and Legacy mutually agreed to wind down the cultivation activities of Archipelago, due to the weak hemp market demand and to the sufficient internal ingredient supply for the foreseeable future. See Note 4, for the related impairment of fixed assets.

## **10. Collaborative Arrangements**

In August 2017, the Company entered into a collaborative arrangement for the research, development and commercialization of an improved wheat quality trait in North America. This collaborative arrangement is a contractual agreement with Corteva AgriScience (“Corteva”) and involves a joint operating activity where both Arcadia and Corteva are active participants in the activities of the collaboration. Arcadia and Corteva participate in the research and development, and Arcadia has the primary responsibility for the intellectual property strategy while Corteva will generally lead the marketing and commercialization efforts. Both parties are exposed to significant risks and rewards of the collaboration and the agreement includes both cost sharing and profit sharing. The activities are performed with no guarantee of either technological or commercial success.

The Company accounts for research and development (“R&D”) costs in accordance ASC 730, *Research and Development*, which states R&D costs must be charged to expense as incurred. Accordingly, internal R&D costs are expensed as incurred. Third-party R&D costs are expensed when the contracted work has been performed or as milestone results are achieved.

## 11. Leases

### Operating Leases

As of September 30, 2021, the Company leases office space in Davis, CA, Phoenix, AZ, Molokai, HI, Chatsworth, CA, and Chesterfield, MO as well as additional buildings, land and equipment. Leases with an initial term of 12 months or less are not recorded on the balance sheet; the Company recognizes lease expense for these short-term leases on a straight-line basis. The Company subleases a portion of the Davis office lease to a third party. During the nine months ended September 30, 2021, the Company entered into two leases for office space in Chesterfield, MO, and for office space and production in Chatsworth, CA, both with a lease term of 35 months following the commencement date and no renewal option. The leases commenced in April and May of 2021, respectively. There are no other leases that have not yet commenced as of September 30, 2021.

Some leases (the Davis office, warehouse, greenhouses and a copy machine) include one or more options to renew, with renewal terms that can extend the lease term from one to six years. The exercise of lease renewal options is at the Company's sole discretion. During the three months ended March 31, 2020, the Company entered into a lease amendment that provided for additional office space in Davis, CA, and extended the term through April 2025, with one option to renew for an additional five-year term. The Company initially expected to exercise its options to renew, and in accordance with ASC 842 *Leases*, accounted for the amendment and expected renewal as a lease modification and remeasured the operating lease liability. During the three months ended September 30, 2021, the Company re-assessed its post-COVID long-term strategy regarding office spaces, and determined that the expectation to exercise its option to renew for an additional five-year term after April 2025 is no longer reasonable. In accordance with ASC 842, the Company accounted for the change that resulted in a decrease of \$2.8 million for the operating lease liability and of \$2.6 million for the right of use asset.

The Company's lease agreements do not contain any material variable lease payments, material residual value guarantees or material restrictive covenants. Leases consisted of the following (in thousands):

Leases	Classification	September 30, 2021	December 31, 2020
<b>Assets</b>			
Operating lease assets	Right of use asset	\$ 3,486	\$ 5,826
Total leased assets		\$ 3,486	\$ 5,826
<b>Liabilities</b>			
Current - Operating	Operating lease liability- current	\$ 1,134	\$ 717
Noncurrent - Operating	Operating lease liability- noncurrent	2,562	5,389
Total leased liabilities		\$ 3,696	\$ 6,106

Lease Cost	Classification	For the Three Months Ended September 30, 2021	For the Three Months Ended September 30, 2020	For the Nine Months Ended September 30, 2021	For the Nine Months Ended September 30, 2020
Operating lease cost	SG&A and R&D Expenses	\$ 319	\$ 261	\$ 955	\$ 745
Short term lease cost (1)	R&D Expenses	37	109	67	303
Short term lease cost	SG&A Expenses	14	—	29	3
Sublease income (2)	SG&A and R&D Expenses	(10)	(12)	(43)	(34)
Net lease cost		\$ 360	\$ 358	\$ 1,008	\$ 1,017

(1) Short term lease cost consists of field trial lease agreements with a lease term of 12 months or less.

(2) Sublease income is recorded as a reduction to lease expense.

Lease Term and Discount Rate	September 30, 2021	December 31, 2020
Weighted-average remaining lease term (years)	2.6	5.0
Weighted-average discount rate	6.4%	6.0%



## 12. Equity Financing

### Private Placements

In January 2021, the Company issued in a private placement offering (the “January 2021 Private Placement”) pursuant to a securities purchase agreement (“January 2021 Purchase Agreement”) (i) 7,876,784 shares of its common stock, and (ii) warrants to purchase up to 3,938,392 shares of common stock at an exercise price of \$3.13 per share (the “January 2021 Warrants”) and raised total gross proceeds of \$25.1 million. The January 2021 Warrants are exercisable at any time at the option of the holder and expire 5.5 years from the date of issuance. In connection with the January 2021 Private Placement, the Company granted to a placement agent warrants to purchase a total of 393,839 shares of Common Stock (the “January 2021 Placement Agent Warrants”) that have an exercise price per share equal to \$3.99 and a term of 5.5 years from the date of issuance.

The common stock warrants are classified as a liability within Level 3 due to a contingent cash payment feature. The Company utilized a Black-Scholes Merton model on January 28, 2021 with the following assumptions: volatility of 123.8 percent, stock price of \$2.88 and risk-free rate of 0.5%. The estimated fair value of the common stock warrant liability was subsequently remeasured at September 30, 2021 with the changes recorded on the Company’s condensed consolidated statements of operations and comprehensive loss. See Note 5.

The January 2021 Placement Agent Warrants were issued for services performed by the placement agent as part of the January 2021 Private Placement and were treated as offering costs. The value of the January 2021 Placement Agent Warrants was determined to be \$942,000 using the Black-Scholes Model with input assumptions including the Company’s stock price, expected life of the warrants, stock price volatility determined from the Company’s historical stock prices, and the risk-free interest rate for the term of the warrants. The Company incurred additional offering costs totaling \$1.9 million that consist of direct incremental legal, advisory, accounting and filing fees relating to the January 2021 Private Placement. The offering costs, inclusive of the January 2021 Placement Agent Warrants, totaled \$2.8 million and allocated to the common stock warrant liability and the common stock using their relative fair values. A total of \$769,000 was allocated to the common stock warrant liability and expensed and the remaining \$2.0 million was allocated to the common stock and offset to additional paid in capital.

In March 2018, the Company issued in a private placement offering (the “March 2018 Private Placement”) pursuant to a securities purchase agreement (“March 2018 Purchase Agreement”) (i) 300,752 shares of its common stock and (ii) warrants to purchase up to 300,752 shares of common stock at an initial exercise price equal to \$45.75 (the “March 2018 Warrants”) and raised total gross proceeds of \$10.0 million. The March 2018 Warrants are exercisable at any time at the option of the holder and expire five years from the date of issuance. In connection with the March 2018 Private Placement, the Company granted to a placement agent warrants to purchase a total of 15,038 shares of Common Stock (the “March 2018 Placement Agent Warrants”) that have an exercise price per share equal to \$41.5625 and a term of five years from the date of issuance.

The number of shares of common stock and the number and exercise price of the March 2018 Warrants issued in the March 2018 Private Placement were subject to adjustments as provided in the March 2018 Purchase Agreement. Following the adjustments as provided in the March 2018 Purchase Agreement, the number of shares issued to the purchasers was 1,201,634, the total number of shares issuable upon exercise of the March 2018 Warrants was 1,282,832 and the per share exercise price of the March 2018 Warrants was \$10.7258.

### Registered Direct Offerings

On May 11, 2018, the Company filed a shelf Registration Statement on Form S-3 with the SEC which was declared effective on June 8, 2018 (“Shelf Registration Statement”). This shelf registration process allows the Company to sell any combination of common stock, preferred stock, warrants and units consisting of such securities in one or more offerings from time to time having aggregate offering prices of up to \$50 million.

In June 2018, the Company entered into a securities purchase agreement (the “June 2018 Purchase Agreement”) pursuant to which it sold (i) 1,392,345 registered shares of its common stock pursuant to the Shelf Registration Statement and (ii) unregistered warrants to purchase 1,392,345 shares of its common stock (the “June 2018 Warrants”) in a private placement, for total gross proceeds of \$14.0 million (the “June 2018 Registered Direct Offering”). The June 2018 Registered Direct Offering closed on June 14, 2018. The June 2018 Warrants have an exercise price of \$9.94 per share, became exercisable upon issuance and expire 5.5 years after the date of issuance. In connection with the June 2018 Registered Direct Offering, the Company granted to a placement agent warrants to purchase a total of 69,617 shares of common stock (“June 2018 Placement Agent Warrants”) that have an exercise price per share equal to \$12.568 and a term of five years.

In June 2019, the Company entered into a securities purchase agreement (the “June 2019 Purchase Agreement”) pursuant to which it sold (i) 1,489,575 registered shares of its common stock pursuant to the Shelf Registration Statement and (ii) unregistered warrants to purchase 1,489,575 shares of its common stock (the “June 2019 Warrants”) in a private placement, for total gross proceeds of \$7.5 million (the “June 2019 Registered Direct Offering”). The June 2019 Registered Direct Offering closed on June 14, 2019. The June 2019 Warrants have an exercise price of \$5.00 per share, became exercisable upon issuance and expire 5.5 years after the date of

issuance. In connection with the June 2019 Registered Direct Offering, the Company granted to a placement agent warrants to purchase a total of 74,479 shares of common stock (“June 2019 Placement Agent Warrants”) that have an exercise price per share equal to \$6.2938 and a term of five years.

In September 2019, the Company entered into a securities purchase agreement (the “September 2019 Purchase Agreement”) pursuant to which it sold (i) 1,318,828 registered shares of its common stock pursuant to the Shelf Registration Statement and (ii) unregistered warrants to purchase 659,414 shares of its common stock (the “September 2019 Warrants”) in a private placement, for total gross proceeds of \$10.0 million (the “September 2019 Registered Direct Offering”). The September 2019 Registered Direct Offering closed on September 5, 2019. The September 2019 Warrants have an exercise price of \$7.52 per share, became exercisable upon issuance and expire 5.5 years after the date of issuance. In connection with the September 2019 Registered Direct Offering, the Company granted to a placement agent warrants to purchase a total of 65,942 shares of common stock (“September 2019 Placement Agent Warrants”) that have an exercise price per share equal to \$9.4781 and a term of five years.

In December 2020, the Company entered into a securities purchase agreement (the “December 2020 Purchase Agreement”) pursuant to which it sold (i) 2,618,658 registered shares of its common stock pursuant to the Shelf Registration Statement and (ii) unregistered warrants to purchase 2,618,658 shares of its common stock (the “December 2020 Warrants”) in a private placement, for total gross proceeds of \$8.0 million (the “December 2020 Registered Direct Offering”). The December 2020 Registered Direct Offering closed on December 22, 2020. The December 2020 Warrants have an exercise price of \$3.00 per share, became exercisable upon issuance and expire 5.5 years after the date of issuance. In connection with the December 2020 Registered Direct Offering, the Company granted to a placement agent warrants to purchase a total of 130,933 shares of common stock (“December 2020 Placement Agent Warrants”) that have an exercise price per share equal to \$3.8188 and a term of five years. See Note 13.

### **13. Warrants**

#### **Common Stock Warrant transactions**

In May 2020, several existing accredited investors exercised the June 2018 Warrants (the “May 2020 Warrant Exercise Transaction”) to purchase up to an aggregate of 1,392,345 shares of the Company’s common stock at a reduced exercise price of \$4.90 per share for gross proceeds of \$6.8 million. As consideration for the exercise of the June 2018 Warrants, the Company issued new unregistered warrants to purchase up to 1,392,345 shares of common stock (the “May 2020 Warrants”) at an exercise price of \$4.775 per share with an exercise period of five years from the date of issuance. The May 2020 Warrants were valued at \$4.4 million, which was calculated using the Black-Scholes Model with the following assumptions: volatility of 128 percent, stock price of \$3.81, and risk-free rate of 0.38%. In connection with the May 2020 Warrant Exercise Transaction, the Company granted to a placement agent warrants to purchase a total of 69,617 shares of common stock (the “May 2020 Placement Agent Warrants”) that have an exercise price per share equal to \$6.125 and a term of five years. The value of the May 2020 Placement Agent Warrants was determined to be \$215,000 using the Black-Scholes Model. The Company recognized a gain on extinguishment of warrant liability in the amount of \$47,000 associated with this transaction, during the quarter ended June 30, 2020.

In July 2020, an existing accredited investor exercised its March 2018 Warrants (the “July 2020 Warrant Exercise Transaction”) to purchase up to an aggregate of 641,416 shares of the Company’s common stock at a reduced exercise price of \$3.975 per share for gross proceeds of \$2.6 million. As consideration for the exercise of these March 2018 Warrants, the Company issued new unregistered warrants to purchase up to 641,416 shares of common stock (the “July 2020 Warrants”) at an exercise price of \$3.85 per share with an exercise period of 5.5 years from the date of issuance. The July 2020 Warrants were valued at \$2.1 million, which was calculated using the Black-Scholes Model with the following assumptions: volatility of 126 percent, stock price of \$3.73, and risk-free rate of 0.35%. In connection with the July 2020 Warrant Exercise Transaction, the Company granted to a placement agent warrants to purchase a total of 32,071 shares of common stock (the “July 2020 Placement Agent Warrants”) that have an exercise price per share equal to \$4.969 and a term of 5.5 years. The value of the July 2020 Placement Agent Warrants was determined to be \$101,000 using the Black-Scholes Model. The Company recognized a loss on extinguishment of warrant liability in the amount of \$682,000 associated with this transaction, during the quarter ended September 30, 2020.

#### **Equity Classified Common Stock Warrants**

In connection with professional services agreements with non-affiliated third party entities, during the nine months ended September 30, 2021 and the year ended December 31, 2020, the Company issued service and performance warrants (“Service and Performance Warrants”).

As of September 30, 2021, the Company issued the following warrants to purchase shares of its common stock. These warrants are exercisable any time at the option of the holder until their expiration date.

	Issuance Date	Term	Exercise Price Per Share	Warrants Exercised during the Year Ended December 31, 2020	Warrants Outstanding at December 31, 2020	Warrants Exercised during the Nine Months Ended September 30, 2021	Warrants Outstanding at September 30, 2021
January 2021 Placement Agent Warrants	January 2021	5.5 years	\$ 3.99	—	—	—	393,839
January 2021 Service and Performance Warrants	January 2021	2 years	\$ 3.08	—	—	—	7,500
December 2020 Warrants	December 2020	5.5 years	\$ 3.00	—	2,618,658	—	2,618,658
December 2020 Placement Agent Warrants	December 2020	5 years	\$ 3.82	—	130,933	—	130,933
July 2020 Warrants	July 2020	5.5 years	\$ 3.85	—	641,416	—	641,416
July 2020 Placement Agent Warrants	July 2020	5.5 years	\$ 4.97	—	32,071	—	32,071
May 2020 Warrants	May 2020	5 years	\$ 4.78	—	1,392,345	—	1,392,345
May 2020 Placement Agent Warrants	May 2020	5 years	\$ 6.13	—	69,617	—	69,617
March 2020 Service and Performance Warrants	March 2020	3 years	\$ 2.50	—	18,350	—	18,350
February 12, 2020 Service and Performance Warrants	February 2020	2 years	\$ 4.71	—	150,000	—	150,000
February 3, 2020 Service and Performance Warrants	February 2020	2 years	\$ 4.91	—	10,000	—	10,000
September 2019 Placement Agent Warrants	September 2019	5 years	\$ 9.48	—	65,942	—	65,942
August 2019 Service and Performance Warrants	August 2019	2 years	\$ 1.92	—	20,000	(20,000)	—
July 2019 Service and Performance Warrants	July 2019	2 years	\$ 2.19	—	10,000	(10,000)	—
June 2019 Placement Agent Warrants	June 2019	5 years	\$ 6.29	—	74,479	—	74,479
April 2019 Service and Performance Warrants	April 2019	5 years	\$ 6.18	—	145,154	—	145,154
June 2018 Placement Agent Warrants	June 2018	5 years	\$ 12.57	—	69,617	—	69,617
March 2018 Placement Agent Warrants	March 2018	5 years	\$ 41.56	—	15,038	—	15,038
Total				—	5,463,620	(30,000)	5,834,959

#### Liability Classified Common Stock Warrants

Certain warrants contain a contingent cash payment feature and therefore were accounted for as a liability at the date of issuance and are adjusted to fair value at each balance sheet date. The change in fair value of the warrant liability is recorded as change in fair value of common stock warrant liabilities in the condensed consolidated statements of operations and comprehensive loss. The key terms and activity of the liability classified common stock warrants are summarized as follows:

	Issuance Date	Term	Exercise Price Per Share	Warrants Exercised during the Year Ended December 31, 2020	Warrants Outstanding at December 31, 2020	Warrants Exercised during the Nine Months Ended September 30, 2021	Warrants Outstanding at September 30, 2021
January 2021 Warrants	January 2021	5.5 years	\$ 3.13	—	—	—	3,938,392
September 2019 Warrants	September 2019	5.5 years	\$ 7.52	—	659,414	—	659,414
June 2019 Warrants	June 2019	5.5 years	\$ 5.00	—	435,830	—	435,830
June 2018 Warrants	June 2018	5.5 years	\$ 9.94	1,392,345	—	—	—
March 2018 Warrants	March 2018	5 years	\$ 10.73	641,416	641,416	—	641,416
Total				2,033,761	1,736,660	—	5,675,052

See Note 5 for the Black-Scholes option-pricing model and weighted-average assumptions used to estimate the fair value of the warrant liabilities.

#### 14. Stock-Based Compensation and Employee Stock Purchase Program

##### Stock Incentive Plans

The Company has two equity incentive plans: the 2006 Stock Plan (“2006 Plan”) and the 2015 Omnibus Equity Incentive Plan (“2015 Plan”).

In 2006, the Company adopted the 2006 Plan, which provided for the granting of stock options to executives, employees, and other service providers under terms and provisions established by the Board of Directors. The Company granted non-statutory stock options (“NSOs”) under the 2006 Plan until May 2015, when it was terminated as to future awards, although it continues to govern the terms of options that remain outstanding and were issued under the 2006 Plan. The 2015 Plan became effective upon the Company’s IPO in May 2015 and all shares that were reserved, but not issued, under the 2006 Plan were assumed by the 2015 Plan. Upon effectiveness, the 2015 Plan had 154,387 shares of common stock reserved for future issuance, which included 10,637 that were

transferred to and assumed by the 2015 Plan. The 2015 Plan provides for automatic annual increases in shares available for grant. In addition, shares subject to awards under the 2006 Plan that are forfeited or canceled will be added to the 2015 Plan. The 2015 Plan provides for the grant of incentive stock options (“ISOs”), NSOs, restricted stock awards, stock units, stock appreciation rights, and other forms of equity compensation, all of which may be granted to employees, officers, non-employee directors, and consultants. The exercise price for ISOs and NSOs will be granted at a price per share not less than the fair value of our common stock at the date of grant. Options granted generally vest over a four-year period; however, the options granted in the third quarter of 2018 vest over two-year period, vesting monthly on a pro-rated basis. Options granted, once vested, are generally exercisable for up to 10 years, after grant to the extent vested.

In June 2019, the shareholders approved an amendment to the Company’s 2015 Plan for a one-time increase to the number of shares of common stock that may be issued under the 2015 Plan by 120,000 shares. On May 17, 2021, upon completion of the Arcadia Wellness transaction, the Company granted 248,000 inducement stock option pursuant to Rule 5635(c)(4) of the Nasdaq Listing Rules. On May 28, 2021, the Company filed a registration statement on Form S-8 to register the issuance of shares upon exercise of these inducement stock options. The inducement options grants have been issued outside of the 2015 Plan, but the options are subject to the terms and conditions of the 2015 Plan. As of September 30, 2021, a total of 1,595,876 shares of common stock were reserved for issuance under the 2015 Plan, of which 297,540 shares of common stock are available for future grant. As of September 30, 2021, a total of 8,573 and 1,298,336 options are outstanding under the 2006 and 2015 Plans, respectively. As of December 31, 2020, a total of 19,172 and 870,587 options are outstanding under the 2006 and 2015 Plans, respectively.

The following is a summary of stock option information and weighted average exercise prices under the Company’s stock incentive plans (in thousands, except share data and price per share):

	Shares Subject to Outstanding Options	Weighted- Average Exercise Price Per Share	Aggregate Intrinsic Value
Outstanding — Balance at December 31, 2020	889,759	\$ 14.46	\$ 240
Options granted	1,111,042	2.85	
Options exercised	—	—	
Options forfeited	(233,558)	3.51	
Options expired	(212,334)	33.38	
Outstanding — Balance at September 30, 2021	<u>1,554,909</u>	\$ 5.22	\$ 240
Vested and expected to vest — September 30, 2021	<u>1,535,209</u>	\$ 5.23	\$ 240
Exercisable — September 30, 2021	<u>501,417</u>	\$ 9.82	\$ —

Aggregate intrinsic value represents the difference between the exercise price of the options and the estimated fair value of the Company’s common stock determined by our Board of Directors for each of the respective periods. The intrinsic value of options exercised was \$0 for both quarters ended September 30, 2021 and 2020.

As of September 30, 2021, there was \$2.3 million of unrecognized compensation cost related to unvested stock-based compensation grants that will be recognized over the weighted-average remaining recognition period of 3.17 years.

In determining the fair value of the stock-based awards, the Company uses the Black-Scholes option-pricing model and assumptions discussed below. Each of these inputs is subjective and generally requires significant judgment to determine.

*Expected Term*—The expected term is the estimated period of time outstanding for stock options granted and was estimated based on a simplified method allowed by the SEC due to insufficient historical data, and defines the term as the average of the contractual term of the options and the weighted-average vesting period for all open employee awards.

*Expected Volatility*—The historical volatility data was computed using the daily closing prices for the Company’s shares during the equivalent period of the calculated expected term of the stock-based awards.

*Risk-Free Interest Rate*—The risk-free interest rate is based on the interest rate of U.S. Treasuries of comparable maturities on the date the options were granted.

*Expected Dividend*—The expected dividend yield is based on the Company’s expectation of future dividend payouts to common stockholders.

The fair value of stock option awards was estimated at the date of grant using a Black-Scholes option-pricing model with the following weighted-average assumption:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
Expected term (years)	6.08	6.01	6.34	6.50
Expected volatility	121 %	230 %	122 %	133 %
Risk-free interest rate	0.97 %	0.38 %	0.83 %	1.03 %
Dividend yield	—	—	—	—

The Company recognized \$0.4 million and \$0.5 million of compensation expense for stock options awards for the three months ended September 30, 2021 and 2020, respectively. The Company recognized \$1.0 million and \$1.8 million of compensation expense for stock options awards for the nine months ended September 30, 2021 and 2020, respectively.

#### **Employee Stock Purchase Plan**

The Company's 2015 Employee Stock Purchase Plan ("ESPP") became effective on May 14, 2015. The ESPP allows eligible employees to purchase shares of the Company's common stock at a discount of up to 15% of their eligible compensation through payroll deductions, subject to any plan limitations. After the first offering period, which began on May 14, 2015 and ended on February 1, 2016, the ESPP provides for six-month offering periods, and at the end of each offering period, employees are able to purchase shares at 85% of the lower of the fair market value of the Company's common stock on the first trading day of the offering period or on the last day of the offering period. As of September 30, 2021, the number of shares of common stock reserved for future issuance under the ESPP is 111,722. The ESPP provides for automatic annual increases in the shares available for purchase beginning on January 1, 2016. As of September 30, 2021, 50,245 shares had been issued under the ESPP. The Company recorded \$4,000 and \$12,000 of ESPP related compensation expense for the quarters ended September 30, 2021 and 2020, respectively. The Company recorded \$12,000 and \$41,000 of ESPP related compensation expense for the nine months ended September 30, 2021 and 2020, respectively.

## **15. Debt**

#### **Vehicle Loans**

The Company entered into notes payable agreements to finance the purchase of company vehicles. The Company has various vehicle loans that mature in 2024 and have interest rates that range from 7.64% to 8.00%. As of September 30, 2021, the outstanding balance of vehicle loans was \$114,000.

#### **Paycheck Protection Program Note**

On April 16, 2020, the Company borrowed \$1.1 million through MidFirst Bank, a federally chartered savings association (the "Lender"), and entered into a promissory note for the same amount under the Paycheck Protection Program ("PPP") that was established under the Coronavirus Aid Relief, and Economic Security Act ("CARES Act") of 2020. During the quarter ended June 30, 2021 the Company applied for full PPP loan forgiveness, and in August 2021, the lender notified Arcadia that the SBA had forgiven the original loan in full. During the three months ended September 30, 2021, the amount forgiven has been recorded as gain on extinguishment of PPP loan on the condensed consolidated statements of operations and comprehensive loss, as the Company has been legally released from being the primary obligor in accordance with ASC 405-20, *Liabilities – Extinguishment of Liabilities*.

#### **Promissory Note**

On June 26, 2020, the Company executed a promissory note (the "Note") in the amount of \$2.0 million, payable to MidFirst Bank, a federally chartered savings association (the "Lender"). The Note was issued in accordance with the terms of a Loan Agreement dated as of May 18, 2020 entered into by the Company and the Lender (the "Loan Agreement") in which the Lender agreed to make advances to the Company from time to time, at any amount up to but not to exceed \$2.0 million. Pursuant to the Loan Agreement, the Note accrued interest, adjusted monthly, at a rate equal to the greater of (i) 3.25% and (ii) the sum of (a) the quotient of the LIBOR Index divided by (one minus the reserve requirement set by the Federal Reserve), and (b) 2.50%. The Company was required to make monthly interest payments on the Note to the Lender and pay the full principal amount plus any accrued but unpaid interest outstanding under the Note no later than May 18, 2023. The Company and the Lender also entered into a Pledge and Security Agreement dated as of May 18, 2020 whereby the Company agreed to secure the Note by granting a security interest to the Lender for the Company's deposit account held with and controlled by the Lender. Due to the lender's control of the deposit account, the balance of \$2.0 million is included in restricted cash on the condensed consolidated balance sheets as of December 31, 2020. As of

September 30, 2021, there was no outstanding balance of the Note. On February 26, 2021, the Company repaid the full balance of \$2.0 million, and on March 31, 2021, the line of credit was closed.

Maturities of current and noncurrent debt as of September 30, 2021, are as follows (in thousands):

Years ending December 31,	Amounts
Remainder of 2021	\$ 9
2022	36
2023	39
2024	30
Thereafter	—
Total	\$ 114

## 16. Income Taxes

Income tax expense during interim periods is based on applying an estimated annual effective income tax rate to year-to-date income, plus any significant unusual or infrequently occurring items that are recorded in the interim period. The computation of the annual estimated effective tax rate at each interim period requires certain estimates and significant judgment including, but not limited to, the expected operating income for the year, projections of the proportion of income earned and taxed in various jurisdictions, permanent and temporary differences, and the likelihood of recovering deferred tax assets generated in the current year. The accounting estimates used to compute the provision for income taxes may change as new events occur, more experience is obtained, additional information becomes known, or as the tax environment changes.

The interim financial statement provision for income taxes is different from the amounts computed by applying the United States federal statutory income tax rate of 21%. The Company's effective tax rate was -0.04% and -0.01% for the three months ended September 30, 2021 and 2020, respectively. The Company's effective tax rate was -0.02% and -0.01% for the nine months ended September 30, 2021 and 2020, respectively. The difference between the effective tax rate and the federal statutory rate of 21% was primarily due to the full valuation allowance recorded on the Company's net deferred tax assets.

The Company experienced an ownership change under IRC Section 382 as a result of the common shares issued in connection with the June 2018 Offering. This ownership change limited the Company's ability to utilize its net operating loss carryforwards prior to expiration and certain net operating loss carryforwards were written off as a result. The Company is currently conducting additional analysis regarding the valuation of the Company at the time of the ownership change to assess what, if any, portion of the limitation may be reversed. Any adjustment to the amount of limitation will not impact the deferred tax asset balance due to the full valuation allowance. Further, the Company may have experienced an ownership change under IRC Section 382 as a result of the common shares issued in connection with the December 2020 Purchase Agreement or in the January 2021 Purchase Agreement. Such an ownership change could limit the Company's ability to utilize its NOL carryforwards prior to expiration but would not impact the net deferred tax asset recorded given the full valuation allowance.

During the nine months ended September 30, 2021, there were no material changes to the Company's uncertain tax positions.

## 17. Commitments and Contingencies

### Leases

The Company leases office and laboratory space, greenhouse space, grain storage bins, warehouse space, farmland, and equipment under operating lease agreements having initial lease terms ranging from one to five years, including certain renewal options available to the Company at market rates. The Company also leases land for field trials on a short-term basis. See Note 11.

### Legal Matters

From time to time, in the ordinary course of business, the Company may become involved in certain legal proceedings. The Company currently is not a party to any material litigation or other material legal proceedings.

### Contingent Liability Related to the Anawah Acquisition

In June 2005, the Company completed its agreement and plan of merger and reorganization with Anawah, Inc. ("Anawah"), to purchase the Anawah's food and agricultural research company through a non-cash stock purchase. Pursuant to the merger with Anawah, and in accordance with the ASC 805 - Business Combinations, the Company incurred a contingent liability not to exceed \$5.0 million. This liability represents amounts to be paid to Anawah's previous stockholders for cash collected on revenue recognized by the Company upon commercial sale of certain specific products developed using technology acquired in the purchase. As of September 30, 2021, the Company continues to pursue two development programs using this technology and believes that the

contingent liability is probable. As a result, \$2.0 million remains on the condensed consolidated balance sheets as an other noncurrent liability.

### **Contingent Liability Related to the ISI Acquisition**

In August 2020, the Company acquired by merger Industrial Seed Innovations (ISI). A portion of the purchase price consideration for the acquisition in the amount of \$280,000 will be recognized in two annual installments, each of up to 132,626 shares of the Company's common stock, subject to the achievement of revenue milestones in 2021 and 2022. The contingent consideration of \$280,000 was measured and recorded at fair value. As of September 30, 2021, the full amount of the contingent consideration is included in other noncurrent liabilities as no installments will become due within 12 months from the condensed consolidated balance sheets date. During the nine months ended September 30, 2021 as a result of a remeasurement of the contingent consideration, a \$140,000 decrease in the related liability was recorded as a change in fair value of contingent consideration on the condensed consolidated statements of operations and comprehensive loss.

### **Contracts**

The Company has entered into contract research agreements with unrelated parties that require the Company to pay certain funding commitments. The initial terms of these agreements range from one to three years in duration and in certain cases are cancelable.

The Company licenses certain technologies via executed agreements ("In-Licensing Agreements") that are used to develop and advance the Company's own technologies. The Company has entered into various In-Licensing Agreements with related and unrelated parties that require the Company to pay certain license fees, royalties, and/or milestone fees. In addition, certain royalty payments ranging from 2% to 15% of net revenue amounts as defined in the In-Licensing Agreements are or will be due.

The Company could be adversely affected by certain actions by the government as it relates to government contract revenue received in prior years. Government agencies, such as the Defense Contract Audit Agency routinely audit and investigate government contractors. These agencies review a contractor's performance under its agreements; cost structure; and compliance with applicable laws, regulations and standards. The agencies also review the adequacy of, and a contractor's compliance with, its internal control systems and policies, including the contractor's purchasing, property, estimating, compensation and management information systems. While the Company's management anticipates no adverse result from an audit, should any costs be found to be improperly allocated to a government agreement, such costs will not be reimbursed, or if already reimbursed, may need to be refunded. If an audit uncovers improper or illegal activities, civil and criminal penalties and administrative sanctions, including termination of contracts, forfeiture of profits, suspension of payments or fines, and suspension or prohibition from doing business with the government could occur. In addition, serious reputational harm or significant adverse financial effects could occur if allegations of impropriety were made against the Company. There currently are routine audits in process relating to government grant revenues.

### **18. Net Loss per Share**

Basic net loss per share is calculated by dividing net loss attributable to common stockholders by the weighted-average number of common shares outstanding during the period and excludes any dilutive effects of stock-based awards and warrants. Diluted net loss per share attributable to common stockholders is computed giving effect to all potentially dilutive common shares, including common stock issuable upon exercise of stock options and warrants. As the Company had net losses for the three and nine months ended September 30, 2021 and 2020, all potentially dilutive common shares were determined to be anti-dilutive.

Securities that were not included in the diluted per share calculations because they would be anti-dilutive were as follows (in shares):

	<b>For the Three Months Ended September 30,</b>		<b>For the Nine Months Ended September 30,</b>	
	<b>2021</b>	<b>2020</b>	<b>2021</b>	<b>2020</b>
Options to purchase common stock	1,554,909	980,883	1,554,909	980,883
Warrants to purchase common stock	11,510,011	4,450,689	11,510,011	4,450,689
<b>Total</b>	<b>13,064,920</b>	<b>5,431,572</b>	<b>13,064,920</b>	<b>5,431,572</b>

## 19. Related-Party Transactions

The Company's related parties include Moral Compass Corporation ("MCC") and the John Sperling Foundation ("JSF"). The rights to the intellectual property owned by Blue Horse Labs, Inc. ("BHL") were assigned to its sole shareholder, the John Sperling Revocable Trust ("JSRT") due to BHL's dissolution and then subsequently to JSF. JSF is deemed a related party of the Company because MCC, one of the Company's largest stockholder, and JSF share common officers and directors.

JSF receives a single digit royalty from the Company when revenue has been collected on product sales or for license payments from third parties that involve certain intellectual property developed under research funding originally from BHL. Royalty fees due to JSF were \$51,000 and \$80,000 as of September 30, 2021 and December 31, 2020, respectively, and are included in the condensed consolidated balance sheets as amounts due to related parties.

The Company currently leases land on the island of Molokai, Hawaii from an entity owned by Kevin Comcowich, the Chair of the Company's Board of Directors, and his wife. The Company grows hemp on this land to support the operations of its joint venture Archipelago Ventures Hawaii. The original lease was executed in February 2019, covers 10 acres of land, has a term of two years and provides for rent payments of \$1,200 per acre per year. During the quarter ended March 31, 2020, the Company engaged a third-party contractor to construct a fence on the property to adhere to the rules of the hemp pilot program. Out of pocket costs to build this fence were approximately \$126,400. Mr. Comcowich supplied materials to the contractor and received payments from the contractor totaling approximately \$44,000. In March and April 2020, the Company entered into two lease amendments for two additional 10-acre parcels and two additional 15-acre parcels, at the same lease rate of \$1,200 per acre per year, and with a term of two years. The Company made lease payments in the amount of \$81,000 and \$84,000 for the nine months ended September 30, 2021 and 2020, respectively.

## 20. Subsequent Events

Management has evaluated subsequent events through November 15, 2021, the date that the financial statements were available to be issued.



## ITEM 2. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

### Special Note Regarding Forward-Looking Statements

*The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our unaudited condensed consolidated financial statements and the related notes to those statements included herein. In addition to historical financial information, this report contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those discussed in the forward-looking statements. The statements contained in this report that are not purely historical are forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. Forward-looking statements are often identified by the use of words such as, but not limited to, “anticipate,” “believe,” “can,” “continue,” “could,” “estimate,” “expect,” “intend,” “may,” “plan,” “project,” “seek,” “should,” “strategy,” “target,” “will,” “would” and similar expressions or variations intended to identify forward-looking statements. These statements are based on the beliefs and assumptions of our management based on information currently available to management. Such forward-looking statements are subject to risks, uncertainties and other important factors that could cause actual results and the timing of certain events to differ materially from future results expressed or implied by such forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those identified below and those discussed in the section titled “Risk Factors” included in the most recent Annual Report on Form 10-K filed by the Company. Furthermore, such forward-looking statements speak only as of the date of this report. Except as required by law, we undertake no obligation to update any forward-looking statements to reflect events or circumstances after the date of such statements.*

*Solely for convenience, the trademarks, service marks and trade names referred to in this report may appear without the ®, TM, or SM symbols, but such references do not constitute a waiver of any rights that might be associated with the respective trademarks, service marks, or trade names.*

### Overview

We are a producer and marketer of innovative, plant-based health and wellness products. Our history as a leader in science-based approaches to developing 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, has laid the foundation for our path forward. 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. The recent acquisition of the assets of Lief Holdings, LLC (“Lief”), EKO Holdings, LLC (“EKO”) and Live Zola, LLC (“Zola”) adds bath and body care products, as well as coconut water, to our portfolio of products.

Our commercial strategy is to satisfy consumer nutrition, health and wellness demands with the superior functional benefits our crops deliver directly from the farm, enabling us to share premium economics throughout the ag-food supply chain and to build a world-class estate of high value traits and varieties. The acquisition of the Lief, EKO and Zola brands allows us to broaden our reach within the health and wellness sector.

According to ResearchandMarkets.com, the global wheat flour market in 2019 totaled \$181 billion and is expected to reach \$220 billion by 2027. It is also estimated by the U.S. Department of Agriculture (“USDA”), that approximately one-quarter of the FDA recommended calories consumed by people in the US are from wheat. Therefore, the market opportunity for nutritional improvements in wheat are significant not only because the wheat market itself is vast, but also because of the “share of stomach” wheat represents. Considering that most people today are not getting enough fiber or protein in their daily diets, the superior nutrient density of our non-GM GoodWheat™ (“GoodWheat”) technology can improve the dietary intake of average consumers, by increasing their fiber and protein consumption without changing the way they eat. We believe this proprietary advantage gives GoodWheat the potential to become a global standard in wheat.

The passage of the U.S. Agriculture Improvement Act of 2018 – also known as the Farm Bill – confirmed the federal legalization of hemp, the term given to non-psychoactive cannabis containing less than 0.3% tetrahydrocannabinol (THC). It also included provisions for legalizing on a federal level hemp’s cultivation, transport and sale for the first time in more than 75 years. Arcadia conducts its business in only federal and state markets in which its activities are legal.

In addition to bringing new hemp varieties to market, we also see an attractive opportunity to service the growing consumer demand for Cannabidiol (“CBD”) and other hemp-derived cannabinoids. CBD is a naturally occurring compound found in the resinous flower of cannabis, a plant with a rich history as a medicine going back thousands of years. Today the therapeutic properties of CBD are being tested and confirmed by scientists and doctors around the world. According to a New Frontier Data report issued in March 2020, U.S. consumer spending on CBD is projected to grow from an estimated \$14B USD in 2020 to \$26B USD in 2025 with global demand accelerating significantly as countries formalize regulatory frameworks for the industry. Backed by our own consumer survey data, we believe our premium Hawaiian grown hemp provides a unique value proposition to consumers that will enable us to gain traction in the marketplace as we grow our business channels.

### **Arcadia GoodWheat™**

In 2018, we launched our GoodWheat brand, a non-genetically modified (non-GM) portfolio of wheat products that enables food manufacturers to differentiate their consumer-facing brands. Consumer food companies are looking to simplify their food ingredient formulations and consumers are demanding “clean labeling” in their foods, paying more for foods having fewer artificial ingredients and more natural, recognizable and healthy ingredients. A 2017 survey by PR agency Ingredient Communications found that 73% of consumers are happy to pay a higher retail price for a food or drink product made with ingredients they recognize. Because GoodWheat increases the nutrient density directly in the primary grains and oils, it provides the mechanism for food formulation simplification naturally and cost effectively to meet evolving consumer demands.

The brand launch is a key element of the company’s go-to-market strategy to achieve greater value for its innovations by participating in downstream consumer revenue opportunities. We designed the brand to make an immediate connection with consumers that products made with GoodWheat meet their demands for healthier wheat options that also taste great. The GoodWheat brand encompasses our current and future non-GM wheat portfolio of high fiber Resistant Starch (RS) and Reduced Gluten wheat varieties, as well as future wheat innovations. In October 2019, the U.S. Patent and Trademark Office granted us the latest patents for extended shelf life wheat, the newest trait in our non-genetically modified wheat portfolio. This new trait was designed to promote whole wheat consumption by improving the shelf life and taste of whole grain wheat products.

With additional patents granted in 2020 we now hold more than 15 global patents on our high fiber Resistant Starch wheat, protecting both bread wheat and durum (pasta) wheat. Claims granted recently strengthen our intellectual property for our Resistant Starch portfolio of products.

We are preparing for the launch of a line of food products under our GoodWheat brand, with pasta as the initial category to be introduced in a soft-launch at the beginning of next year. Our pasta products will utilize our GoodWheat grain as the sole ingredient, providing them with a higher fiber content than traditional wheat. Additional categories of products are slated for launch in 2022.

### **Arcadia Wellness, LLC**

In May 2021, our wholly-owned subsidiary Arcadia Wellness, LLC, acquired the assets of Eko, Lief, and Zola. The acquisition includes leading consumer CBD brands like Soul Spring™, the top selling CBD-infused botanical therapy brand in the natural category, Saavy Naturals™, a leading line of all-natural body care products and Provault™, a CBD-infused sports performance formula made with natural ingredients, providing effective support and recovery for athletes. Also included in the purchase is Zola, a leading coconut water sourced exclusively with sustainably grown coconuts from Thailand. Key personnel have joined Arcadia Wellness.

### **Arcadia GoodHemp™**

In December 2019, we announced the launch of a new product line, GoodHemp, as the company's commercial brand for delivering hemp seeds, transplants, flower and extracts. The acquisition of Industrial Seed Innovations (“ISI”) in August 2020 brought ISI’s portfolio of strong performing, federally compliant hemp varieties to Arcadia’s GoodHemp™ catalog. ISI’s popular Umpqua, Rogue and Santiam seed varieties each bring unique and highly desirable characteristics to further differentiate Arcadia’s GoodHemp catalog.

## **Archipelago Ventures Hawaii, LLC**

In August 2019, we formed a new joint venture to serve the Hawaiian, North American and Asian hemp markets, Archipelago Ventures Hawaii, LLC (“Archipelago”). This venture between Arcadia and Legacy Ventures Hawaii (“Legacy”) combines Arcadia’s extensive genetic expertise and seed innovation history with Legacy’s growth capital and strategic advisory expertise in the Hawaiian markets.

In October 2021, Arcadia and Legacy mutually agreed to wind down the cultivation activities of Archipelago, due to the weak hemp market demand and to the sufficient internal ingredient supply for the foreseeable future.

## **Arcadia SPA**

In April 2021, we acquired the assets of Agrasys S.A., a food ingredients company based in Barcelona, Spain. The physical and intellectual property assets enable us to commercialize Tritordeum, a proprietary cereal grain that is a combination of durum wheat and wild barley, resulting in a nutritious grain high in fiber, protein and lutein. Tritordeum was developed at the Instituto de Agricultura Sostenible – Consejo Superior de Investigaciones Científicas, (IAS-CSIC) the largest public institution dedicated to agricultural research in Spain, and subsequently licensed exclusively to Agrasys for commercialization. We completed the transaction through Arcadia SPA, S.L., a newly formed company based in Spain, and key Agrasys personnel have joined Arcadia SPA to operate the Tritordeum business in Europe.

## **Verdeca HB4<sup>®</sup> Soybean**

In 2012, we partnered with Bioceres, Inc. (“Bioceres”) an Argentina-based technology company, to form Verdeca LLC, (“Verdeca”) a U.S.-based joint venture company to deploy next-generation soybean traits developed to benefit soybean producers through quality improvement, stress mitigation and management practices. The HB4<sup>®</sup> soybean varieties deliver two layers of value for growers: drought and herbicide tolerance, offering resistance to a broad-spectrum herbicide utilized to prevent growth of a wide range of annual and perennial broadleaf weeds and grasses. In November 2020, we sold our membership interest in Verdeca to Bioceres in a transaction in which we received cash, shares of Bioceres stock and a royalty stream of up to \$10 million on HB4 soybean sales. An additional \$2 million in cash is to be paid upon achievement by Verdeca of specific regulatory or commercial milestones.

## **Impact of COVID-19**

In early 2020, the World Health Organization (“WHO”) determined the coronavirus (“COVID-19”) was a worldwide pandemic. We are closely monitoring how the spread of the new strains of coronavirus are affecting our employees and business operations. We have developed preparedness plans to help protect the safety of our employees while safely continuing business operations. While management currently expects the impact of COVID-19 to be temporary, there is uncertainty around the duration and its broader impact on the economy and therefore the effects it will have on the Company’s financial condition, liquidity, operations, suppliers, industry, and workforce. The Company experienced delivery delays during the third quarter of 2021 due to a slowed global supply chain. However, management does not expect this will significantly impact revenues, due to the growth the Company is experiencing.

## **Components of Our Statements of Operations Data**

### ***Revenues***

We derive our revenues from product revenues, royalties, license revenues and contract research agreements. Given our acute focus on selling our GoodWheat and Arcadia Wellness products, we do not intend to continue pursuing contract research agreements and government grant projects.

### ***Product Revenues***

Our product revenues to date have consisted primarily of sales of our SONOVA products, GoodWheat grain sales, and GoodHemp seeds sales. This quarter also includes revenues from products within the recently acquired brands now part of Arcadia Wellness and Arcadia Spain. We recognize revenue from product sales when control of the product is transferred to third-party

distributors and manufacturers, collectively “our customers,” which generally occurs upon delivery. Our revenues fluctuate depending on the timing of shipments of product to our customers and are reported net of estimated chargebacks, returns and losses.

#### *License Revenues*

Our license revenues to date consist of up-front, nonrefundable license fees, annual license fees, and subsequent milestone payments that we receive under our research and license agreements. Revenue generated from up-front license fees are recognized upon execution of the agreement. We recognize annual license fees when it is probable that a material reversal will not occur.

Milestone fees are variable consideration that is initially constrained and recognized only when it is probable that such amounts would not be reversed. The Company assesses when achievement of milestones are probable in order to determine the timing of revenue recognition for milestone fees. Milestones typically consist of significant stages of development for our traits in a potential commercial product, such as achievement of specific technological targets, completion of field trials, filing with regulatory agencies, completion of the regulatory process, and commercial launch of a product containing our traits. Given the seasonality of agriculture and time required to progress from one milestone to the next, achievement of milestones is inherently uneven, and our license revenues are likely to fluctuate significantly from period to period.

#### *Royalty Revenues*

Our royalty revenues consist of amounts earned from the sale of commercial products that incorporate our traits by third parties. Our royalty revenues consist of a minimum annual royalty, offset by amounts earned from the sale of products. We recognize the minimum annual royalty on a straight-line basis over the year, and we recognize royalty revenue resulting from the sale of products when the third parties transfer control of the product to their customers, which generally occurs upon shipment. Our royalty revenues can fluctuate depending on the timing of shipments of product by the third parties to their customers.

#### *Contract Research and Government Grant Revenues*

Contract research and government grant revenues consist of amounts earned from performing contracted research primarily related to breeding programs or the genetic engineering of plants for third parties. Contract research revenue is accounted for as a single performance obligation for which revenues are recognized over time using the input method (e.g., costs incurred to date relative to the total estimated costs at completion).

#### ***Operating Expenses***

##### *Cost of Product Revenues*

Cost of product revenues relates to the sale of our SONOVA, GoodWheat, GoodHemp, Arcadia Wellness, and Arcadia Spain products and consists of in-licensing and royalty fees, any adjustments or write-downs to inventory or prepaid production costs, as well as the cost of raw materials, including internal and third-party services costs related to procuring, processing, formulating, packaging and shipping our products.

##### *Research and Development Expenses*

Research and development expenses consist of costs incurred in the discovery, development and testing of our products and products in development incorporating our traits. These expenses consist primarily of employee salaries and benefits, fees paid to subcontracted research providers, fees associated with in-licensing technology, land leased for field trials, chemicals and supplies, and other external expenses. These costs are expensed as incurred. Additionally, we are required from time to time to make certain milestone payments in connection with the development of technologies in-licensed from third parties. Our research and development expenses may fluctuate from period to period.

### *Selling, General and Administrative Expenses*

Selling, general and administrative expenses consist primarily of employee costs, professional service fees, broker and sales commission fees, and overhead costs. Our selling, general, and administrative expenses may fluctuate from period to period. In connection with our commercialization activities for our consumer products, we expect to increase our investments in sales and marketing and business development, including additional consulting fees.

### *Impairment of intangible assets*

Impairments of intangible assets are recorded when the fair value of intangible assets drops below the previously recorded value from the time of the acquisition.

### *Change in Fair Value of Contingent Consideration*

Change in the fair value of contingent consideration is comprised of the fair value remeasurement of the liabilities associated with our contingent consideration.

### *Write-down of fixed assets*

Write-down of fixed assets includes losses from tangible assets due to impairment or recoverability test charges to adjust fixed assets to their fair value or recoverability value.

### *Interest Expense*

Interest expense consists primarily of contractual interest on notes payable relating to the purchase of company vehicles, and the revolving line of credit.

### *Other Income, Net*

Other income, net, consists of realized gains on corporate securities, interest income and the amortization of investment premium and discount on our cash and cash equivalents and investments.

### *Issuance and offering costs*

Issuance and offering costs generally include placement agent, legal, advisory, accounting and filing fees related to financing transactions.

### *Change in the Estimated Fair Value of Common Stock Warrant Liabilities*

Change in the estimated fair value of common stock warrant liabilities is comprised of the fair value remeasurement of the liabilities associated with our financing transactions.

### *Income Tax Provision*

Our income tax provision has not been historically significant, as we have incurred losses since our inception. The provision for income taxes consists of state and foreign income taxes. Due to cumulative losses, we maintain a valuation allowance against our U.S. deferred tax assets as of September 30, 2021 and December 31, 2020. We consider all available evidence, both positive and negative, including but not limited to, earnings history, projected future outcomes, industry and market trends and the nature of each of the deferred tax assets in assessing the extent to which a valuation allowance should be applied against our U.S. deferred tax assets.

## Results of Operations

### Comparison of the Three Months Ended September 30, 2021 and 2020

	Three Months Ended September 30,		\$ Change	% Change
	2021	2020		
	(In thousands except percentage)			
<b>Revenues:</b>				
Product	\$ 2,324	\$ 245	\$ 2,079	849 %
License	17	10	7	70 %
Royalty	35	16	19	119 %
Contract research and government grants	—	43	(43)	(100)%
Total revenues	2,376	314	2,062	657 %
<b>Operating expenses:</b>				
Cost of product revenues	2,511	1,841	670	36 %
Research and development	1,038	1,762	(724)	(41)%
Impairment of intangible assets	120	—	120	100 %
Write-down of fixed assets	1,108	—	1,108	100 %
Selling, general and administrative	6,312	4,292	2,020	47 %
Total operating expenses	11,089	7,895	3,194	40 %
Loss from operations	(8,713)	(7,581)	(1,132)	15 %
Interest expense	(15)	(23)	8	(35)%
Other (expense) income, net	(7)	—	(7)	(100)%
Change in fair value of common stock warrant liabilities	4,777	1,130	3,647	323 %
Loss on extinguishment of warrant liability	—	(682)	682	(100)%
Gain on extinguishment of PPP loan	1,123	—	1,123	100 %
Net loss before income taxes	(2,835)	(7,156)	4,321	(60)%
Income tax provision	(1)	(9)	8	(89)%
Net loss	(2,836)	(7,165)	4,329	(60)%
Net loss attributable to non-controlling interest	(661)	(774)	113	(15)%
Net loss attributable to common stockholders	\$ (2,175)	\$ (6,391)	\$ 4,216	(66)%

### Revenues

Product revenues accounted for 98% and 78% of our total revenues in the three months ended September 30, 2021 and 2020, respectively. The \$2.1 million, or 849%, increase in product revenues for the three months ended September 30, 2021 compared to the same period in 2020 was primarily driven by \$1.8 million of sales related mainly to the newly acquired lines of products of Arcadia Wellness, in addition to higher GLA SONOVA sales.

Royalty revenues accounted for 1% and 5% of our total revenues in the three months ended September 30, 2021 and 2020, respectively. The \$35,000 of royalty revenues for the three months ended September 30, 2021 represents the proportionate share of contracted minimum annual royalty fees.

Contract research and government grant revenues accounted for 0% and 14% of our total revenues for the three months ended September 30, 2021 and 2020, respectively. Our contract research and government grant revenues decreased by \$43,000, or 100%, in the three months ended September 30, 2021 compared to the same period in 2020. The decrease was driven by the completion of agreements and grants during 2020. We do not intend to continue pursuing contract research agreements and government grant projects as we focus on selling our commercial products.

### Cost of Product Revenues

Cost of product revenues increased by \$670,000, or 36%, in the three months ended September 30, 2021 compared to the same period in 2020. The increase is mainly due to the increase in cost of product revenues of \$1.7 million related to the newly acquired product lines, partially offset by lower inventory write-downs, which amounted to \$449,000 during the three months ended September 30, 2021, and \$1.5 million during the third quarter of 2020. The \$449,000 of write-downs in third quarter of 2021 was to reduce hemp seed inventory to fair value and record the destruction of hemp crops.

### Research and Development

Research and development expenses decreased by \$724,000, or 41%, in the three months ended September 30, 2021 compared to the same period in 2020. The decrease was primarily driven by the Company pivoting its focus to commercialization, which led to lower employee-related expenses, and related activity costs as we right-sized our research teams. Partially offsetting the favorability for the quarter is \$333,000 of expense included in 2021 for the release of product from inventory that was not commercialized by Arcadia.

### Selling, General, and Administrative

Selling, general, and administrative expenses increased by \$2 million, or 47%, in the three months ended September 30, 2021, compared to the same period in 2020. The increase was driven by increased commercial and marketing personnel and consulting activities in preparation for new product launches.

### Impairment of intangible assets

We recognized an impairment of intangible assets in the amount of \$120,000 for the third quarter of 2021. The impairment charge was primarily the result of a decline in the hemp seed market forecasted sales. No impairment losses were recorded in the same period of 2020.

### Write-down of fixed assets

We assessed Archipelago's fixed assets related to cultivating hemp and processing CBD for impairment and recorded a write-down in the amount of \$1.1 million for the three months ended September 30, 2021. There were no such impairments during the three months ended September 30, 2020. See Note 4.

### Change in the Estimated Fair Value of Common Stock Warrant Liabilities

Change in the estimated fair value of common stock warrant liabilities resulted in a gain of \$4.8 million for the three months ended September 30, 2021, due to the fair value remeasurement of the common stock warrant liabilities driven by the change in the stock price, risk-free rates and volatility during the third quarter of 2021.

### Gain on extinguishment of PPP loan

During the quarter ended September 30, 2021 we were notified by the lender that the SBA had forgiven the original PPP loan amount in full, and this resulted in a \$1.1 million gain for the quarter.

### Income Tax Expense

Income tax expense for the three months ended September 30, 2021 of \$1,000, slightly decreased when compared to the expense of \$9,000 recorded for the three months ended September 30, 2020.

### Comparison of the Nine Months Ended September 30, 2021 and 2020

	Nine Months Ended September 30,		\$ Change	% Change
	2021	2020		
(In thousands except percentage)				
<b>Revenues:</b>				
Product	\$ 4,506	\$ 630	\$ 3,876	615 %
License	17	110	(93)	(85)%
Royalty	86	58	28	48 %
Contract research and government grants	—	106	(106)	(100)%
Total revenues	4,609	904	3,705	410 %
<b>Operating expenses:</b>				
Cost of product revenues	4,954	3,463	1,491	43 %
Research and development	3,328	5,999	(2,671)	(45)%
Impairment of intangible assets	120	—	120	100 %
Change in fair value of contingent consideration	(140)	—	(140)	(100)%

Write-down of fixed assets	1,319	—	1,319	100 %
Selling, general and administrative	16,750	11,689	5,061	43 %
Total operating expenses	26,331	21,151	5,180	24 %
Loss from operations	(21,722)	(20,247)	(1,475)	(7)%
Interest expense	(23)	(32)	9	28 %
Other (expense) income, net	10,214	83	10,131	12206 %
Change in fair value of common stock warrant liabilities	4,601	6,212	(1,611)	26 %
Loss on extinguishment of warrant liability	—	(635)	635	(100)%
Gain on extinguishment of PPP loan	1,123	—	1,123	100 %
Issuance and offering costs	(769)	—	(769)	(100)%
Net loss before income taxes	(6,576)	(14,619)	8,043	(55)%
Income tax provision	(1)	(15)	14	93 %
Net loss	(6,577)	(14,634)	8,057	(55)%
Net loss attributable to non-controlling interest	(1,199)	(1,081)	(118)	(11)%
Net loss attributable to common stockholders	<u>\$ (5,378)</u>	<u>\$ (13,553)</u>	<u>\$ 8,175</u>	<u>(60)%</u>

### Revenues

Product revenues accounted for 98% and 70% of our total revenues in the nine months ended September 30, 2021 and 2020, respectively. The \$3.9 million, or 615%, increase in product revenues for the nine months ended September 30, 2021 compared to the same period in 2020 was primarily driven by \$2.6 million of sales related mainly to the newly acquired lines of products of Arcadia Wellness, plus \$584,000 of additional sales of GoodWheat grain, and \$257,000 of GoodHemp seed sales.

License revenues accounted for 0% and 12% of our total revenues in the nine months ended September 30, 2021, and 2020, respectively. The \$110,000 in license revenues for the nine months ended September 30, 2020 was due to the achievement of certain milestones.

Royalty revenues accounted for 2% and 6% of our total revenues in the nine months ended September 30, 2021 and 2020, respectively. The \$86,000 of royalty revenues for the nine months ended September 30, 2021 represents the proportionate share of contracted minimum annual royalty fees.

Contract research and government grant revenues accounted for 0% and 12% of our total revenues for the nine months ended September 30, 2021 and 2020, respectively. Our contract research and government grant revenues decreased by \$106,000, or 100%, in the first nine months of 2021, compared to the same period in 2020. The decrease was driven by the completion of agreements and grants during 2020. We do not intend to continue pursuing contract research agreements and government grant projects, as we focus on selling our commercial products.

### Cost of Product Revenues

Cost of product revenues increased by \$1.5 million, or 43%, in the nine months ended September 30, 2021 compared to the same period in 2020. The increase is in line with sales from the newly acquired lines of products within Arcadia Wellness, in the amount of \$2.3 million of additional cost of product revenues, in addition to GoodWheat grain and GoodHemp seeds. The increase is partially offset by lower inventory write-downs, in the amount of \$1.3 million, during the nine months ended September 30, 2021, compared to \$3.1 million during the nine months ended September 30, 2020.

### Research and Development

Research and development expenses decreased by \$2.7 million, or 45%, in the nine months ended September 30, 2021 compared to the same period in 2020. The decrease was primarily driven by the Company pivoting its focus to commercialization, which led to lower employee-related expenses as we right-sized our research teams. Partially offsetting this favorability was \$333,000 of expense included in 2021 for the release of product from inventory that was not commercialized by Arcadia.

### Selling, General, and Administrative

Selling, general, and administrative expenses increased by \$5.1 million, or 43%, in the nine months ended September 30, 2021 compared to the same period in 2020. The increase was primarily driven by acquisitive activities, including investment banker success



fees, legal diligence and transaction fees, and additional salaries and benefits associated with the increased headcount. We have also increased commercial and marketing personnel and consulting activities in preparation for new product launches.

#### *Impairment of intangible assets*

We recognized an impairment of intangible assets in the amount of \$120,000 for the nine months ended September 30, 2021. The impairment charge was primarily the result of a decline in the hemp seed market forecasted sales. No impairment losses were recorded in the same period of 2020.

#### *Change in fair value of contingent consideration*

During the nine months ended September 30, 2021, the change in the fair value of contingent consideration was due to the ISI contingent consideration remeasurement that resulted in a decrease of the liability in the amount of \$140,000. There was no change in fair value of contingent consideration during the nine months ended September 30, 2020.

#### *Write-down of fixed assets*

We assessed Archipelago's fixed assets related to cultivating hemp and processing CBD for impairment and recorded a write-down in the amount of \$1.3 million for the nine months ended September 30, 2021. There were no such impairments during the nine months ended September 30, 2020. See Note 4.

#### *Other Income, Net*

Other income, net increased by \$10.1 million in the nine months ended September 30, 2021 when compared to the same period in 2020. This is primarily due to the realized gain resulting from the sale of the shares of BIOX.

#### *Gain on extinguishment of PPP loan*

During the nine months ended September 30, 2021, we were notified by the lender that the SBA had forgiven the original PPP loan amount in full, and this resulted in a \$1.1 million gain for nine months ended September 30, 2021.

#### *Issuance and offering costs*

Offering costs increased by \$769,000 for the nine months ended September 30, 2021, and were comprised of the placement agent fees, placement agent warrants, and legal and accounting fees related to the January 2021 PIPE financing transaction. There were no issuance and offering costs for the nine months ended September 30, 2020.

#### *Change in the Estimated Fair Value of Common Stock Warrant Liabilities*

Change in the estimated fair value of common stock warrant liabilities resulted in income of \$4.6 million for the nine months ended September 30, 2021, due to the fair value remeasurement of the common stock warrant liabilities driven by the change in the stock price, risk-free rates and volatility during the nine months ended September 30, 2021.

#### *Income Tax Expense*

Income tax expense for the nine months ended September 30, 2021, of \$1,000 slightly decreased when compared to the expense of \$15,000 recorded for the nine months ended September 30, 2020.

#### **Seasonality**

We and our commercial partners operate in different geographies around the world and conduct field trials used for data generation, which must be conducted during the appropriate growing seasons for particular crops and markets. Often, there is only one crop-growing season per year for certain crops and markets. Similarly, climate conditions and other factors that may influence the sales of our products may vary from season to season and year to year. In particular, weather conditions, including natural disasters such as heavy rains, hurricanes, hail, floods, tornadoes, freezing conditions, drought, or fire, may affect the timing and outcome of field trials, which may delay milestone payments and the commercialization of products incorporating our seed traits. Sales of commercial products that incorporate our seed traits will vary based on crop growing seasons and weather patterns within particular regions.

## Liquidity, Capital Resources, and Going Concern

We have funded our operations primarily with the net proceeds from the sale of our securities and incurring debt, as well as from the sale of our SONOVA, GoodWheat, and GoodHemp products and payments under license agreements, contract research agreements and government grants. Our principal use of cash is to fund our operations, which are primarily focused on completing development and commercializing our quality seed traits. This includes scaling harvest production of wheat and hemp, as well as coordinating with our partners on their development programs. As of September 30, 2021, we had cash and cash equivalents of \$35.5 million. For the nine months ended September 30, 2021, the Company had a net loss of \$6.6 million and net cash used in operations of \$19.2 million. For the twelve months ended December 31, 2020, the Company had net losses of \$6.0 million and net cash used in operations of \$30.2 million.

We believe that our existing cash and cash equivalents will be sufficient to meet our anticipated cash requirements for at least the next 12 months. See Note 1 of the notes to the condensed consolidated financial statements for more information.

As is disclosed in Notes 12 and 13, on January 25, 2021, the Company entered into a securities purchase agreement with certain institutional and accredited investors relating to the issuance and sale in a private placement of shares of Company common stock and warrants for an aggregate of \$25.1 million, exclusive of any related transaction fees.

We sold all of the 1,875,000 shares of Bioceres stock we acquired in the November 2020 Bioceres transaction. The sale generated gross and net proceeds of \$22.2 million, and \$21.8 million, respectively.

We may seek to raise additional funds through debt or equity financings. We may also consider entering into additional partner arrangements. The sale of additional equity would result in dilution to the Company's stockholders. The incurrence of debt would result in debt service obligations, and the instruments governing such debt could provide for additional operating and financing covenants that would restrict operations. If the Company does require additional funds and is unable to secure adequate additional funding at terms agreeable to the Company, we may be forced to reduce spending, extend payment terms with suppliers, liquidate assets, or suspend or curtail planned development programs. Any of these actions could materially harm the business, results of operations and financial condition.

## Cash Flows

The following table summarizes our cash flows for the periods indicated (in thousands):

	Nine Months Ended September 30,	
	2021	2020
Net cash (used in) provided by:		
Operating activities	\$ (19,208)	\$ (23,467)
Investing activities	16,678	14,428
Financing activities	22,014	12,824
Effects of foreign currency translation on cash and cash equivalents	(1)	—
Net increase in cash	<u>\$ 19,483</u>	<u>\$ 3,785</u>

### Cash flows from operating activities

Cash used in operating activities for the nine months ended September 30, 2021, was \$19.2 million. With respect to our net loss of \$6.6 million, non-cash charges including \$1.0 million of stock-based compensation, \$914,000 of lease amortization, \$1.8 million of write-downs of inventory, \$1.3 million of write-down of fixed assets, \$769,000 of issuance and offering costs, and \$737,000 of depreciation were offset by adjustments in our working capital accounts of \$2.4 million, \$10.2 million of realized gain on corporate securities, the change in fair value of common stock warrant liabilities of \$4.6 million, other non-cash income from the change in fair value of contingent consideration of \$140,000, and operating lease payments of \$984,000.

Cash used in operating activities for the nine months ended September 30, 2020 was \$23.5 million. Our net loss of \$14.6 million, adjustments in our working capital accounts of \$8.6 million, non-cash income from the change in fair value of common stock warrant liabilities of \$6.2 million, operating lease payments of \$629,000, amortization of investment premium of \$44,000 and gain on disposal of equipment of \$8,000, were partially offset by noncash charges including \$3.1 million of write-downs of inventory and prepaid production costs, \$1.8 million of stock-based compensation, \$745,000 of lease amortization, \$635,000 of loss on extinguishment of warrant liability and \$395,000 of depreciation.

#### *Cash flows from investing activities*

Cash provided by investing activities for the nine months ended September 30, 2021 consisted of \$21.8 million of proceeds from sales of investments, partially offset by \$4.3 million of acquisitions, and \$919,000 in purchases of property and equipment.

Cash provided by investing activities for the nine months ended September 30, 2020 consisted of \$18.3 million in proceeds from sales and maturities of investments and \$8,000 in proceeds from sales of equipment, which were partially offset by \$2.0 million in purchases of property and equipment, \$1.3 million in purchases of short-term investments and \$500,000 in acquisitions (for ISI acquisition).

#### *Cash flows from financing activities*

Cash provided by financing activities for the nine months ended September 30, 2021 consisted of proceeds from the issuance of common stock relating to the January 2021 PIPE financing transaction of \$25.1 million gross proceeds, capital contributions from the non-controlling interest in our joint venture of \$750,000, and proceeds from the purchase of ESPP shares of \$39,000, which were offset by payments of transaction costs related to the January 2021 PIPE of \$1.9 million and principal payments on debt of \$2.0 million.

Cash provided by financing activities for the nine months ended September 30, 2020 consisted of proceeds from the issuance of common stock relating to the exercise of the June 2018 Warrants of \$6.8 million and the exercise of half of the March 2018 PIPE Warrants of \$2.6 million, proceeds from borrowings of \$3.1 million, capital contributions from the non-controlling interest in our joint venture of \$1.2 million, and proceeds from the purchase of ESPP shares of \$51,000, which were offset by payments of transactions costs related to the extinguishment of warrant liability of \$863,000 and principal payments on notes payable of \$26,000.

#### **Off-Balance Sheet Arrangements**

Since our inception, we have not engaged in any off-balance sheet arrangements, including the use of structured finance, special purpose entities, or variable interest entities other than Verdeca, which has been disposed of in November 2020.

#### **Critical Accounting Policies and Estimates**

Our management's discussion and analysis of our financial condition and results of operations is based on our condensed consolidated financial statements, which have been prepared in accordance with GAAP. The preparation of these condensed consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the condensed consolidated financial statements, as well as the reported revenue generated, and expenses incurred during the reporting periods. Our estimates are based on our historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

We consider our critical accounting policies and estimates to be revenue recognition, determination of the provision for income taxes, stock-based compensation, fair value of certain equity instruments, and net realizable value of inventory. See Notes 5, 12 and 13 for the estimates made in connection with the securities purchase agreements executed during 2018, 2019, 2020 and 2021.

### **ITEM 3: QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

Not Required.

### **ITEM 4: CONTROLS AND PROCEDURES**

#### **Evaluation of Disclosure Controls and Procedures**

We maintain “disclosure controls and procedures,” as such term is defined in Rule 13a-15(e) under the Securities Exchange Act of 1934, or Exchange Act, that are designed to ensure that information required to be disclosed by us in reports that we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in Securities and Exchange Commission rules and forms, and that such information is accumulated and communicated to our management, including our President and Chief Executive Officer and our Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. In designing and evaluating our disclosure controls and procedures, management recognized that disclosure controls and procedures, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the disclosure controls and procedures are met. Our disclosure controls and procedures have been designed to meet reasonable assurance standards. Additionally, in designing disclosure controls and procedures, our management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible disclosure controls and procedures. The design of any disclosure controls and procedures also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions.

Based on their evaluation as of the end of the period covered by this Quarterly Report on Form 10-Q, our President and Chief Executive Officer and our Chief Financial Officer have concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

#### **Changes in Internal Control over Financial Reporting**

There were no changes in our internal control over financial reporting (as such term is defined in Rule 13a-15(f) under the Exchange Act) identified in connection with the evaluation identified above that occurred during the quarter ended September 30, 2021 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

## **PART II. OTHER INFORMATION**

### **ITEM 1. LEGAL PROCEEDINGS**

We currently are not a party to any material litigation or other material legal proceedings. From time to time, we may be subject to legal proceedings and claims in the ordinary course of business.

### **ITEM 1A. RISK FACTORS**

In addition to the other information set forth in this Quarterly Report, you should carefully consider the factors discussed in Part I, “Item 1A. Risk Factors” in our Annual Report on Form 10-K for the year ended December 31, 2020, which could materially affect our business, financial condition, liquidity or future results. The risks described below and in our Annual Report on Form 10-K are not the only risks facing our company. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially adversely affect our business, financial condition, liquidity or future results.

#### ***Risk associated with CBD products***

The manufacture, labeling and distribution by us of the CBD products in our portfolio is regulated by various federal, state and local agencies. These governmental authorities may commence regulatory or legal proceedings, which could restrict the allowable scope of our product claims or the ability to sell our products in the future. The FDA may regulate these products to ensure that the products are not misrepresented. We are subject to regulation by the federal government and other state and local agencies as a result of our CBD products. The changing compliance environment increases the possibility that we may violate one or more of the requirements. If our operations are found to be in violation of any of such laws or any other governmental regulations that apply to us, we may be subject to penalties, including, without limitation, civil and criminal penalties, damages, fines, the curtailment or restructuring of our operations, any of which could adversely affect the ability to operate our business and our financial results. Failure to comply with FDA requirements may result in, among other things, injunctions, product withdrawals, recalls, product seizures, fines and criminal prosecutions. Our advertising is subject to the U.S. Federal Trade Commission, or FTC, under the Federal Trade Commission Act regulation. Additionally, some states also permit advertising and labeling laws to be enforced by attorneys general who may seek relief for consumers, seek class-action certifications, seek class-wide damages and product recalls of products sold by us.

### **ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS**

During the three months ended September 30, 2021, we issued the securities described below without registration under the Securities Act. Unless otherwise indicated below, the securities were issued pursuant to the private placement exemption provided by Section 4(a)(2) of the Securities Act.

On July 29, 2021, we issued 10,000 shares of our common stock to a warrant holder upon the cash exercise of a warrant with an exercise price per share of \$2.19.

On August 4, 2021, we issued 4,000 shares of common stock to two warrant holders. The warrant holders utilized a cashless net exercise (based on a common stock price of \$2.37 per share on the date of exercise) of a total of 20,000 warrants, each with an exercise price per share of \$1.92.

### **ITEM 3. DEFAULTS UPON SENIOR SECURITIES**

None.

### **ITEM 4. MINE SAFETY DISCLOSURES**

Not applicable.

### **ITEM 5. OTHER INFORMATION**

None.

**ITEM 6. EXHIBITS**

The following exhibits are attached hereto or are incorporated herein by reference.

<b>Exhibit Number</b>	<b>Exhibit Description</b>
10.1(1)	<a href="#">Employment letter for Laura Pitlik, Chief Marketing Officer</a>
10.2(1)	<a href="#">Severance and Change In Control Agreement for Laura Pitlik</a>
10.3(1)(2)	<a href="#">CEO Transition Agreement</a>
31.1	<a href="#">Principal Executive Officer's Certifications Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</a>
31.2	<a href="#">Principal Financial Officer's Certifications Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</a>
32.1(3)	<a href="#">Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002</a>
32.2(3)	<a href="#">Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002</a>
101.INS	Inline XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document
101.SCH	Inline XBRL Taxonomy Extension Schema Document
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104.1	Cover page from the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2021, formatted in inline XBRL (and contained in Exhibit 101)

- (1) Indicates a management contract or compensatory plan, contract or arrangement in which any Director or any Executive Officer participates.
- (2) Incorporated by reference to Exhibit 10.1 filed with the Report on Form 8-K filed on September 7, 2021.
- (3) This certification is deemed not filed for purpose of Section 18 of the Exchange Act or otherwise subject to the liability of that section, nor shall it be deemed incorporated by reference into any filing under the Securities Act or the Exchange Act.

**SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Arcadia Biosciences, Inc.

November 15, 2021

By: /s/ MATTHEW T. PLAVAN

Matthew T. Plavan

President and Chief Executive Officer

November 15, 2021

By: /s/ PAMELA HALEY

Pamela Haley

Chief Financial Officer



June 24, 2021

Laura Pitlik

Dear Laura:

This letter sets forth the terms of your employment as **Chief Marketing Officer** of Arcadia Biosciences, Inc. (the "Company"), which will commence on July 12, 2021 (the "Effective Date"). The terms set forth below shall be effective as of the Effective Date.

**Reporting and Base Salary.** You will report to the President and Chief Executive Officer, Matthew Plavan. This is a full-time exempt position for which your annual base salary rate shall be **\$250,000**. You will work remotely from your home office in Dallas, TX, but you will be expected to travel to the Company's corporate offices in Davis, CA, or the Company's manufacturing location in Chatsworth, CA, from time to time as requested by the Company's President and Chief Executive Officer.

**Sign-on Bonus.** In addition to your base salary, your offer also includes a sign-on bonus of **\$50,000**; \$25,000 payable with your first paycheck, and \$25,000 payable on January 1, 2022. You must be employed with the company and in good standing to receive your sign-on bonus payment for that date. All bonus payments are subject to standard withholdings.

**Bonus Compensation.** In addition to your base salary and sign-on bonus, you will be eligible for an annual incentive cash award, as determined by the Company. Your annual incentive cash bonus shall have a target equal to **40%** of your base salary as of the Effective Date, prorated for the portion of year during which you are employed by the Company. The target bonus and its components, the Company performance objectives, and your individual objectives shall be determined each year by the Compensation Committee of the Board of Directors (the "Compensation Committee").

**Severance & CIC Agreement.** You will have the benefits set forth in a (3-Month) Severance Agreement and (1-year) Change-in-Control Agreement, pending Arcadia Board of Director's approval, between you and the Company to be executed on the Effective Date.

**Equity Awards.** Concurrent with the commencement of your employment with the Company, and as an inducement to accept employment with the Company, you will be granted an option to purchase shares of common stock of the Company ("Company Common Stock") as follows, under the terms and conditions of a Non-Qualified Stock Option Agreement (an "Option"):

Strike Price*	Number of Shares
FMV	<b>75,000</b>

\* FMV = the price of a share of RKDA common stock at close of market on the date of grant, which will be the Effective Date.

Your Option shall vest and become exercisable in accordance with the schedule below:

- 25% of the shares subject to the Option will be fully vested and exercisable effective as of the first anniversary of the Effective Date (the "Initial Vesting Date"), subject to your continued service through the Initial Vesting Date, and;
- 75% of the shares subject to the Option will vest and become exercisable in 36 equal monthly installments following the Initial Vesting Date, with the first such monthly vesting date taking place on August 31, 2022 and subsequent vesting dates on the last day of the next 35 months thereafter (with the last vesting date on July 31, 2025), subject to your continued service through the applicable vesting date.



The Company may grant additional equity awards to you from time to time, which will be subject to the terms of the applicable equity compensation plan or arrangement in effect at the time of grant. The Compensation Committee will determine in its discretion whether you will be granted any such equity awards and the terms and conditions of any such awards in accordance with the terms of any applicable equity plan. You should be aware that you may incur federal and state income taxes as a result of your receipt, or the vesting of any equity compensation awards, and it shall be your responsibility to pay any such applicable taxes.

You are also eligible to participate in the Company's Employee Stock Purchase Program (ESPP) per the terms and conditions of the ESPP plan.

Other Benefits. You are eligible for all Company benefits as described in the Employee Handbook and in various Company policies. Your coverage for medical, dental and vision insurance will become effective on September 1, 2021. If needed, the Company will reimburse you for any COBRA-related costs to bridge your healthcare benefits coverage to September 1, 2021.

Your PTO accrual of 7.0769 hours per pay period (23 days annually) will begin with your first paycheck. You are granted an additional 8.0 hours (1 day) of PTO each year as part of your offer of employment.

In accordance with the Federal Immigration Reform and Control Act of 1986, the Company is required to have an Employment Eligibility Verification Form I-9 on file for you. On your first day of employment, we will ask you to provide identification needed to complete the form. Arcadia uses E-Verify and will provide the Social Security Administration and, if necessary, the Department of Homeland Security information from your Form I-9 to confirm that you are authorized to work in the United States.

Your employment is "at-will," which means that either you or the Company may terminate the employment relationship at any time for any reason or for no reason. This at-will relationship may not be modified by any oral or implied agreement.

This letter, the Severance Agreement and the Confidentiality and Invention Assignment Agreement executed on the Effective Date, and any policies that the Company may adopt from time to time constitute the entire agreement relating to the terms of your employment with the Company you and is contingent upon successful completion of all background checks. If all the above terms and conditions meet with your approval, please sign this letter and return it to me at your earliest convenience.

If you should have any questions, please feel free to call me.

Sincerely,

/s/ Matthew T. Plavan

Matthew Plavan  
President & CEO

ACCEPTED AND ACKNOWLEDGED BY:

/s/ Laura Pitlik

Laura Pitlik

June 26, 2021

Date



## SEVERANCE AND CHANGE IN CONTROL AGREEMENT

This Severance and Change in Control Agreement (the “**Agreement**”) is made and entered into by and between Laura Pitlik (“**Executive**”) and Arcadia Biosciences, Inc. (the “**Company**”), effective as of July 12, 2021 (the “**Effective Date**”).

### RECITALS

1. The Compensation Committee of the Board of Directors of the Company (the “**Committee**”) recognizes that it is possible that the Company could terminate Executive’s employment with the Company and from time to time the Company may consider the possibility of an acquisition by another company or other change in control transaction. The Committee also recognizes that such considerations can be a distraction to Executive and can cause Executive to consider alternative employment opportunities. The Committee has determined that it is in the best interests of the Company and its stockholders to assure that the Company will have the continued dedication and objectivity of Executive, notwithstanding the possibility, threat or occurrence of such a termination of employment or the occurrence of a Change in Control (as defined herein) of the Company.

2. The Committee believes that it is in the best interests of the Company and its stockholders to provide Executive with an incentive to continue his or her employment with the Company and to motivate Executive to maximize the value of the Company for the benefit of its stockholders.

3. The Committee believes that it is imperative to provide Executive with certain severance benefits upon Executive’s termination of employment and with certain additional benefits following a Change in Control. These benefits will provide Executive with enhanced financial security and incentive and encouragement to remain with the Company notwithstanding the possibility of a Change in Control.

4. The Company and Executive have entered into an employment terms letter dated as of June 24, 2021 and made effective as of July 12, 2021 (the “**Employment Letter**”).

5. The Company and Executive wish to restate the terms of Executive’s severance and benefits (whether or not in connection with a Change in Control) and replace any and all such provisions providing for severance and/or change in control payments, as set forth below. All other terms and conditions of the Employment Letter will remain in full force and effect.

6. Certain capitalized terms used in the Agreement are defined in Section 6 below.

## AGREEMENT

NOW, THEREFORE, in consideration of the mutual covenants contained herein, the parties hereto agree as follows:

1. Term of Agreement. The Agreement shall terminate on the third (3<sup>rd</sup>) anniversary of the Effective Date (the “**Term End Date**”); provided, however, that if as of the Term End Date Executive is receiving benefits under Section 3 of this Agreement, then the Agreement shall continue in effect until such date as all of the obligations of the parties hereto with respect to this Agreement have been satisfied.

2. At-Will Employment. The Company and Executive acknowledge that, notwithstanding this Agreement and any benefits provided for herein, Executive’s employment is and will continue to be at-will, as defined under applicable law. If Executive’s employment terminates for any reason, including (without limitation) any termination of employment not set forth in Section 3, Executive will not be entitled to any payments, benefits, damages, awards or compensation other than the payment of accrued but unpaid wages and vacation, if any, as required by law, and any unreimbursed reimbursable expenses or pursuant to written agreements with the Company, including equity award agreements.

3. Severance Benefits.

(a) Termination without Cause and not in Connection with a Change in Control. If the Company terminates Executive’s employment with the Company for a reason other than Cause, Executive becoming Disabled, or Executive’s death, at any time other than during the twelve (12)-month period immediately following a Change in Control, then, subject to Section 4, Executive will receive the following severance benefits from the Company:

(i) Accrued Compensation. The Company will pay Executive all accrued but unpaid vacation, expense reimbursements, wages, and other benefits due to Executive under any Company-provided plans, policies, and arrangements.

(ii) Severance Payment. Executive will receive continuing payments of severance for a period of three (3) months (such number of months, the “**Standard Severance Period**”) from the date of such termination of employment at a rate equal to Executive’s base salary as in effect immediately prior to the date of Executive’s termination of employment (disregarding any reduction in base salary that triggers the right to termination for Good Reason), less all required tax withholdings and other applicable deductions, which will be paid in accordance with the Company’s regular payroll procedures.

(iii) Continued Employee Benefits. If Executive elects continuation coverage pursuant to the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended (“**COBRA**”) for Executive and Executive’s eligible dependents, within the time period prescribed pursuant to COBRA, the Company will reimburse Executive for the COBRA premiums for such coverage (at the coverage levels in effect immediately prior to Executive’s termination or resignation) until the earlier of (A) the end of the Standard Severance Period, or (B) the date upon which Executive and/or Executive’s eligible dependents becomes covered under similar plans. COBRA reimbursements will be made by the Company to Executive consistent with the Company’s normal expense reimbursement policy and will be taxable to the extent required to

avoid adverse consequences to Executive or the Company under either Code Section 105(h) or the Patient Protection and Affordable Care Act of 2010.

(iv) Pro-Rated Bonus. Following the end of the year in which Executive's employment with the Company terminates, but no later than March 15 of such following year, the Committee, and if applicable, the Company's Board of Directors ("**Board**"), shall determine in good faith the annual cash bonus that Executive would have been entitled to receive for the year of termination if Executive had remained employed by the Company through the end of such year (such hypothetical bonus, the "**Termination Year Bonus**"). The Company will pay Executive a pro-rated portion of the Termination Year Bonus based on the percentage of the year that Executive was employed by the Company in the year of termination. This amount will be payable on or before the earlier of (i) March 15 of the year immediately following the year of Executive's termination and (ii) the date that the Company pays annual cash bonuses to other executives of the Company with respect to the year of Executive's termination.

(v) Payments or Benefits Required by Law. Executive will receive such other compensation or benefits from the Company as may be required by law.

(b) Termination without Cause or Resignation for Good Reason in Connection with a Change in Control. If during the twelve (12)-month period immediately following a Change in Control, (x) the Company terminates Executive's employment with the Company for a reason other than Cause, Executive becoming Disabled, or Executive's death, or (y) Executive resigns from such employment for Good Reason, then, subject to Section 4, Executive will receive the following severance benefits from the Company in lieu of the benefits described in Section 3(a) above:

(i) Accrued Compensation. The Company will pay Executive all accrued but unpaid vacation, expense reimbursements, wages, and other benefits due to Executive under any Company-provided plans, policies, and arrangements.

(ii) Severance Payment. Executive will receive continuing payments of severance for a period of three (3) months (such number of months, the "**Enhanced Severance Period**") from the date of such termination of employment at a rate equal to Executive's base salary as in effect immediately prior to the date of Executive's termination of employment (disregarding any reduction in base salary that triggers the right to termination for Good Reason), less all required tax withholdings and other applicable deductions, which will be paid in accordance with the Company's regular payroll procedures.

(iii) Continued Employee Benefits. If Executive elects continuation coverage pursuant to COBRA for Executive and Executive's eligible dependents, within the time period prescribed pursuant to COBRA, the Company will reimburse Executive for the COBRA premiums for such coverage (at the coverage levels in effect immediately prior to Executive's termination or resignation) until the earlier of (A) the end of the Enhanced Severance Period, or (B) the date upon which Executive and/or Executive's eligible dependents becomes covered under similar plans. COBRA reimbursements will be made by the Company to Executive consistent with the Company's normal expense reimbursement policy and will be taxable to the extent required to avoid adverse consequences to Executive or the Company under either Code Section 105(h) or the Patient Protection and Affordable Care Act of 2010.

(iv) Equity. Executive will be entitled to accelerated vesting as to one hundred percent (100%) of the then-unvested portion of all of Executive's outstanding equity awards.

(v) Pro-Rated Bonus. Following the end of the year in which Executive's employment with the Company terminates, but no later than March 15 of such following year, the Committee, and if applicable, the Board, shall determine in good faith the Termination Year Bonus (as defined above). The Company will pay Executive a pro-rated portion of the Termination Year Bonus based on the percentage of the year that Executive was employed by the Company in the year of termination. This amount will be payable on or before the earlier of (i) March 15 of the year immediately following the year of Executive's termination and (ii) the date that the Company pays annual cash bonuses to other executives of the Company with respect to the year of Executive's termination.

(vi) Payments or Benefits Required by Law. Executive will receive such other compensation or benefits from the Company as may be required by law.

(c) Disability; Death. If Executive's employment with the Company is terminated due to Executive becoming Disabled or Executive's death, then Executive or Executive's estate (as the case may be) will (i) receive the earned but unpaid base salary through the date of termination of employment, (ii) receive all accrued vacation, expense reimbursements and any other benefits due to Executive through the date of termination of employment in accordance with Company-provided or paid plans, policies and arrangements, and (iii) not be entitled to any other compensation or benefits from the Company except to the extent required by law (for example, COBRA).

(d) Voluntary Resignation; Termination for Cause. If Executive voluntarily terminates Executive's employment with the Company (other than for Good Reason following a Change in Control) or if the Company terminates Executive's employment with the Company for Cause, then Executive will (i) receive his or her earned but unpaid base salary through the date of termination of employment, (ii) receive all accrued vacation, expense reimbursements and any other benefits due to Executive through the date of termination of employment in accordance with established Company-provided or paid plans, policies and arrangements, and (iii) not be entitled to any other compensation or benefits (including, without limitation, accelerated vesting of any equity awards) from the Company except to the extent provided under agreement(s) relating to any equity awards or as may be required by law (for example, COBRA).

(e) Timing of Payments. Subject to Section 4, payment of the severance and benefits hereunder shall be made or commence to be made as soon as practicable following Executive's termination of employment.

(f) Exclusive Remedy. In the event of a termination of Executive's employment with the Company pursuant to Section 3(a) or Section 3(b), the provisions of this Section 3 are intended to be and are exclusive and in lieu of any other rights or remedies to which Executive or the Company may otherwise be entitled, whether at law, tort or contract, in equity, or under this Agreement (other than the payment of accrued but unpaid wages, as required by law, and any unreimbursed reimbursable expenses). Executive will be entitled to no other severance, benefits, compensation or other payments or rights upon a termination of employment, including, without limitation, any severance payments and/or benefits provided in the Employment Agreement, other

than those benefits expressly set forth in Section 3 of this Agreement or pursuant to written equity award agreements with the Company.

4. Conditions to Receipt of Severance.

(a) Release of Claims Agreement. In the event of a termination of Executive's employment with the Company pursuant to Section 3(a) or Section 3(b), the receipt of any severance payments or benefits pursuant to this Agreement is subject to Executive signing and not revoking a separation agreement and release of claims in a form acceptable to the Company (the "**Release**"), which must become effective no later than the sixtieth (60<sup>th</sup>) day following Executive's termination of employment (the "**Release Deadline**"), and if not, Executive will forfeit any right to severance payments or benefits under this Agreement. To become effective, the Release must be executed by Executive and any revocation periods (as required by statute, regulation, or otherwise) must have expired without Executive having revoked the Release. In addition, in no event will severance payments or benefits be paid or provided until the Release actually becomes effective. If the termination of employment occurs at a time during the calendar year where the Release Deadline could occur in the calendar year following the calendar year in which Executive's termination of employment occurs, then any severance payments or benefits under this Agreement that would be considered Deferred Payments (as defined in Section 4(d)(i)) will be paid on the first payroll date to occur during the calendar year following the calendar year in which such termination occurs, or such later time as required by (i) the payment schedule applicable to each payment or benefit as set forth in Section 3, (ii) the date the Release becomes effective, or (iii) Section 4(d)(ii); provided that the first payment shall include all amounts that would have been paid to Executive if payment had commenced on the date of Executive's termination of employment.

(b) Non-solicitation. Executive agrees, to the extent permitted by applicable law, that in the event the Executive receives severance pay or other benefits pursuant to Section 3(a) or 3(b) above, for the number of months of severance provided to Executive pursuant to Section 3(a)(ii) or 3(b)(ii), as applicable, immediately following the date of Executive's termination, Executive, as a condition to receipt of severance pay and benefits under Sections 3(a) and 3(b), will not directly or indirectly, solicit, induce, recruit, or encourage any employee of the Company to leave his or her employment either for Executive or for any other entity or person. In the event Executive violates the provisions of this Section 4(b), all severance pay and other benefits to which Executive may otherwise be entitled pursuant to Section 3(a) or 3(b) shall cease immediately.

The covenant contained in this Section 4(b) hereof shall be construed as a series of separate covenants, one for each country, province, state, city or other political subdivision in which the Company currently engages in its business or, during the term of this Agreement, becomes engaged in its business. Except for geographic coverage, each such separate covenant shall be deemed identical in terms to the covenant contained in this Section 4(b). If, in any judicial proceeding, a court refuses to enforce any of such separate covenants (or any part thereof), then such unenforceable covenant (or such part) shall be eliminated from this Agreement to the extent necessary to permit the remaining separate covenants (or portions thereof) to be enforced. In the event that the provisions of this Section 4(b) are deemed to exceed the time, geographic or scope limitations permitted by applicable law, then such provisions shall be reformed to the maximum time, geographic or scope limitations, as the case may be, permitted by applicable law.

(c) Confidential Information Agreement and Other Requirements. Executive's receipt of any payments or benefits under Section 3 (except for those required by law) will be subject to Executive continuing to comply with the terms of the Confidential Information Agreement (as defined in Section 9) executed by Executive in favor of the Company and the provisions of this Agreement.

(d) Section 409A.

(i) Notwithstanding anything to the contrary in this Agreement, no severance pay or benefits to be paid or provided to Executive, if any, pursuant to this Agreement that, when considered together with any other severance payments or separation benefits, are considered deferred compensation not exempt under Section 409A (together, the "**Deferred Payments**") will be paid or otherwise provided until Executive has a "separation from service" within the meaning of Section 409A. And for purposes of this Agreement, any reference to "termination of employment," "termination" or any similar term shall be construed to mean a "separation from service" within the meaning of Section 409A. Similarly, no severance payable to Executive, if any, pursuant to this Agreement that otherwise would be exempt from Section 409A pursuant to Treasury Regulation Section 1.409A-1(b)(9) will be payable until Executive has a "separation from service" within the meaning of Section 409A.

(ii) Notwithstanding anything to the contrary in this Agreement, if Executive is a "specified employee" within the meaning of Section 409A at the time of Executive's termination of employment (other than due to death), then the Deferred Payments, if any, that are payable within the first six (6) months following Executive's separation from service, will become payable on the first payroll date that occurs on or after the date six (6) months and one (1) day following the date of Executive's separation from service. All subsequent Deferred Payments, if any, will be payable in accordance with the payment schedule applicable to each payment or benefit. Notwithstanding anything herein to the contrary, if Executive dies following Executive's separation from service, but prior to the six (6) month anniversary of the separation from service, then any payments delayed in accordance with this paragraph will be payable in a lump sum as soon as administratively practicable after the date of Executive's death and all other Deferred Payments will be payable in accordance with the payment schedule applicable to each payment or benefit. Each payment, installment and benefit payable under this Agreement is intended to constitute a separate payment for purposes of Section 1.409A-2(b)(2) of the Treasury Regulations.

(iii) Without limitation, any amount paid under this Agreement that satisfies the requirements of the "short-term deferral" rule set forth in Section 1.409A-1(b)(4) of the Treasury Regulations is not intended to constitute Deferred Payments for purposes of clause (i) above.

(iv) Without limitation, any amount paid under this Agreement that qualifies as a payment made as a result of an involuntary separation from service pursuant to Section 1.409A-1(b)(9)(iii) of the Treasury Regulations that does not exceed the Section 409A Limit is not intended to constitute Deferred Payments for purposes of clause (i) above. Any payment intended to qualify under this exemption must be made within the allowable time period specified in Section 1.409A-1(b)(9)(iii) of the Treasury Regulations.

(v) To the extent that reimbursements or in-kind benefits under this Agreement constitute non-exempt "nonqualified deferred compensation" for purposes of Section

409A, (1) all reimbursements hereunder shall be made on or prior to the last day of the calendar year following the calendar year in which the expense was incurred by Executive, (2) any right to reimbursement or in-kind benefits shall not be subject to liquidation or exchange for another benefit, and (3) the amount of expenses eligible for reimbursement or in-kind benefits provided in any calendar year shall not in any way affect the expenses eligible for reimbursement or in-kind benefits to be provided, in any other calendar year.

(vi) Any tax gross-up that Executive is entitled to receive under this Agreement or otherwise shall be paid to Executive no later than December 31<sup>st</sup> of the calendar year following the calendar year in which Executive remits the related taxes.

(vii) Notwithstanding any other provision of this Agreement to the contrary, in no event shall any payment under this Agreement that constitutes “nonqualified deferred compensation” for purposes of Code Section 409A be subject to offset by any other amount unless otherwise permitted by Code Section 409A.

(viii) The foregoing provisions are intended to be exempt from or comply with the requirements of Section 409A so that none of the severance payments and benefits to be provided hereunder will be subject to the additional tax imposed under Section 409A, and any ambiguities or ambiguous terms herein will be interpreted to be exempt or so comply. The Company and Executive agree to work together in good faith to consider amendments to this Agreement and to take such reasonable actions which are necessary, appropriate or desirable to avoid imposition of any additional tax or income recognition prior to actual payment to Executive under Section 409A.

## 5. Limitation on Payments.

(a) Anything in this Agreement to the contrary notwithstanding, if any payment or benefit Executive would receive from the Company or otherwise (“**Payment**”) would (i) constitute a “parachute payment” within the meaning of Section 280G of the Code; and (ii) but for this sentence, be subject to the excise tax imposed by Section 4999 of the Code (the “**Excise Tax**”), then such Payment shall be equal to the Reduced Amount. The “**Reduced Amount**” shall be either (x) the largest portion of the Payment that would result in no portion of the Payment being subject to the Excise Tax; or (y) the largest portion, up to and including the total, of the Payment, whichever amount, after taking into account all applicable federal, state and local employment taxes, income taxes, and the Excise Tax (all computed at the highest applicable marginal rate), results in Executive’s receipt, on an after-tax basis, of the greater amount of the Payment. Any reduction made pursuant to this Section 5(a) shall be made in accordance with the following order of priority: (i) stock options whose exercise price exceeds the fair market value of the optioned stock (“**Underwater Options**”), (ii) Full Credit Payments (as defined below), that are payable in cash, (iii) non-cash Full Credit Payments that are taxable, (iv) non-cash Full Credit Payments that are not taxable, (v) Partial Credit Payments (as defined below) and (vi) non-cash employee welfare benefits. In each case, reductions shall be made in reverse chronological order such that the payment or benefit owed on the latest date following the occurrence of the event triggering the excise tax will be the first payment or benefit to be reduced (with reductions made pro-rata in the event payments or benefits are owed at the same time). “**Full Credit Payment**” means a payment, distribution or benefit, whether paid or payable or distributed or distributable pursuant to the terms of this Agreement or otherwise, that if reduced in value by one dollar reduces the amount of the parachute payment (as defined in Section 280G of the Code) by one dollar, determined as if such



payment, distribution or benefit had been paid or distributed on the date of the event triggering the excise tax. **“Partial Credit Payment”** means any payment, distribution or benefit that is not a Full Credit Payment. In no event shall the Executive have any discretion with respect to the ordering of payment reductions.

(b) Unless the Company and Executive otherwise agree in writing, any determination required under this Section 5 will be made in writing by an independent firm (the **“Firm”**), whose determination will be conclusive and binding upon Executive and the Company for all purposes. For purposes of making the calculations required by this Section 5, the Firm may make reasonable assumptions and approximations concerning applicable taxes and may rely on reasonable, good faith interpretations concerning the application of Sections 280G and 4999 of the Code. The Company and Executive will furnish to the Firm such information and documents as the Firm may reasonably request in order to make a determination under this Section 5. The Company will bear all costs the Firm may reasonably incur in connection with any calculations contemplated by this Section 5.

6. Definition of Terms. The following terms referred to in this Agreement will have the following meanings:

(a) Cause. **“Cause”** means:

(i) Executive’s conviction of, or pleading guilty or nolo contendere to, any felony or a lesser crime involving dishonesty or moral turpitude;

(ii) Executive’s willful failure to perform Executive’s duties and responsibilities to the Company or Executive’s violation of any written Company policy or agreement;

(iii) Executive’s commission of any act of fraud, embezzlement, dishonesty against the Company or any other intentional misconduct that has caused or is reasonably expected to result in injury to the Company;

(iv) Executive’s unauthorized use or disclosure of any proprietary information or trade secrets of the Company or any other party to whom the Executive owes an obligation of nondisclosure as a result of his or her relationship with the Company;

(v) Executive’s failure to reasonably cooperate with the Company in any investigation or formal proceeding after receiving a written request to do so; or

(vi) Executive’s material breach of any of his or her obligations under any written agreement or covenant with the Company.

(b) Change in Control. **“Change in Control”** means the occurrence of any of the following:

(i) The consummation of a merger or consolidation of the Company with or into another entity or any other corporate reorganization, if the Company’s stockholders immediately prior to such merger, consolidation or reorganization cease to directly or indirectly own immediately after such merger, consolidation or reorganization at least a majority of the

combined voting power of the continuing or surviving entity's securities outstanding immediately after such merger, consolidation or other reorganization;

(ii) The consummation of the sale, transfer or other disposition of all or substantially all of the Company's assets (other than (x) to a corporation or other entity of which at least a majority of its combined voting power is owned directly or indirectly by the Company, (y) to a corporation or other entity owned directly or indirectly by the stockholders of the Company in substantially the same proportions as their ownership of the common stock of the Company or (z) to a continuing or surviving entity described in Section 6(b)(i) in connection with a merger, consolidation or corporate reorganization which does not result in a Change in Control under Section 6(b)(i));

(iii) A change in the effective control of the Company which occurs on the date that a majority of members of the Board is replaced during any twelve (12) month period by Directors whose appointment or election is not endorsed by a majority of the members of the Board prior to the date of the appointment or election. For purposes of this clause, if any Person (as defined below in Section 6(b)(iv)) is considered to be in effective control of the Company, the acquisition of additional control of the Company by the same Person will not be considered a Change in Control; or

(iv) The consummation of any transaction as a result of which any Person becomes the "beneficial owner" (as defined in Rule 13d-3 under the Securities Exchange Act of 1934, as amended (the "**Exchange Act**")), directly or indirectly, of securities of the Company representing at least fifty percent (50%) of the total voting power represented by the Company's then outstanding voting securities. For purposes of this clause (iv), the term "person" shall have the same meaning as when used in sections 13(d) and 14(d) of the Exchange Act but shall exclude:

(1) a trustee or other fiduciary holding securities under an employee benefit plan of the Company or an affiliate of the Company;

(2) a corporation or other entity owned directly or indirectly by the stockholders of the Company in substantially the same proportions as their ownership of the common stock of the Company;

(3) the Company; and

(4) a corporation or other entity of which at least a majority of its combined voting power is owned directly or indirectly by the Company.

A transaction shall not constitute a Change in Control if its sole purpose is to change the state of the Company's incorporation or to create a holding company that will be owned in substantially the same proportions by the persons who held the Company's securities immediately before such transactions. For the avoidance of doubt, an initial public offering of the common stock of the Company shall not constitute a Change in Control for purposes of this Agreement.

(c) Code. "**Code**" means the Internal Revenue Code of 1986, as amended.

(d) Disability. "**Disability**" means that because of a physical or medical impairment, Executive is unable, with or without reasonable accommodation, to perform the

essential functions pertaining to Executive's position with the Company for a period exceeding 4 months.

(e) Good Reason. "**Good Reason**" means Executive's termination of employment within ninety (90) days following the expiration of any cure period (discussed below) following the occurrence, without Executive's consent, of one or more of the following:

(i) A material reduction of Executive's duties, authority or responsibilities, relative to Executive's duties, authority or responsibilities in effect immediately prior to such reduction; provided, however, that a reduction in duties, authority or responsibilities solely by virtue of the Company being acquired and made part of a larger entity (as, for example, when the Chief Marketing Officer of the Company remains as such following a Change of Control but is not made the Chief Marketing Officer of the acquiring corporation) will not constitute Good Reason;

(ii) A material reduction in Executive's base compensation (except where there is a reduction applicable to all similarly situated executive officers generally); provided, that a reduction of less than ten percent (10%) will not be considered a material reduction in base compensation;

(iii) A material change in the geographic location of Executive's primary work facility or location; provided, that a relocation of less than thirty-five (35) miles from Executive's then-present work location will not be considered a material change in geographic location; or

(iv) A material breach by the Company of a material provision of this Agreement or a failure of a successor entity in the Change of Control to assume this Agreement;

Executive will not resign for Good Reason without first providing the Company with written notice within sixty (60) days of the event that Executive believes constitutes "Good Reason" specifically identifying the acts or omissions constituting the grounds for Good Reason and a reasonable cure period of not less than thirty (30) days following the date of such notice during which such condition must not have been cured.

(f) Section 409A. "**Section 409A**" means Code Section 409A, and the final regulations and any guidance promulgated thereunder or any state law equivalent.

(g) Section 409A Limit. "**Section 409A Limit**" will mean two (2) times the lesser of: (i) Executive's annualized compensation based upon the annual rate of pay paid to Executive during the Executive's taxable year preceding the Executive's taxable year of his or her separation from service as determined under Treasury Regulation Section 1.409A-1(b)(9)(iii)(A)(1) and any Internal Revenue Service guidance issued with respect thereto; or (ii) the maximum amount that may be taken into account under a qualified plan pursuant to Section 401(a)(17) of the Internal Revenue Code for the year in which Executive's separation from service occurred.

## 7. Successors.

(a) The Company's Successors. Any successor to the Company (whether direct or indirect and whether by purchase, merger, consolidation, liquidation or otherwise) to all or substantially all of the Company's business and/or assets will assume the obligations under this Agreement and agree expressly to perform the obligations under this Agreement in the same

manner and to the same extent as the Company would be required to perform such obligations in the absence of a succession. For all purposes under this Agreement, the term “Company” will include any successor to the Company’s business and/or assets which executes and delivers the assumption agreement described in this Section 7(a) or which becomes bound by the terms of this Agreement by operation of law.

(b) Executive’s Successors. The terms of this Agreement and all rights of Executive hereunder will inure to the benefit of, and be enforceable by, Executive’s personal or legal representatives, executors, administrators, successors, heirs, distributees, devisees and legatees.

## 8. Arbitration.

(a) Arbitration. In consideration of Executive’s employment with the Company, its promise to arbitrate all employment-related disputes, and Executive’s receipt of the compensation, pay raises and other benefits paid to Executive by the Company, at present and in the future, Executive agrees that any and all controversies, claims, or disputes with anyone (including the Company and any employee, officer, director, stockholder or benefit plan of the Company in their capacity as such or otherwise) arising out of, relating to, or resulting from Executive’s employment with the Company or termination thereof, including any breach of this Agreement, will be subject to binding arbitration under the Arbitration Rules set forth in California Code of Civil Procedure Section 1280 through 1294.2, including Section 1281.8 (the “Act”), and pursuant to California law. The Federal Arbitration Act shall also apply with full force and effect, notwithstanding the application of procedural rules set forth under the Act.

(b) Dispute Resolution. **Disputes that Executive agrees to arbitrate, and thereby agrees to waive any right to a trial by jury, include any statutory claims under local, state, or federal law** (except those which are expressly excluded by statute, state law, or applicable court decision from being resolved by mandatory arbitration), including, but not limited to, claims under Title VII of the Civil Rights Act of 1964, the Americans with Disabilities Act of 1990, the Age Discrimination in Employment Act of 1967, the Older Workers Benefit Protection Act, the Sarbanes Oxley Act, the Worker Adjustment and Retraining Notification Act, the California Fair Employment and Housing Act, the Family and Medical Leave Act, the California Family Rights Act, the California Labor Code, claims of harassment, discrimination, and wrongful termination, and any statutory or common law claims. Executive further understands that this Agreement to arbitrate also applies to any disputes that the Company may have with Executive.

(c) Procedure. Executive agrees that any arbitration will be administered by the Judicial Arbitration & Mediation Services, Inc. (“JAMS”), pursuant to its Employment Arbitration Rules & Procedures (the “JAMS Rules”). The arbitrator shall have the power to decide any motions brought by any party to the arbitration, including motions for summary judgment and/or adjudication, motions to dismiss and demurrers, and motions for class certification, prior to any arbitration hearing. The arbitrator shall have the power to award any remedies available under applicable law, and the arbitrator shall award attorneys’ fees and costs to the prevailing party, except as prohibited by law. The Company will pay for any administrative or hearing fees charged by the administrator or JAMS, and all arbitrator’s fees, except that Executive shall pay any filing fees associated with any arbitration that Executive initiates, but only so much of the filing fee as Executive would have instead paid had Executive filed a complaint in a court of law. Executive agrees that the arbitrator shall administer and conduct any arbitration in accordance with California

law, including the California Code of Civil Procedure and the California Evidence Code, and that the arbitrator shall apply substantive and procedural California law to any dispute or claim, without reference to the rules of conflict of law. To the extent that the JAMS Rules conflict with California law, California law shall take precedence. The decision of the arbitrator shall be in writing. Any arbitration under this Agreement shall be conducted in Sacramento County, California.

(d) Remedy. Except as provided by the Act, arbitration shall be the sole, exclusive, and final remedy for any dispute between Executive and the Company. **Accordingly, except as provided by the Act and this Agreement, neither Executive nor the Company will be permitted to pursue court action regarding claims that are subject to arbitration.** Notwithstanding, the arbitrator will not have the authority to disregard or refuse to enforce any lawful Company policy, and the arbitrator will not order or require the Company to adopt a policy not otherwise required by law that the Company has not adopted.

(e) Administrative Relief. Executive is not prohibited from pursuing an administrative claim with a local, state, or federal administrative body or government agency that is authorized to enforce or administer laws related to employment, including, but not limited to, the Department of Fair Employment and Housing, the Equal Employment Opportunity Commission, the National Labor Relations Board, or the Workers' Compensation Board. However, Executive may not pursue court action regarding any such claim, except as permitted by law.

(f) Voluntary Nature of Agreement. Executive acknowledges and agrees that Executive is executing this Agreement voluntarily and without any duress or undue influence by the Company or anyone else. Executive further acknowledges and agrees that Executive has carefully read this Agreement and that Executive has asked any questions needed for Executive to understand the terms, consequences and binding effect of this Agreement and fully understands it, including that **EXECUTIVE IS WAIVING EXECUTIVE'S RIGHT TO A JURY TRIAL**. Finally, Executive agrees that Executive has been provided an opportunity to seek the advice of an attorney of Executive's choice before signing this Agreement.

9. Confidential Information. Executive agrees to continue to comply with and be bound by the Confidentiality and Intellectual Property Rights Agreement (the "**Confidential Information Agreement**") entered into by and between Executive and the Company, dated July 12, 2021.

#### 10. Notice.

(a) General. Notices and all other communications contemplated by this Agreement will be in writing and will be deemed to have been duly given when personally delivered or when mailed by U.S. registered or certified mail, return receipt requested and postage prepaid. In the case of Executive, mailed notices will be addressed to him or her at the home address which he or she most recently communicated to the Company in writing. In the case of the Company, mailed notices will be addressed to its corporate headquarters, and all notices will be directed to the attention of its General Counsel.

(b) Notice of Termination. Any termination by the Company for Cause or by Executive for Good Reason will be communicated by a notice of termination to the other party hereto given in accordance with Section 10(a) of this Agreement. Such notice will indicate the

specific termination provision in this Agreement relied upon, will set forth in reasonable detail the facts and circumstances claimed to provide a basis for termination under the provision so indicated, and will specify the termination date (which will be not more than thirty (30) days after the giving of such notice). The failure by Executive to include in the notice any fact or circumstance which contributes to a showing of Good Reason will not waive any right of Executive hereunder or preclude Executive from asserting such fact or circumstance in enforcing his or her rights hereunder.

11. Miscellaneous Provisions.

(a) No Duty to Mitigate. Executive will not be required to mitigate the amount of any payment contemplated by this Agreement, nor will any such payment be reduced by any earnings that Executive may receive from any other source.

(b) Waiver. No provision of this Agreement will be modified, waived or discharged unless the modification, waiver or discharge is agreed to in writing and signed by Executive and by an authorized officer of the Company (other than Executive). No waiver by either party of any breach of, or of compliance with, any condition or provision of this Agreement by the other party will be considered a waiver of any other condition or provision or of the same condition or provision at another time.

(c) Headings. All captions and section headings used in this Agreement are for convenient reference only and do not form a part of this Agreement.

(d) Entire Agreement. This Agreement constitutes the entire agreement of the parties hereto and supersedes in their entirety all prior or contemporaneous representations, understandings, undertakings or agreements (whether oral or written and whether expressed or implied) of the parties with respect to the subject matter hereof, including, without limitation, any severance provisions contained in the Employment Agreement. Executive acknowledges and agrees that this Agreement encompasses all the rights of Executive to any severance payments and/or benefits based on the termination of Executive's employment and Executive hereby agrees that he or she has no such rights except as stated herein. No waiver, alteration, or modification of any of the provisions of this Agreement will be binding unless in writing and signed by duly authorized representatives of the parties hereto and which specifically mention this Agreement.

(e) Choice of Law. The validity, interpretation, construction and performance of this Agreement will be governed by the laws of the State of California (with the exception of its conflict of laws provisions).

(f) Severability. The invalidity or unenforceability of any provision or provisions of this Agreement will not affect the validity or enforceability of any other provision hereof, which will remain in full force and effect.

(g) Withholding. All payments made pursuant to this Agreement will be subject to withholding of applicable income, employment and other taxes, as determined in the Company's reasonable judgment.

(h) Counterparts. This Agreement may be executed in counterparts, each of which will be deemed an original, but all of which together will constitute one and the same instrument.

*[Signature Page Follows]*

**IN WITNESS WHEREOF**, each of the parties has executed this Agreement, in the case of the Company by its duly authorized officer, on the day and year set forth below.

**COMPANY** **ARCADIA BIOSCIENCES, INC.**

By: /s/ Matthew T. Plavan

Name: Matthew Plavan

Title: President and Chief Executive Officer

Date: July 12, 2021

**EXECUTIVE**

**LAURA PITLIK**

By: /s/ Laura Pitlik

Date: July 12, 2021



**CERTIFICATION OF CHIEF EXECUTIVE OFFICER  
PURSUANT TO EXCHANGE ACT RULE 13a-14(a)/15d-14(a)  
AS ADOPTED PURSUANT TO SECTION 302  
OF THE SARBANES-OXLEY ACT OF 2002**

I, Matthew T. Plavan, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Arcadia Biosciences, Inc. for the period ended September 30, 2021;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: November 15, 2021

/s/ MATTHEW T. PLAVAN

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Matthew T. Plavan  
President and Chief Executive Officer  
(Principal Executive Officer)

**CERTIFICATION OF CHIEF FINANCIAL OFFICER  
PURSUANT TO EXCHANGE ACT RULE 13a-14(a)/15d-14(a)  
AS ADOPTED PURSUANT TO SECTION 302  
OF THE SARBANES-OXLEY ACT OF 2002**

I, Pamela Haley, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Arcadia Biosciences, Inc. for the period ended September 30, 2021;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: November 15, 2021

/s/ PAMELA HALEY

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Pamela Haley  
Chief Financial Officer  
(Principal Financial Officer)

**CERTIFICATION  
PURSUANT TO 18 U.S.C. SECTION 1350  
AS ADOPTED PURSUANT TO  
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the accompanying Quarterly Report of Arcadia Biosciences, Inc. (the "Company"), on Form 10-Q for the quarter ended September 30, 2021 (the "Report"), I, Matthew T. Plavan, President and Chief Executive Officer of the Company, hereby certify pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002 that:

- (1) the Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: November 15, 2021

/s/ MATTHEW T. PLAVAN

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Matthew T. Plavan  
President and Chief Executive Officer  
(Principal Executive Officer)

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**CERTIFICATION**  
**PURSUANT TO 18 U.S.C. SECTION 1350**  
**AS ADOPTED PURSUANT TO**  
**SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the accompanying Quarterly Report of Arcadia Biosciences, Inc. (the "Company"), on Form 10-Q for the quarter ended September 30, 2021 (the "Report"), I, Pamela Haley, Chief Financial Officer of the Company, hereby certify pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002 that:

- (1) the Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: November 15, 2021

/s/ PAMELA HALEY

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Pamela Haley  
Chief Financial Officer  
(Principal Financial Officer)

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