

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 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 March 31, 2018

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: 000-51173

Catalyst Biosciences, Inc.

(Exact Name of Registrant as Specified in its Charter)

Delaware

(State or Other Jurisdiction of
Incorporation or Organization)

611 Gateway Blvd.

South San Francisco, California
(Address of Principal Executive Offices)

56-2020050

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

94080

(Zip Code)

(650) 266-8674

(Registrant's Telephone Number, Including Area Code)

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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer Accelerated filer

Non-accelerated filer (Do not check if a smaller reporting company) Smaller reporting company

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for 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 April 30, 2018, the number of outstanding shares of the registrant's common stock, par value \$0.001 per share, was 11,935,169.

CATALYST BIOSCIENCES, INC.
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PART I. FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

Catalyst Biosciences, Inc.
Condensed Consolidated Balance Sheets
(In thousands, except share and per share amounts)

	<u>March 31, 2018</u> (Unaudited)	<u>December 31, 2017</u>
Assets		
Current assets:		
Cash and cash equivalents	\$ 126,550	\$ 14,472
Short-term investments	16,968	17,971
Restricted cash	175	5,333
Prepaid and other current assets	1,740	1,333
Total current assets	<u>145,433</u>	<u>39,109</u>
Deposits, noncurrent	128	128
Property and equipment, net	325	276
Total assets	<u>\$ 145,886</u>	<u>\$ 39,513</u>
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	\$ 1,437	\$ 747
Accrued compensation	511	1,366
Other accrued liabilities	952	1,322
Deferred revenue, current portion	—	212
Deferred rent, current portion	—	7
Redeemable convertible notes	—	5,085
Total current liabilities	<u>2,900</u>	<u>8,739</u>
Deferred rent, noncurrent portion	135	—
Total liabilities	<u>3,035</u>	<u>8,739</u>
Stockholders' equity:		
Preferred stock, \$0.001 par value, 5,000,000 shares authorized; 0 and 3,680 shares issued and outstanding at March 31, 2018 and December 31, 2017, respectively	—	—
Common stock, \$0.001 par value, 100,000,000 shares authorized; 11,935,081 and 6,081,230 shares issued and outstanding at March 31, 2018 and December 31, 2017, respectively	12	6
Additional paid-in capital	321,172	204,262
Accumulated other comprehensive income (loss)	(4)	—
Accumulated deficit	<u>(178,329)</u>	<u>(173,494)</u>
Total stockholders' equity	<u>142,851</u>	<u>30,774</u>
Total liabilities and stockholders' equity	<u>\$ 145,886</u>	<u>\$ 39,513</u>

The accompanying notes are an integral part of these condensed consolidated financial statements.

Catalyst Biosciences, Inc.
Condensed Consolidated Statements of Operations
(In thousands, except share and per share amounts)
(Unaudited)

	Three Months Ended March 31,	
	2018	2017
Contract revenue	\$ 6	\$ 271
Operating expenses:		
Research and development	3,771	2,061
General and administrative	2,914	2,381
Total operating expenses	<u>6,685</u>	<u>4,442</u>
Loss from operations	(6,679)	(4,171)
Interest and other income, net	1,637	33
Net loss	<u>\$ (5,042)</u>	<u>\$ (4,138)</u>
Net loss per share attributable to common stockholders, basic and diluted	<u>\$ (0.56)</u>	<u>\$ (4.57)</u>
Shares used to compute net loss per share attributable to common stockholders, basic and diluted	<u>8,989,669</u>	<u>906,048</u>

The accompanying notes are an integral part of these condensed consolidated financial statements.

Catalyst Biosciences, Inc.
Condensed Consolidated Statements of Comprehensive Loss
(In thousands)
(Unaudited)

	<u>Three Months Ended March 31,</u>	
	<u>2018</u>	<u>2017</u>
Net loss	\$ (5,042)	\$ (4,138)
Other comprehensive income (loss):		
Unrealized gain on available-for-sale securities	(4)	1
Total comprehensive loss	<u>\$ (5,046)</u>	<u>\$ (4,137)</u>

The accompanying notes are an integral part of these condensed consolidated financial statements.

Catalyst Biosciences, Inc.
Condensed Consolidated Statement of Stockholders' Equity
(In thousands, except share amounts)
(Unaudited)

	Convertible Preferred Stock		Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders' Equity (Deficit)
	Shares	Amount	Shares	Amount				
Balance at December 31, 2017	3,680	\$ —	6,081,230	\$ 6	\$ 204,262	\$ —	\$ (173,494)	\$ 30,774
Opening balance adjustment - adoption of ASC 606	—	—	—	—	—	—	207	207
Balance at January 1, 2018	3,680	\$ —	6,081,230	\$ 6	\$ 204,262	\$ —	\$ (173,287)	\$ 30,981
Stock-based compensation expense	—	—	—	—	606	—	—	606
Issuance of common stock for follow-on offering, net of issuance costs	—	—	3,382,352	4	106,758	—	—	106,762
Issuance of common stock upon exercise of warrants	—	—	1,735,419	2	9,543	—	—	9,545
Conversion of preferred stock to common stock	(3,680)	—	736,000	—	—	—	—	—
Stock options exercised for common stock	—	—	59	—	—	—	—	—
Conversion of redeemable convertible notes to common stock	—	—	21	—	3	—	—	3
Unrealized loss on available-for-sale securities	—	—	—	—	—	(4)	—	(4)
Net loss	—	—	—	—	—	—	(5,042)	(5,042)
Balance at March 31, 2018	—	\$ —	11,935,081	\$ 12	\$ 321,172	\$ (4)	\$ (178,329)	\$ 142,851

The accompanying notes are an integral part of these condensed consolidated financial statements.

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

	Three Months Ended March 31,	
	2018	2017
Operating Activities		
Net loss	\$ (5,042)	\$ (4,138)
Adjustments to reconcile net loss to net cash used in operating activities:		
Stock-based compensation expense	606	120
Depreciation and amortization	33	48
Loss on disposal of assets	116	—
Changes in operating assets and liabilities:		
Prepaid and other current assets	(407)	(279)
Accounts payable	690	62
Accrued compensation and other accrued liabilities	(1,225)	(26)
Deferred rent	128	(8)
Deferred revenue	(6)	(71)
Net cash flows used in operating activities	<u>(5,107)</u>	<u>(4,292)</u>
Investing Activities		
Proceeds from maturities of short-term investments	13,937	6,801
Purchase of investments	(12,936)	—
Purchases of property and equipment	(198)	(3)
Net cash flows provided by investing activities	<u>803</u>	<u>6,798</u>
Financing Activities		
Payments for the redemption of redeemable convertible notes	(5,082)	(6,752)
Proceeds from issuance of common stock, net of issuance costs	106,761	1,782
Proceeds from exercise of warrants	9,545	—
Net cash flow provided by (used in) financing activities	<u>111,224</u>	<u>(4,970)</u>
Net increase (decrease) in cash, cash equivalents and restricted cash	106,920	(2,464)
Cash, cash equivalents and restricted cash at beginning of the period	19,805	29,857
Cash, cash equivalents and restricted cash at end of the period ^(a)	<u>\$ 126,725</u>	<u>\$ 27,393</u>

Supplemental Disclosure of Non-Cash Investing and Financing Activities:

Adoption of ASC 606	207	—
Conversion of redeemable convertible notes to common stock	3	—
Unrealized Gain/Loss on investments	4	1

(a) The following table provides a reconciliation of cash and restricted cash to amounts reported within the condensed consolidated balance sheets:

Cash and cash equivalents	\$ 126,550	\$ 14,533
Restricted cash	175	12,860
Total cash and restricted cash	<u>\$ 126,725</u>	<u>\$ 27,393</u>

The accompanying notes are an integral part of these condensed consolidated financial statements

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

1. Nature of Operations

Catalyst Biosciences, Inc. and its subsidiary (the “Company” or “Catalyst”) is a clinical-stage biotechnology company focused on developing novel medicines to address hematology indications, including the treatment of hemophilia. Its facilities are in South San Francisco, California and it operates in one segment. Prior to August 20, 2015, the name of the Company was Targacept, Inc. (“Targacept”). On August 20, 2015, Targacept completed its business combination with Catalyst (the “Merger”).

Based on the current status of its research and development plans, the Company believes that its existing cash, cash equivalents and short-term investments as of March 31, 2018 will be sufficient to fund its cash requirements for at least the next 12 months from the date of the filing of this quarterly report. If, at any time, the Company’s prospects for financing its research and development programs decline, the Company may decide to reduce research and development expenses by delaying, discontinuing or reducing its funding of one or more of its research or development programs. Alternatively, the Company might raise funds through strategic collaborations, public or private financings or other arrangements. Such funding, if needed, may not be available on favorable terms, or at all.

2. Summary of Significant Accounting Policies

Basis of Presentation

The Company’s condensed consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles (“GAAP”) and following the requirements of the Securities and Exchange Commission (the “SEC”) for interim reporting. As permitted under those rules, certain footnotes or other financial information that are normally required by U.S. GAAP can be condensed or omitted. These financial statements have been prepared on the same basis as the Company’s annual financial statements and, in the opinion of management, reflect all adjustments, consisting only of normal recurring adjustments, which are necessary for a fair presentation of the Company’s financial information. These interim results and cash flows for any interim period are not necessarily indicative of the results to be expected for the full year.

The accompanying condensed consolidated financial statements and related financial information should be read in conjunction with the consolidated financial statements filed with the Company’s Annual Report on Form 10-K for the year ended December 31, 2017 (“Annual Report”).

The Company’s significant accounting policies are included in “*Part II - Item 8 - Financial Statements and Supplementary Data - Note 2 – Summary of Significant Accounting Policies*” in the Company’s Annual Report. As discussed in our Annual Report, the Company adopted the new revenue standards in the first quarter of 2018, using the modified retrospective method through a cumulative adjustment to equity, there have been no other significant changes to these accounting policies during the first three months of 2018.

Effective January 1, 2018, the Company adopted ASC 606 using the modified retrospective method through a cumulative adjustment to equity, which resulted in an immaterial \$0.2 million increase to our opening balance of accumulated deficit as of January 1, 2018. The Company enters into collaboration arrangements that may include the receipt of payments for up-front license fees, success-based milestone payments, full time equivalent based payments for research services, product supplies, and royalties on any future sales of commercialized products that result from the collaborations.

In determining the appropriate amount of revenue to be recognized as it fulfills its obligations under its agreements, the Company performs the following steps: (i) identification of the promised goods or services in the contract; (ii) determination of whether the promised goods or services are performance obligations including whether they are distinct in the context of the contract; (iii) measurement of the transaction price, including the constraint on variable consideration; (iv) allocation of the transaction price to the performance obligations based on estimated selling prices; and (v) recognition of revenue when the Company satisfies each performance obligation.

Accounting Pronouncements Recently Adopted

In November 2016, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) No. 2016-18, Restricted Cash, which requires amounts generally described as restricted cash and restricted cash equivalents be included with cash and cash equivalents when reconciling the total beginning and ending amounts for the periods shown on the statement of cash flows. The Company adopted ASU 2016-18 effective January 1, 2018, using a retrospective transition method to each period presented. The adoption of this ASU changed previously reported amounts in the condensed consolidated statement of cash flows for the three months ended March 31, 2017, by decreasing the Company’s cash flows from financing activities by \$6.8 million as compared to previously reported amounts for the prior year period.

In August 2016, the FASB issued ASU No. 2016-15, Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments. The standard provides guidance on how certain cash receipts and payments are presented and classified in the statement of cash flows. The standard is intended to reduce current diversity in practice. The Company adopted ASU 2016-15 effective January 1, 2018, and this guidance did not have an impact on the Company’s financial statements.

In January 2016, the FASB issued ASU No. 2016-01, Financial Instruments – Overall (Topic 825-10), which updates certain aspects of recognition, measurement, presentation and disclosure of financial instruments. Subsequently, in February 2018, the FASB issued ASU No. 2018-03, Technical Corrections and Improvements to Financial Instruments - Overall (Topic 825-10), which clarifies certain aspects of ASU 2016-01 over certain aspects of recognition, measurement, presentation and disclosure of financial instruments. The Company adopted ASU 2016-01 and 2018-03 effective January 1, 2018, and this guidance did not have a material impact on the Company’s financial statements.

In May 2014, the FASB issued ASU No. 2014-09, Revenue from Contracts with Customers (Topic 606), which amends the existing accounting standards for revenue recognition. ASU 2014-09 is based on principles that govern the recognition of revenue at an amount an entity expects to be entitled when products are transferred to customers. Subsequently, the FASB has issued the following standards related to ASU 2014-09: ASU No. 2016-08, Revenue from Contracts with Customers (Topic 606): Principal versus Agent Considerations; ASU No. 2016-10, Revenue from Contracts with Customers (Topic 606): Identifying Performance Obligations and Licensing; and ASU No. 2016-12, Revenue from Contracts with Customers (Topic 606): Narrow-Scope Improvements and Practical Expedients, (collectively, the “new revenue standards”). The Company adopted the new revenue standards effective January 1, 2018, using the modified retrospective method through a cumulative adjustment to equity. While the Company has identified that the most significant change relates to its accounting for collaboration arrangements with multiple deliverables, in particular, the ISU Abxis agreement. Under the old guidance, such deliverables and consideration must be accounted for under a single unit of accounting along with other arrangement deliverables and consideration that does not have stand-alone value and are recognized as revenue over the estimated period that the performance obligations are to be performed. Under the current new standard however, the total arrangement consideration is allocated to each performance obligation based on its estimated stand-alone selling price and revenue is recognized as each performance obligation is satisfied. As a result, revenue for this transaction may be recorded in an earlier period than under the old guidance, resulting in a \$0.2 million increase to the Company’s opening balance of accumulated deficit as of January 1, 2018.

Adopting ASU No. 2014-09, Revenue from Contracts with Customers, or the new revenue standard, involved new estimates and judgments related to the estimates of stand-alone selling prices and the allocation of discounts and variable consideration in allocating the transaction price. The Company recognized revenue earlier under the current new standard and may have more variability due to significant estimates involved under the new accounting guidance.

Accounting Pronouncements Not Yet Adopted

In February 2016, the FASB issued ASU No. 2016-02, Leases (Topic 842), which replaces the existing guidance for leases. The new standard establishes a right-of-use (“ROU”) model that requires a lessee to record a ROU asset and a lease liability on the balance sheet for all leases with terms longer than 12 months. Leases will be classified as either finance or operating, with classification affecting the pattern of expense recognition in the income statement. ASU 2016-02 will be effective for the Company beginning in the first quarter of 2019, using a modified retrospective method to adopt the new standard and early adoption is permitted. The Company is currently evaluating the impact of adopting the new lease standard on its consolidated financial statements.

3. Fair Value Measurements

For a description of the fair value hierarchy and the Company's fair value methodology, see "Part II - Item 8 - Financial Statements and Supplementary Data - Note 2 – Summary of Significant Accounting Policies" in the Company's Annual Report. There were no significant changes in these methodologies during the three months ended March 31, 2018.

Liabilities that are measured at fair value consist of the derivative liability associated with the redeemable convertible notes (see Note 5) and are valued using Level 3 inputs. There were no transfers in or out of Level 1, 2 or 3 during the periods presented. As of March 31, 2018 there was no derivative liability and as of December 31, 2017 the fair value of the derivative liability was immaterial.

The following tables present the fair value hierarchy for assets and liabilities measured at fair value on a recurring basis as of March 31, 2018 and December 31, 2017 (*in thousands*):

	March 31, 2018			
	Level 1	Level 2	Level 3	Total
Financial assets:				
Money market funds ⁽¹⁾	\$ 126,526	\$ —	\$ —	\$ 126,526
U.S. government agency securities ⁽³⁾	16,968	—	—	16,968
Restricted cash (money market funds) ⁽²⁾	175	—	—	175
Total financial assets	\$ 143,669	\$ —	\$ —	\$ 143,669

- (1) Included in cash and cash equivalents on accompanying condensed consolidated balance sheets.
- (2) 0.2 million of restricted cash serves as collateral for the Company's corporate credit card and deposit for its old facility lease.
- (3) Included in short-term investments on accompanying condensed consolidated balance sheets and are classified as available-for-sale securities.

	December 31, 2017			
	Level 1	Level 2	Level 3	Total
Financial assets:				
Money market funds ⁽¹⁾	\$ 14,334	\$ —	\$ —	\$ 14,334
U.S. government agency securities ⁽³⁾	16,471	—	—	16,471
Restricted cash (money market funds) ⁽²⁾	5,333	—	—	5,333
Agency securities ⁽³⁾	—	1,500	—	1,500
Total financial assets	\$ 36,138	\$ 1,500	\$ —	\$ 37,638

- (1) Included in cash and cash equivalents on accompanying condensed consolidated balance sheets.
- (2) \$5.2 million of restricted cash in the Indenture serves as full collateral for the redeemable convertible notes and \$0.1 million of restricted cash serves as collateral for the Company's corporate credit card and deposit for its facility lease.
- (3) Included in short-term investments on accompanying condensed consolidated balance sheets and are classified as available-for-sale securities.

4. Financial Instruments

Cash equivalents, restricted cash and short-term investments which are classified as available-for-sale securities, consisted of the following (in thousands):

March 31, 2018	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Money market funds (cash equivalents)	\$ 126,526	\$ —	\$ —	\$ 126,526
U.S. government agency securities	16,972	—	(4)	16,968
Restricted cash (money market funds)	175	—	—	175
Total financial assets	<u>\$ 143,673</u>	<u>\$ —</u>	<u>\$ (4)</u>	<u>\$ 143,669</u>
Classified as:				
Cash and cash equivalents				\$ 126,526
Short-term investments				16,968
Restricted cash (money market funds)				175
				<u>\$ 143,669</u>

December 31, 2017	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Money market funds (cash equivalents)	\$ 14,334	\$ —	\$ —	\$ 14,334
U.S. government agency securities	16,474	—	(3)	16,471
Restricted cash (money market funds)	5,330	3	—	5,333
Agency securities	1,500	—	—	1,500
Total financial assets	<u>\$ 37,638</u>	<u>\$ 3</u>	<u>\$ (3)</u>	<u>\$ 37,638</u>
Classified as:				
Cash and cash equivalents				\$ 14,334
Short-term investments				17,971
Restricted cash (money market funds)				5,333
				<u>\$ 37,638</u>

There have been no material realized gains or losses on available-for-sale securities for the periods presented. The carrying amounts of cash, accounts receivable, other receivables, accounts payable, other payables and redeemable convertible notes approximate their fair values due to the short-term maturity of these instruments.

5. Redeemable Convertible Notes

On August 19, 2015, immediately prior to the Merger, the Company issued to Targacept stockholders non-interest bearing redeemable convertible notes (the “Notes”) in the aggregate principal amount of \$37.0 million. The Notes do not bear interest. The principal amount of the Notes is convertible, at the option of each noteholder, into cash or into shares of the Company’s common stock at a conversion rate of \$137.85 per share, and are payable in cash, if not previously redeemed or converted, at maturity on February 19, 2018, the 30-month anniversary of the closing of the issuance of the Notes.

In connection with the issuance of the Notes, on August 19, 2015, Targacept entered into an indenture (the “Indenture”) with American Stock Transfer & Trust Company, LLC, as trustee, and an escrow agreement with American Stock Transfer & Trust Company, LLC and Delaware Trust Company, LLC, as escrow agent, under which \$37.0 million, which represented the initial principal amount of the Notes, was deposited in a segregated escrow account for the benefit of the holders of the Notes in order to facilitate the payment of the notes upon redemption or at maturity (the amount of such deposit together with interest accrued and capitalized thereon, the “Escrow Funds”). The Notes were the Company’s secured obligation, and the Indenture does not limit its other indebtedness, secured or unsecured.

The conversion to common stock feature of the Notes was determined to be a derivative liability requiring bifurcation and separate accounting. The fair value of such conversion feature at issuance was determined to be \$1.5 million. The bifurcation of the derivative liability from the estimated fair value of the Notes of \$37.1 million at issuance resulted in a debt discount of \$1.4 million. The Company elected to accrete the entire debt discount as interest expense immediately after the Merger. In addition,

changes in the fair value of the derivative liability were being recorded within interest and other income in the consolidated statements of operations. The Company remeasured the derivative liability to fair value until the earlier of the conversion, redemption or maturity of the redeemable convertible notes.

As of March 31, 2018, there was no derivative liability and December 31, 2017, the fair value of the derivative liability was immaterial. The estimated reporting date fair value-based measurement of the derivative liability was calculated using the Black-Scholes valuation model.

The Company recognized no interest expense for the three months ended March 31, 2018 and 2017, related to the amortization of the debt discount on the Company's consolidated statement of operations as the redeemable convertible notes are immediately fully redeemable at the option of the holders and the entire debt discount was accreted immediately after the Merger.

On February 19, 2018, the Notes matured and the remaining Notes were repaid in full with cash from the restricted cash indenture and an immaterial amount were converted to common stock. The Company has no outstanding Notes remaining as of March 31, 2018.

6. Stock Based Compensation

The following table summarizes stock option activity under the Company's equity incentive plans and related information:

	Number of Shares Underlying Outstanding Options	Weighted- Average Exercise Price	Weighted- Average Remaining Contractual Term (Years)
Outstanding — December 31, 2017	821,741	\$ 13.69	9.17
Options granted	227,900	\$ 14.83	
Options exercised	(59)	\$ 4.63	
Options canceled/forfeited	(23,189)	\$ 4.46	
Outstanding — March 31, 2018	<u>1,026,393</u>	\$ 14.15	9.03
Exercisable — March 31, 2018	<u>228,386</u>	\$ 34.41	7.72
Vested and expected to vest — March 31, 2018	<u>1,026,393</u>	\$ 14.15	9.03

Valuation Assumptions

The Company estimated the fair value of stock options granted using the Black-Scholes option-pricing formula and a single option award approach. Due to its limited history as a public company and limited number of sales of its common stock, the Company estimated its volatility considering a number of factors including the use of the volatility of comparable public companies. The expected term of options granted under the Plan, all of which qualify as "plain vanilla" per SEC Staff Accounting Bulletin 107, is determined based on the simplified method due to the Company's limited operating history and is 6.01 years based on the average between the vesting period and the contractual life of the option. The risk-free rate is based on the yield of a U.S. Treasury security with a term consistent with the option. This fair value is being amortized ratably over the requisite service periods of the awards, which is generally the vesting period.

The fair value of employee stock options was estimated using the following weighted-average assumptions for the three months ended March 31, 2018 and 2017:

	Three Months Ended March 31,	
	2018	2017
Employee Stock Options:		
Risk-free interest rate	2.40%	1.57%
Expected term (in years)	6.01	6.04
Dividend yield	—	—
Volatility	109.32%	73.28%
Weighted-average fair value of stock options granted	\$ 12.34	\$ 21.15

Catalyst Biosciences, Inc.
Notes to Condensed Consolidated Financial Statements (Unaudited) - (Continued)

Total stock-based compensation recognized was as follows (in thousands):

	Three Months Ended March 31,	
	2018	2017
Research and development	\$ 115	\$ 20
General and administrative ⁽¹⁾	491	100
Total stock-based compensation	\$ 606	\$ 120

(1) 2018 includes \$0.1 million in modification stock-based compensation expense related to a Board member's departure.

As of March 31, 2018, 150,175 shares of common stock were available for future grant and 1,026,393 options to purchase shares of common stock were outstanding. As of March 31, 2018, the Company had unrecognized employee stock-based compensation expense of \$5.6 million, related to unvested stock awards, which is expected to be recognized over an estimated weighted-average period of 3.15 years.

7. Collaborations

ISU Abxis

On September 16, 2013, the Company signed a license and collaboration agreement with ISU Abxis, whereby the Company licensed its proprietary human Factor IX products to ISU Abxis for initial development in South Korea. Under the terms of the agreement, ISU Abxis is responsible for manufacturing, preclinical development activities and clinical development through completion of a proof-of-concept Phase 1/2 study in individuals with hemophilia B. The Company has the sole rights and responsibility for worldwide development, manufacture, and commercialization of Factor IX products after Phase 1/2 development. ISU Abxis may exercise its right of first refusal to acquire commercialization rights in South Korea, in which case they would be entitled to profit sharing on worldwide sales. ISU Abxis's rights will also terminate if the Company enters into a license agreement with another party to develop, manufacture and commercialize Factor IX products in the United States, European Union or Asia, subject to ISU Abxis's retained rights in South Korea.

ISU Abxis paid the Company an up-front signing fee of \$1.75 million and is obligated to pay to the Company contingent milestone-based payments on the occurrence of certain defined development events, and reimbursement for a portion of the Company's costs relating to intellectual property filings and maintenance thereof on products. The Company is obligated to pay ISU Abxis potential milestones up to \$2.0 million and a percentage of all net profits it receives from collaboration products.

Contract revenue of \$0 and \$0.3 million for the three months ended March 31, 2018 and 2017, respectively, reflects (i) the amortization of the up-front fee over the estimated period of our performance obligations, which concluded in February 2018, and (ii) milestone payments received from ISU Abxis, which were recognized through February 2018, the estimated remaining period of the Company's performance obligation under the agreement, of which the Company recorded \$0 and \$0.2 million for the three months ended March 31, 2018 and 2017, respectively. The adoption of the new revenue standards resulted in a \$0.2 million cumulative adjustment to the Company's opening balance of accumulated deficit as of January 1, 2018. The deferred revenue balance related to the ISU Abxis collaboration was \$0 and \$0.2 million as of March 31, 2018 and December 31, 2017, respectively.

8. Net Loss per Share Attributable to Common Stockholders

The following table sets forth the computation of the basic and diluted net loss per common share during the three months ended March 31, 2018 and 2017 (in thousands, except share and per share data):

	Three Months Ended March 31,	
	2018	2017
Net loss attributable to common stockholders	\$ (5,042)	\$ (4,138)
Weighted-average number of shares used in computing net loss per share, basic and diluted	8,989,669	906,048
Net loss available for common stockholders per share, basic and diluted	\$ (0.56)	\$ (4.57)

Since the Company was in a loss position for all periods presented, diluted net loss per share is the same as basic net loss per share for all periods as the inclusion of all potential common shares outstanding would have been anti-dilutive. Potentially dilutive securities on an as-if converted basis that were not included in the diluted per share calculations because they would be anti-dilutive were as follows:

	Three Months Ended March 31,	
	2018	2017
Options to purchase common stock	1,026,393	125,495
Common stock warrants	12,039	12,039
Redeemable convertible notes	—	92,462
Total	1,038,432	229,996

9. Stockholders' Equity

April 2017 Underwritten Public Offering — On April 12, 2017, the Company issued and sold in a registered, underwritten public offering an aggregate of (i) 1,470,000 shares of common stock (including 540,000 shares of common stock sold pursuant to the exercise of the Underwriter's overallotment option), (ii) 13,350 shares of Series A Preferred Stock, each convertible into 200 shares of common stock and (iii) warrants to purchase 2,070,000 shares of common stock at an exercise price of \$5.50 per share (including 270,000 sold pursuant to the exercise of the Underwriter's overallotment option). The net proceeds to the Company, after deducting the underwriting discounts and commissions and offering expenses payable by the Company were approximately \$18.6 million.

Series A Convertible Preferred Stock — In connection with the closing on April 12, 2017 of the public offering, the Company filed the Certificate of Designation of Preferences, Rights and Limitations of the Series A Preferred Stock (the "Certificate of Designation") with the Secretary of State of the State of Delaware. The Certificate of Designation describes the rights, preferences and privileges of the shares of Series A Preferred Stock. With certain exceptions, the shares of Series A Preferred Stock rank on par with the shares of the Common Stock, in each case, as to dividend rights and distributions of assets upon liquidation, dissolution or winding up of the Company.

Upon its issuance, the Series A Preferred Stock was not considered a liability or temporary equity and as such the Series A Preferred Stock was recorded in permanent equity on the Company's balance sheet.

During the three months ended March 31, 2018 and 2017, 3,680 and 0 shares of the Company's Series A Preferred Stock were converted into 736,000 shares of common stock of the Company. As of March 31, 2018, there were no shares of Series A Preferred Stock issued and outstanding.

Warrants — In connection with the closing on April 12, 2017 of the public offering and the overallotment option, the Company issued warrants to purchase 2,070,000 shares of common stock at an exercise price of \$5.50 per share. Upon their issuance, the common stock warrants were determined to be equity instruments under ASC 480 and ASC 815-40. The net proceeds allocated to the warrants on a relative fair value basis resulted in \$5.0 million being allocated to the warrants. As of March 31, 2018, the Company has no warrants outstanding associated with this offering.

The following is a summary of warrant activity for the three months ended March 31, 2018:

	Number of Shares Underlying Warrants	Weighted Average Exercise Price
Outstanding — December 31, 2017	1,751,708	\$ 6.46
Exercised	(1,735,419)	\$ 5.50
Forfeited	(4,250)	\$ 5.50
Outstanding — March 31, 2018	12,039	\$ 145.11

February 2018 Underwritten Public Offering — On February 13, 2018, the Company entered into an underwriting agreement with JonesTrading, in connection with a registered firm commitment underwritten public offering of 2,941,176 shares of common stock, pursuant to a shelf registration statement that was declared effective by the SEC on February 6, 2018. On February 15, 2018, the Company sold 3,382,352 shares of common stock (including 441,176 shares of common stock sold pursuant to the exercise of the underwriters' overallotment option) at a price to the public of \$34.00 per share. The net proceeds to the Company, after deducting the underwriting discounts and commissions and offering expenses payable by the Company were approximately \$106.8 million.

10. Commitments and Contingencies

Pfizer

Pursuant to the termination agreement entered on December 8, 2016, in connection with the termination of a prior license and development agreement, Pfizer granted the Company an exclusive license to Pfizer’s proprietary rights for manufacturing materials and processes that apply to Factor VIIa variants, CB 813a and marzeptacog alfa (activated) (“MarzAA”). Pfizer also transferred to the Company the IND application and documentation related to the development, manufacturing and testing of the Factor VIIa products as well as the orphan drug designation. The Company agreed to make contingent cash payments to Pfizer in an aggregate amount equal to up to \$17.5 million, payable upon the achievement of clinical, regulatory and commercial milestones. Following commercialization of any covered product, Pfizer would also receive a single-digit royalty on net product sales on a country-by-country basis for a predefined royalty term. During the three months ended March 31, 2018, the Company paid Pfizer a \$1 million milestone payment based on the dosing of the first patient in the ongoing Phase 2 study, recorded as a R&D expense.

Manufacturing Agreements

On May 20, 2016, the Company signed a development and manufacturing services agreement with AGC Biologics, Inc. (“AGC”), formerly known as CMC ICOS Biologics, Inc., pursuant to which AGC will conduct manufacturing development and, together with AGC the Company has successfully manufactured MarzAA for the Phase 2 portion of a planned Phase 2/3 clinical trial. The Company has agreed to a total of \$3.8 million in payments to AGC pursuant to the initial statement of work under the Agreement, subject to completion of applicable work stages. As of March 31, 2018, the Company has \$0.6 million in payment obligations to AGC remaining under the initial statement of work for MarzAA.

On February 21, 2018, the Company and AGC entered into a new statement of work under the development and manufacturing services agreement dated May 20, 2016, between the Company and AGC. Under the new statement of work, the Company has engaged AGC for the process transfer and commercial scale cGMP manufacturing of CB 2679d/ISU 304, Catalyst’s highly potent next-generation coagulation FIX variant being developed for the treatment of severe hemophilia B. The Company has agreed to a total of approximately \$5.6 million in payments pursuant to the new statement of work, including the commercial scale manufacturing of CB 2679d/ISU 304, subject to completion of applicable work stages. As of March 31, 2018, the Company has \$5.6 million in payment obligations to AGC remaining under the initial statement of work for CB 2679d/ISU 304.

Operating Leases

The Company leases office and research space under operating leases that expired in February 2018. In November 2017, we entered into a new office lease agreement to lease approximately 8,606 rentable square feet of space located in South San Francisco, California. The term of the lease is five years and two months, starting February 16, 2018. We relocated our corporate headquarters into this new space in February 2018.

Future minimum lease payments under all non-cancelable operating leases as of March 31, 2018, were as follows (*in thousands*):

	Minimum Lease Payments	
2018	\$	310
2019		488
2020		499
2021		510
2022		522
2023		177
Total future minimum lease payments	\$	2,506

11. Related Parties

On October 24, 2017 the Company announced a strategic research collaboration with Mosaic Biosciences, Inc. (“Mosaic”) to develop intravitreal anti-complement factor 3 (C3) products for the treatment of dry age-related macular degeneration (“AMD”) and other retinal diseases. According to the agreement the Company and Mosaic will co-fund the research. Dr. Usman, our Chief Executive Officer and a member of our board of directors, and Mr. Lawlor, the chairman of our board of directors, are also members of the board of directors of Mosaic. Expenses related to the collaboration were \$0.2 million and \$0 for the three months ended March 31, 2018 and 2017, respectively.

12. Interest and Other Income

The following table shows the detail of interest and other income/(expense), net for the three month periods ended March 31, 2018 and 2017 (*in thousands*):

	Three Months Ended March 31,	
	2018	2017
Interest income	\$ 285	\$ 17
Loss on disposal of fixed assets	(116)	—
Other income, net	1,468	16
Total other income/(expense), net	\$ 1,637	\$ 33

Other income of \$1.5 million for the three months ended March 31, 2018, reflects milestone payments received under an agreement associated with neuronal nicotinic receptor (“NNR”) assets sold in 2016.

ITEM 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations

Unless otherwise indicated, in this Quarterly Report on Form 10-Q, (i) references to “Catalyst,” “we,” “us,” “our” or the “Company” mean Catalyst Biosciences, Inc. and our subsidiaries. The following discussion and analysis of our financial condition and results of operations should be read in conjunction with the consolidated financial statements and related notes that appear in this Quarterly Report on Form 10-Q (“Report”).

In addition to historical information, this Report contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended (“The Exchange Act”). Forward-looking statements are identified by words such as “believe,” “will,” “may,” “estimate,” “continue,” “anticipate,” “intend,” “should,” “plan,” “expect,” “predict,” “could,” “potentially” or the negative of these terms or similar expressions. You should read these statements carefully because they discuss future expectations, contain projections of future results of operations or financial condition, or state other “forward-looking” information. These statements relate to our future plans, objectives, expectations, intentions and financial performance and the assumptions that underlie these statements. For example, forward-looking statements include any statements regarding the strategies, prospects, plans, expectations or objectives of management for future operations, the progress, scope or duration of the development of product candidates or programs, clinical trial plans, timelines and potential results, the benefits that may be derived from product candidates or the commercial or market opportunity in any target indication, our ability to protect intellectual property rights, our anticipated operations, financial position, revenues, costs or expenses, statements regarding future economic conditions or performance, statements of belief and any statement of assumptions underlying any of the foregoing. These forward-looking statements are subject to certain risks and uncertainties that could cause actual results to differ materially from those anticipated in the forward-looking statements. Factors that might cause such a difference include, but are not limited to, those discussed in this report in Part II, Item 1A — “Risk Factors,” elsewhere in this Report and in Part I - Item 1A – “Risk Factors” in the Company’s Annual Report on Form 10-K for the year ended December 31, 2017 (“Annual Report”). Forward-looking statements are based on our management’s beliefs and assumptions and on information currently available to our management. These statements, like all statements in this report, speak only as of their date, and we undertake no obligation to update or revise these statements in light of future developments. We caution investors that our business and financial performance are subject to substantial risks and uncertainties.

Overview

We are a clinical-stage biopharmaceutical company focused on developing novel medicines to address serious medical conditions for individuals who need new or better treatment options. We are focusing our product development efforts in the field of hemostasis (the process that regulates bleeding) and have a mission to develop valuable therapies for individuals with hemophilia. We used a scientific approach to engineer several protease-based therapeutic candidates that regulate bleeding.

Our most advanced program, a highly potent, subcutaneously administered, next-generation coagulation Factor VIIa variant, marzeptacog alfa (activated) (“MarzAA”), is currently enrolling individuals with hemophilia with an inhibitor in a Phase 2/3 subcutaneous dosing trial. The Phase 2 open-label subcutaneous efficacy trial will evaluate the ability of MarzAA to eliminate, or minimize, spontaneous bleeding episodes in individuals with hemophilia A or B with inhibitors. The trial will enroll up to 12 individuals with hemophilia and an inhibitor across up to ten clinical trial sites globally. MarzAA has successfully completed an intravenous Phase 1 clinical trial evaluating the pharmacokinetics, pharmacodynamics and coagulation activity in individuals with severe hemophilia A and B with and without an inhibitor. MarzAA has been granted orphan drug designation by the U.S. Food and Drug Administration (“FDA”) for routine prophylaxis to prevent bleeding episodes in individuals with hemophilia A or B with inhibitors. Interim data is expected to be announced in the second half of 2018.

Our next most advanced hemophilia program, a highly potent next-generation coagulation Factor IX variant, CB 2679d/ISU 304, has completed enrollment of a Phase 1/2 subcutaneous dosing trial in South Korea, that evaluated the safety and efficacy of CB 2679d/ISU 304 in individuals with severe hemophilia B, sponsored by our collaborator, ISU Abxis. The objective of this study was to demonstrate the feasibility of increasing Factor IX activity trough levels from ~1% (severe hemophilia) to >12% (mild hemophilia with a reduced chance of spontaneous joint bleeds) with six daily subcutaneous injections. CB 2679d/ISU 304 has been granted orphan drug designation by the FDA and orphan medicinal product designation by the Committee for Orphan Medicinal Products (“COMP”) of the European Commission (“EC”). ISU Abxis initiated this trial in June 2017 and top line data was presented on February 9, 2018. Data from Cohorts 1 through 3 (three subjects in each cohort) showed that a single subcutaneous dose of either 75 or 150 IU/kg three days after a single intravenous dose of 75 IU/kg significantly increased the half-life of CB 2679d/ISU 304 to 98.7 hours, equivalent to the half-life of extended-half-life intravenous agents. Cohort 4 was omitted as we observed sufficient activity of CB 2679d/ISU 304 in cohorts 2 and 3.

In cohort 5, five subjects were dosed daily for six days with a subcutaneous dose of 140 IU/kg without a preceding intravenous dose. We observed increased Factor IX activity levels in all five subjects from very low levels after washout of prior therapy to a median

Factor IX activity level of 16% (range 11.5-18%), that is well into the mild hemophilia range (5-40%) and is higher than a level required to prevent spontaneous hemarthrosis. The observed increase in Factor IX activity levels after the daily dosing was linear, indicating that continued subcutaneous dosing may achieve high-mild hemophilia Factor IX clotting activity.

Terminal subcutaneous half-life was 63.2 hours (interquartile range 60.2-64 hours) with the result that activity levels were still 4-6.4%, 5 days after the last dose. No inhibitors to CB 2679d/ISU 304 or Factor IX were detected to date. One subject had moderate adverse events of pain, erythema and redness after the first 2 injections and mild rating after subsequent injections. Other subjects in cohort 5 reported some of these adverse events, mainly with initial injections. Two subjects had bruising after injection when Factor IX activity levels were low that did not occur with subsequent injections as Factor IX activity levels rose.

In April 2018, the Korean Ministry of Food and Drug Safety ("MFDS") approved the addition of a sixth cohort to the Phase 1/2 trial of CB 2679d/ISU 304 in individuals with severe hemophilia B following positive data from the multi-dose Cohort 5. Cohort 6 will enroll up to five patients. Each individual will receive a single intravenous loading dose of 75 IU/kg, followed by nine daily subcutaneous doses of 150 IU/kg CB 2679d/ISU 304. The loading dose will be administered 30 minutes before the first subcutaneous dose. The study will be completed in South Korea in coordination with the Company's collaborator ISU Abxis.

The substantially enhanced potency of MarzAA and CB 2679d/ISU 304 compared with existing treatment options may allow for effective subcutaneous prophylactic treatment of individuals with hemophilia A or B with an inhibitor or individuals with hemophilia B, respectively, especially in children, and may ultimately deliver substantially better outcomes for individuals with hemophilia.

We believe that subcutaneous dosing of our next-generation factors may result in progressive increases in activity levels until they reach a stable therapeutic target range in the blood (ideally mild hemophilia to normal levels). Conversely, dosing by intravenous infusions results in high initial Factor levels in the blood followed by a rapid fall off in activity to a trough level in a range that is measured as moderate or severe hemophilia and resulting in higher bleeding risk. Stable and higher factor levels could potentially yield a significant improvement in outcomes and have the added benefit of convenience over competing intravenous therapeutics, particularly when administered to children, and where venous access is challenging.

We also have several Factor Xa variants that have demonstrated efficacy in several preclinical models and have the potential to be used as a universal procoagulant. We have delayed initiating further work on our Factor Xa therapeutic program at this time to focus our efforts on the Factor VIIa and Factor IX clinical programs.

Based on industry reports and company reported sales, we estimate the 2017 global market opportunity for MarzAA and CB 2679d to be approximately \$2.2 billion and \$1.8 billion, respectively. Annual worldwide sales in 2017 for FDA-approved recombinant protease products for individuals with hemophilia A and B and an inhibitor were approximately \$1.2 billion and approximately \$2.2 billion when including prothrombin complex concentrate products. We remain focused on advancing MarzAA through Phase 2/3 and CB 2679d through Phase 2b and Phase 3 clinical trials.

We have also developed novel protease molecules that target the complement cascade, a series of naturally occurring molecular processes that play a central role in the body's inflammatory and immune response. We continue to explore potential licensing opportunities for our dry AMD anti-complement program.

In October 2017, we announced a strategic research collaboration with Mosaic Biosciences, Inc. to develop intravitreal anti-complement factor 3 products for the treatment of dry AMD and other retinal diseases. The transaction was reviewed by disinterested members of our board of directors and approved by our audit committee. Expenses related to the collaboration were \$0.2 million for the three months ended March 31, 2018.

Transactions with related parties, including the transaction referred to above, are reviewed and approved by independent members of our Board of Directors in accordance with our Code of Business Conduct and Ethics.

On June 29, 2009, we entered into a Research and License agreement with Wyeth Pharmaceuticals, Inc., subsequently acquired by Pfizer, whereby we and Pfizer collaborated on the development of novel human Factor VIIa products and we granted Pfizer the exclusive rights to develop and commercialize the licensed products on a worldwide basis. On April 2, 2015, Pfizer notified us that it was exercising its right to terminate the research and license agreement effective June 1, 2015. Accordingly, we revised the expected period of performance to end on June 1, 2015, and the deferred revenue balance was fully amortized as of that date. On December 8, 2016, we signed a definitive agreement related to the termination of the Pfizer Agreement. Pursuant to this termination agreement, Pfizer granted us an exclusive license to Pfizer's proprietary rights for manufacturing materials and processes that apply to Factor VIIa variants, CB 813a and MarzAA. Pfizer also transferred to us the IND application and documentation related to the development, manufacturing and testing of the Factor VIIa products as well as the orphan drug designation.

Pursuant to this agreement, we agreed to make contingent cash payments to Pfizer in an aggregate amount equal to up to \$17.5 million, payable upon the achievement of clinical, regulatory and commercial milestones. Following commercialization of any covered product, Pfizer would also receive a single-digit royalty on net product sales on a country-by-country basis for a predefined royalty term. In February 2018, we paid Pfizer a \$1 million milestone payment based on the dosing of the first patient in the ongoing Phase 2 study.

In September 2013, we signed a license and collaboration agreement with ISU Abxis pursuant to which we licensed our proprietary human Factor IX products to ISU Abxis for initial development in South Korea. Under the agreement, ISU Abxis was responsible for manufacturing, preclinical development activities and clinical development through the completion of cohort five of a proof-of-concept Phase 1/2 study in individuals with hemophilia B that was conducted in South Korea. We are funding cohort six and we have the sole rights and responsibility for worldwide development, manufacture, and commercialization of Factor IX products after Phase 1/2 development. ISU Abxis may exercise its right of first refusal to acquire commercialization rights in South Korea, in which case they would be entitled to profit sharing on worldwide sales. ISU Abxis paid us an up-front fee of \$1.75 million and is obligated to pay to us contingent milestone-based payments on the occurrence of certain defined development events, of which two have been achieved as of March 31, 2018. Collaboration and license revenue related to the ISU Abxis agreement was \$0 and \$0.3 million during the three months ended March 31, 2018 and 2017 respectively, that reflects (i) the amortization of the up-front fee over the estimated period of our performance obligations, which concluded in February 2018, and (ii) milestone payments received from ISU Abxis, which were recognized through February 2018, the estimated remaining period of the Company's performance obligation under the agreement, of which the Company recorded \$0 and \$0.2 million for the three months ended March 31, 2018 and 2017, respectively. The adoption of the new revenue standards resulted in a \$0.2 million cumulative adjustment to the Company's opening balance of accumulated deficit as of January 1, 2018. We had no more deferred revenue balance as of March 31, 2018 related to the ISU Abxis collaboration.

We have never been profitable and have incurred significant operating losses in each year since inception. Our net losses were \$5.0 million and \$4.1 million for the three months ended March 31, 2018 and 2017, respectively. As of March 31, 2018, we had an accumulated deficit of \$178.3 million. Substantially all our operating losses resulted from expenses incurred in our research and development programs and from general and administrative costs associated with our operations.

We expect to incur significant expenses and increasing operating losses for at least the next several years as we continue the preclinical, manufacturing and clinical development, and seek regulatory approval for our drug candidates. In addition, our expenses have increased due to hiring additional financial personnel, upgrading our financial information systems and incurring costs associated with being a public company. In addition, our operating losses may fluctuate significantly from quarter to quarter and year to year due to timing of preclinical, clinical development programs and regulatory approval.

Financial Operations Overview

Contract Revenue

We enter into collaboration arrangements that may include the receipt of payments for up-front license fees, success-based milestone payments, full time equivalent based payments for research services, product supplies, and royalties on any future sales of commercialized products that result from the collaborations. We have not generated any revenue from commercial product sales to date. ISU Abxis represents 100% of our total contract revenue for the three months ended March 31, 2018 and 2017.

In determining the appropriate amount of revenue to be recognized as it fulfills its obligations under its agreements, we performs the following steps: (i) identification of the promised goods or services in the contract; (ii) determination of whether the promised goods or services are performance obligations including whether they are distinct in the context of the contract; (iii) measurement of the transaction price, including the constraint on variable consideration; (iv) allocation of the transaction price to the performance obligations based on estimated selling prices; and (v) recognition of revenue when we satisfy each performance obligation.

Research and Development Expenses

Research and development expenses represent costs incurred to conduct research, such as the discovery and development of our product candidates. We recognize all research and development costs as they are incurred.

Research and development expenses consist primarily of the following:

- employee-related expenses, which include salaries, benefits and stock-based compensation;
- laboratory and vendor expenses, including payments to consultants, related to the execution of preclinical, non-clinical, and clinical studies;

- the cost of acquiring and manufacturing preclinical and clinical materials and developing manufacturing processes;
- clinical trial expenses, including costs of third-party clinical research organizations;
- performing toxicity studies; and
- facilities and other allocated expenses, which include direct and allocated expenses for rent and maintenance of facilities, depreciation and amortization expense and other supplies.

The following table summarizes our research and development expenses during the three months ended March 31, 2018 and 2017 (*in thousands*):

	<u>Three Months Ended March 31,</u>	
	<u>2018</u>	<u>2017</u>
Personnel costs	\$ 713	\$ 365
Preclinical research	448	195
Clinical manufacturing	2,399	1,353
Facility and overhead	211	148
Total research and development expenses	<u>\$ 3,771</u>	<u>\$ 2,061</u>

The largest component of our total operating expenses has historically been our investment in research and development activities, including the clinical development of our product candidates. We are currently focusing substantially all our resources and development efforts on our clinical pipeline. Our internal resources, employees and infrastructure are not directly tied to individual product candidates or development programs. As such, we do not maintain information regarding these costs incurred for these research and development programs on a project-specific basis.

We expect our aggregate research and development expenses will increase during the next few quarters as we continue the preclinical, manufacturing and clinical development of our product candidates in the United States, particularly the manufacturing and clinical development costs of MarzAA and CB 2679d/ISU 304. While ISU has previously been responsible for clinical and development expenses for CB 2679d/ISU 304 under our agreement with them, their funding obligations have expired and we are assuming responsibility for these expenses in the future.

On May 20, 2016, we signed a development and manufacturing services agreement with AGC Biologics, Inc. (“AGC”), formerly known as CMC ICOS Biologics, Inc., pursuant to which AGC will conduct manufacturing development manufacture agreed upon product candidates. We will own all intellectual property developed in such manufacturing development activities that are specifically related to our product candidates and will have a royalty-free and perpetual license to use AGC’s intellectual property to the extent reasonably necessary to make these product candidates, including commercial manufacturing. In 2016 we commenced manufacturing activities for MarzAA, and together with AGC we have successfully manufactured MarzAA for the Phase 2 portion of a planned Phase 2/3 clinical trial. In February 2018 we entered into a statement of work for AGC for process transfer and clinical scale manufacturing of CB 2679d/ISU 304.

We have agreed to a total of \$3.8 million in payments to AGC pursuant to the initial statement of work for MarzAA under the Agreement, and an additional \$5.6 million for the statement of work for CB2679d/ISU 304, in each case subject to completion of applicable work stages. In the event that clinical manufacturing batches need to be cancelled or rescheduled, we would be obligated to pay for a portion of AGC’s manufacturing fees less certain fees that AGC is able to mitigate. The initial term of the agreement is ten years or, if later, until all stages under outstanding statements of work have been completed. Either party may terminate the agreement in its entirety upon written notice of a material uncured breach or upon the other party’s bankruptcy, and we may terminate the agreement upon prior notice for any reason. In addition, each party may terminate the agreement in the event that the manufacturing development activities cannot be completed for technical or scientific reasons. As of March 31, 2018, we have \$0.6 million in payment obligations to AGC remaining under the initial statement of work for MarzAA and \$5.6 million in payment obligations related to CB2679d/ISU 304.

The process of conducting clinical trials necessary to obtain regulatory approval is costly and time consuming. We may never succeed in achieving marketing approval for our product candidates. The probability of success of each product candidate may be affected by numerous factors, including clinical data, competition, manufacturing capability and commercial viability. As a result, we are unable to determine the duration of and costs to complete our research and development projects or when and to what extent we will generate revenue from the commercialization and sale of any of our product candidates.

Successful development of current and future product candidates is highly uncertain. Completion dates and costs for our research programs can vary significantly for each current and future product candidate and are difficult to predict. Thus, we cannot estimate

with any degree of certainty the costs we will incur in the development of our product candidates. We anticipate we will make determinations as to which programs and product candidates to pursue and how much funding to direct to each program and product candidate on an ongoing basis in response to the scientific success of early research programs, results of ongoing and future clinical trials, our ability to enter into collaborative agreements with respect to programs or potential product candidates, as well as ongoing assessments as to each current or future product candidate's commercial potential.

General and Administrative Expenses

General and administrative expenses consist of personnel costs, allocated expenses and other expenses for outside professional services, including legal, human resources, audit and accounting services. Personnel costs consist of salaries, bonus, benefits and stock-based compensation. We incur expenses associated with operating as a public company, including expenses related to compliance with the rules and regulations of the SEC and Nasdaq Stock Market LLC ("Nasdaq"), insurance expenses, audit expenses, investor relations activities, Sarbanes-Oxley compliance expenses and other administrative expenses and professional services. We expect such expenses to continue.

Interest and Other Income, Net

Interest and other income consists primarily of interest income on our investment portfolio and milestone payments received under an agreement associated with neuronal nicotinic receptor ("NNR") assets sold in 2016.

Results of Operations

The following tables set forth our results of operations data for the periods presented (*in thousands*):

	Three Months Ended March 31,		Change (\$)	Change (%)
	2018	2017		
Contract revenue	\$ 6	\$ 271	\$ (265)	(98)%
Operating expenses:				
Research and development	3,771	2,061	1,710	83%
General and administrative	2,914	2,381	533	22%
Total operating expenses	6,685	4,442	2,243	50%
Loss from operations	(6,679)	(4,171)	(2,508)	60%
Interest and other income	1,637	33	1,604	4861%
Net loss	<u>\$ (5,042)</u>	<u>\$ (4,138)</u>	<u>\$ (904)</u>	<u>22%</u>

Contract Revenue

Contract revenue was \$0 and \$0.3 million during the three months ended March 31, 2018 and 2017, a decrease of \$0.3 million, or 100%. The decrease was due primarily to the adoption of the new revenue standards which resulted in a \$0.2 million cumulative adjustment to our opening balance of accumulated deficit as of January 1, 2018 and \$0.1 million decrease in revenue recognition under our collaboration with ISU Abxis that concluded in February 2018.

Research and Development Expenses

Research and development expenses were \$3.8 million and \$2.1 million during the three months ended March 31, 2018 and 2017, respectively, an increase of \$1.7 million, or 83%. The increase was due primarily to an increase of \$1.0 million related to manufacturing expenses for MarzAA, an increase of \$0.4 million in personnel-related costs and \$0.3 million related to preclinical third-party research and development service contracts.

General and Administrative Expenses

General and administrative expenses was \$2.9 million and \$2.4 million during the three months ended March 31, 2018 and 2017, respectively, an increase of \$0.5 million, or 22%. The increase was due primarily to an increase of \$0.6 million in personnel-related costs, partially offset by a \$0.1 million decrease in professional service costs.

Interest and Other Income

Interest and other income was \$1.6 million and \$0 during the three months ended March 31, 2018 and 2017, respectively, an increase of \$1.6 million, or 100%. The increase was due primarily to a \$1.5 million net gain related to milestone payments received under an agreement associated with NNR assets sold in 2016 and an increase of \$0.3 million in investment and dividend income, partially offset by a decrease of \$0.1 million on the disposal of assets related to our headquarters move.

Recent Accounting Pronouncements

Accounting Pronouncements Recently Adopted

In November 2016, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) No. 2016-18, Restricted Cash, which requires amounts generally described as restricted cash and restricted cash equivalents be included with cash and cash equivalents when reconciling the total beginning and ending amounts for the periods shown on the statement of cash flows. We adopted ASU 2016-18 effective January 1, 2018, using a retrospective transition method to each period presented. The adoption of this ASU changed previously reported amounts in the condensed consolidated statement of cash flows for the three months ended March 31, 2017, by decreasing our cash flows from financing activities by \$6.8 million as compared to previously reported amounts for the prior year period.

In August 2016, the FASB issued ASU No. 2016-15, Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments. The standard provides guidance on how certain cash receipts and payments are presented and classified in the statement of cash flows, including beneficial interests in securitization. The standard is intended to reduce current diversity in practice. ASU 2016-15 will be effective for us beginning in the first quarter of 2018, but early adoption is permitted, including adoption in an interim period. We adopted ASU 2016-15 effective January 1, 2018 and this guidance did not have a material impact on our consolidated financial statements.

In January 2016, the FASB issued ASU No. 2016-01, Financial Instruments – Overall (Topic 825-10), which updates certain aspects of recognition, measurement, presentation and disclosure of financial instruments. Subsequently, in February 2018, the FASB issued ASU No. 2018-03, Technical Corrections and Improvements to Financial Instruments - Overall (Topic 825-10), which clarifies certain aspects of ASU 2016-01 over certain aspects of recognition, measurement, presentation and disclosure of financial instruments. We adopted ASU 2016-01 and 2018-03 effective January 1, 2018, and this guidance did not have a material impact on our financial statements.

In May 2014, the FASB issued ASU No. 2014-09, Revenue from Contracts with Customers (Topic 606), which amends the existing accounting standards for revenue recognition. ASU 2014-09 is based on principles that govern the recognition of revenue at an amount an entity expects to be entitled when products are transferred to customers. Subsequently, the FASB has issued the following standards related to ASU 2014-09: ASU No. 2016-08, Revenue from Contracts with Customers (Topic 606): Principal versus Agent Considerations; ASU No. 2016-10, Revenue from Contracts with Customers (Topic 606): Identifying Performance Obligations and Licensing; and ASU No. 2016-12, Revenue from Contracts with Customers (Topic 606): Narrow-Scope Improvements and Practical Expedients. We adopted the new revenue standards effective January 1, 2018, using the modified retrospective method through a cumulative adjustment to equity. While we have identified that the most significant change relates to its accounting for collaboration arrangements with multiple deliverables, in particular, the ISU Abxis agreement. Under the old guidance, such deliverables and consideration must be accounted for under a single unit of accounting along with other arrangement deliverables and consideration that do not have stand-alone value and are recognized as revenue over the estimated period that the performance obligations are to be performed. Under the current new standard however, the total arrangement consideration is allocated to each performance obligation based on its estimated stand-alone selling price and revenue is recognized as each performance obligation is satisfied. As a result, revenue for this transaction may be recorded in an earlier period than under the old guidance, resulting in an \$0.2 million increase to our opening balance of accumulated deficit as of January 1, 2018.

Adopting ASU No. 2014-09, Revenue from Contracts with Customers, or the new revenue standard, involved significant new estimates and judgments related to the estimates of stand-alone selling prices and the allocation of discounts and variable consideration in allocating the transaction price. We recognized revenue earlier under the current new standard and may have more variability due to significant estimates involved under the new accounting guidance.

Accounting Pronouncements Not Yet Adopted

In February 2016, the FASB issued ASU No. 2016-02, Leases (Topic 842), which replaces the existing guidance for leases. The new standard establishes a right-of-use (“ROU”) model that requires a lessee to record a ROU asset and a lease liability on the balance sheet for all leases with terms longer than 12 months. Leases will be classified as either finance or operating, with classification affecting the pattern of expense recognition in the income statement. ASU 2016-02 will be effective for us beginning in the first quarter of 2019, using a modified retrospective method to adopt the new standard and early adoption is permitted. We are currently evaluating the impact of adopting the new lease standard on our consolidated financial statements.

Liquidity and Capital Resources

As of March 31, 2018, we had \$143.5 million of cash, cash equivalents and short-term investments, a \$5.0 million net loss and \$5.1 million cash used in operations for the three months ended March 31, 2018. We have an accumulated deficit of \$178.3 million as of March 31, 2018. Our primary uses of cash are to fund operating expenses, including research and development expenditures and general and administrative expenditures. Cash used to fund operating expenses is impacted by the timing of when we pay these expenses, as reflected in the change in its outstanding accounts payable and accrued expenses.

On February 13, 2018, we entered into an underwriting agreement with JonesTrading, in connection with a registered firm commitment underwritten public offering of 2,941,176 shares of common stock, pursuant to a shelf registration statement that was declared effective by the SEC on February 6, 2018. On February 15, 2018 we sold 3,382,352 shares of common stock (including 441,176 shares of common stock sold pursuant to the exercise of the underwriters’ overallotment option) at a price to the public of \$34.00 per share. The net proceeds to us, after deducting the underwriting discounts and commissions and offering expenses payable by us were approximately \$106.8 million.

We believe that our existing capital resources, including cash, cash equivalents and short-term investments will be sufficient to meet our projected operating requirements for at least the next 12 months. We have based this estimate on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we currently expect. We plan to continue to fund losses from operations and capital funding needs through future equity and/or debt financings, as well as potential additional asset sales, licensing transactions, collaborations or strategic partnerships with other companies. The sale of additional equity or convertible debt could result in additional dilution to our stockholders. The incurrence of indebtedness would result in debt service obligations and could result in operating and financing covenants that would restrict our operations. Licensing transactions, collaborations or strategic partnerships may result in us relinquishing valuable rights. We can provide no assurance that financing will be available in the amounts we need or on terms acceptable to us, if at all. If we are not able to secure adequate additional funding we may be forced to delay, make reductions in spending, extend payment terms with suppliers, liquidate assets where possible, and/or suspend or curtail planned programs. Any of these actions could materially harm our business.

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

	Three Months Ended March 31,	
	2018	2017
Cash used in operating activities	\$ (5,107)	\$ (4,292)
Cash provided by investing activities	803	6,798
Cash provided by (used in) financing activities	111,224	(4,970)
Net increase (decrease) in cash, cash equivalents and restricted cash	\$ 106,920	\$ (2,464)

Cash Flows from Operating Activities

Cash used in operating activities for the three months ended March 31, 2018 was \$5.1 million, due primarily to a net loss of \$5.0 million, the change in our net operating assets and liabilities of \$0.8 million due primarily to a \$1.2 million decrease in accrued compensation and other accrued liabilities and a \$0.4 million increase in prepaid expenses, partially offset by a \$0.7 million increase in accounts payable and a \$0.1 million increase in deferred rent. Non-cash charges of \$0.6 million were recorded for stock-based compensation, and a \$0.1 million for loss on the disposal of assets.

Cash used in operating activities for the three months ended March 31, 2017 was \$4.3 million, due primarily to a net loss of \$4.1 million, the change in our net operating assets and liabilities of \$0.3 million due primarily to a \$0.2 million increase in accounts receivable and \$0.1 million increase in prepaid expenses, partially offset by non-cash charges of \$0.1 million for stock-based compensation.

Cash Flows from Investing Activities

Cash used provided by investing activities for the three months ended March 31, 2018 was \$0.8 million, due primarily to \$13.9 million in proceeds from maturities of investments, partially offset by \$12.9 million in purchases of investments and \$0.2 million in purchase of assets.

Cash provided by investing activities for the three months ended March 31, 2017 was \$6.8 million, due primarily to \$6.8 million in proceeds from maturities of investments.

Cash Flows from Financing Activities

Cash provided by financing activities for the three months ended March 31, 2018 was \$111.2 million, due primarily to \$106.8 million in net proceeds from the issuance of common stock related to our underwritten public offering in February 2018, \$9.5 million in proceeds from the exercise of common stock warrants, partially offset by payments of \$5.1 million related to the maturity and redemption the remaining redeemable convertible notes.

Cash used in financing activities for the three months ended March 31, 2017 was \$5.0 million, due primarily to payments of \$6.8 million related to the redemption of some of the redeemable convertible notes, partially offset by \$1.8 million in net proceeds from issuance of common stock in at-the-market transactions.

Contractual Obligations

The following table summarizes our fixed contractual obligations as of March 31, 2018 (in thousands):

	Payments due by period				Total
	Less than 1 year	1 to 3 years	3 to 5 years	More than 5 years	
Contractual Obligations:					
Operating lease obligations ⁽¹⁾	\$ 431	\$ 992	\$ 1,083	\$ —	\$ 2,506
AGC Manufacturing obligations ⁽²⁾	2,572	3,629	—	—	6,201
Total contractual obligations ⁽³⁾	\$ 3,003	\$ 4,621	\$ 1,083	\$ —	\$ 8,707

- (1) Represents future minimum lease payments under the non-cancelable lease for our headquarters in South San Francisco, California. The minimum lease payments above do not include any related common area maintenance charges or real estate taxes.
- (2) Represents future payments due under our development and manufacturing services agreement initial statement of work, subject to the completion of applicable work stages, which we expect to occur in less than one year.
- (3) We may be obligated to pay ISU Abxis up to \$2.0 million in potential milestone payments. As the achievement and timing of these milestones are uncertain and not estimable, such commitments have not been included in the contractual obligation disclosed above. We may be obligated to pay Pfizer certain milestone payments up to \$17.5 million. The achievement and timing of these milestones are uncertain and not estimable and have not been included in the contractual obligation disclosed above.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements.

Critical Accounting Policies and Estimates

Certain of our accounting policies that involve a higher degree of judgment and complexity are discussed in “Part II - Item 7 - Management’s Discussion and Analysis of Financial Condition and Results of Operation - Critical Accounting Estimates” in the Annual Report. There have been no significant changes to these critical accounting estimates during the first three months of 2018.

Effective January 1, 2018, we adopted the new revenue standards using the modified retrospective method through a cumulative adjustment to equity, which resulted in an immaterial \$0.2 million increase to our opening balance of accumulated deficit as of January 1, 2018. See Recent Accounting Pronouncements above for effects of adoption on our condensed consolidated statement of operations for the three months ended March 31, 2018 and on our consolidated balance sheet as of December 31, 2017.

ITEM 3. Quantitative and Qualitative Disclosures About Market Risk

Market risk represents the risk of loss that may impact our financial position due to adverse changes in financial market prices and interest rates. We are exposed to market risks in the ordinary course of our business. Our primary exposure to market risk is interest income sensitivity in our investment portfolio. Fixed rate securities and borrowings may have their fair market value adversely impacted due to fluctuations in interest rates, while floating rate securities may produce less income than expected if interest rates fall and floating rate borrowings may lead to additional interest expense if interest rates increase. Due in part to these factors, our future investment income may fall short of expectations due to changes in interest rates or we may suffer losses in principal if forced to sell securities which have declined in market value due to changes in interest rates.

However, because of the short-term nature of the instruments in our portfolio, a sudden change in market interest rates would not be expected to have a material impact on the fair market value of our investment portfolio. As of March 31, 2018, we had cash and cash equivalents of \$143.5 million, which consisted of bank deposits and money market funds and short-term investments of \$17.0 million. Accordingly, we do not expect our operating results or cash flows to be affected to any significant degree by the effect of a sudden change in market interest rates on our investment portfolio.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Management, with the participation of our Chief Executive Officer and our Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of March 31, 2018. The term “disclosure controls and procedures,” as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC’s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to our management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure.

Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of our disclosure controls and procedures as of March 31, 2018, our Chief Executive Officer and Chief Financial Officer 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 has been no change in our internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act) identified during the first three months of 2018 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

We are not a party to any material legal proceedings.

ITEM 1A. RISK FACTORS

Our business is subject to risks and events that, if they occur, could adversely affect our financial condition and results of operations and the trading price of our securities. Our risk factors have not changed materially from those described in “*Part I - Item 1A - Risk Factors*” in the Company’s Annual Report on Form 10-K for the fiscal year ended December 31, 2017, filed with the Securities and Exchange Commission on March 19, 2018.

You should carefully consider the risks and uncertainties disclosed as “*Risk Factors*” in our Annual Report, together with all of the other information in this Report, including the section titled “*Part I - Financial Information - Item 2 - Management’s Discussion and Analysis of Financial Condition and Results of Operations*” and the condensed consolidated financial statements and related notes.

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

None.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

None.

ITEM 6. EXHIBITS

See Index to Exhibits at the end of this Report, which is incorporated by reference here. The Exhibits listed in the accompanying Index to Exhibits are filed as part of this Report.

EXHIBIT INDEX

Exhibit Number	Description
31.1	<u>Certification of the Principal Executive Officer pursuant to Rule 13a-14(a) and 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</u>
31.2	<u>Certification of the Principal Financial Officer pursuant to Rule 13a-14(a) and 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</u>
32.1	<u>Certification of the Principal Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</u>
32.2	<u>Certification of the Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</u>
101	The following materials from the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2018, formatted in XBRL (eXtensible Business Reporting Language): (i) the Consolidated Balance Sheets as of March 31, 2018 (unaudited) and December 31, 2017; (ii) the Consolidated Statements of Comprehensive Income for the three months ended March 31, 2018 and 2017 (unaudited); (iii) the Consolidated Statement of Stockholders' Equity as of March 31, 2018 (unaudited); (iv) the Consolidated Statements of Cash Flows for the three months ended March 31, 2018 and 2017 (unaudited); and (v) the Notes to Unaudited Interim Consolidated Financial Statements.

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.

CATALYST BIOSCIENCES, INC.

Date: May 3, 2018

/s/ Nassim Usman, Ph.D.

Nassim Usman, Ph.D.

President and Chief Executive Officer

(Principal Executive Officer)

Date: May 3, 2018

/s/ Fletcher Payne

Fletcher Payne

Chief Financial Officer

(Principal Financial and Accounting Officer)

CERTIFICATION PURSUANT TO RULE 13a-14(a) AND 15d-14(a) OF THE SECURITIES EXCHANGE ACT
OF 1934,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Nassim Usman, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Catalyst Biosciences, Inc.;
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;

5. The registrant's other certifying officer(s) 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.

Date: May 3, 2018

/s/ Nassim Usman, Ph.D.

Nassim Usman, Ph.D.

CERTIFICATION PURSUANT TO RULE 13a-14(a) AND 15d-14(a) OF THE SECURITIES EXCHANGE ACT
OF 1934,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Fletcher Payne, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Catalyst Biosciences, Inc.;
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;

5. The registrant's other certifying officer(s) 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.

Date: May 3, 2018

/s/ Fletcher Payne

Fletcher Payne

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 Quarterly Report on Form 10-Q of Catalyst Biosciences, Inc. (the "Company") for the period ended March 31, 2018 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Nassim Usman, hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

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

Date: May 3, 2018

/s/ Nassim Usman, Ph.D.

Nassim Usman, Ph.D.

President and Chief Executive Officer

(Principal Executive 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 Quarterly Report on Form 10-Q of Catalyst Biosciences, Inc. (the "Company") for the period ended March 31, 2018 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Fletcher Payne, hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

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

Date: May 3, 2018

/s/ Fletcher Payne

Fletcher Payne

Chief Financial Officer

(Principal Financial and Accounting Officer)