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

FORM 10-Q

Quarterly Report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

For the quarterly period ended September 30, 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: 001-37985

ANAPTYSBIO, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

20-3828755
(I.R.S. Employer
Identification Number)

**10421 Pacific Center Court, Suite 200
San Diego, CA 92121**
(Address of principal executive offices and zip code)

(858) 362-6295
(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, if any, every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the Registrant was required to submit 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	<input type="checkbox"/>	Accelerated filer	<input checked="" type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
		Emerging growth company	<input checked="" type="checkbox"/>

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

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

As of November 6, 2018, there were 26,751,578 shares of the Registrant's Common Stock, \$0.001 par value per share, outstanding.

ANAPTYSBIO, INC.
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PART I. FINANCIAL INFORMATION

ITEM 1. CONSOLIDATED FINANCIAL STATEMENTS (unaudited)

**ANAPTYSBIO, INC.
CONSOLIDATED BALANCE SHEETS
(in thousands, except par value data)**

	<u>September 30, 2018</u>	<u>December 31, 2017</u>
	<u>(unaudited)</u>	
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 293,408	\$ 81,189
Receivable from collaborative partners	5,000	—
Australian tax incentive receivable	173	1,601
Short-term investments	200,406	167,218
Prepaid expenses and other current assets	4,035	2,688
Total current assets	<u>503,022</u>	<u>252,696</u>
Property and equipment, net	1,344	665
Long-term investments	18,616	75,897
Other long-term assets	79	46
Restricted cash	60	60
Total assets	<u>\$ 523,121</u>	<u>\$ 329,364</u>
LIABILITIES, PREFERRED STOCK AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 6,180	\$ 2,323
Accrued expenses	7,145	4,875
Notes payable, current portion	7,500	6,875
Other current liabilities	48	17
Total current liabilities	<u>20,873</u>	<u>14,090</u>
Notes payable, net of current portion	2,409	7,553
Deferred rent	162	140
Stockholders' equity:		
Preferred stock, \$0.001 par value, 10,000 shares authorized and no shares, issued or outstanding at September 30, 2018 and December 31, 2017, respectively	—	—
Common stock, \$0.001 par value, 500,000 shares authorized, 26,749 shares and 23,791 shares issued and outstanding at September 30, 2018 and December 31, 2017, respectively	27	24
Additional paid in capital	629,887	393,017
Accumulated other comprehensive loss	(541)	(426)
Accumulated deficit	(129,696)	(85,034)
Total stockholders' equity	<u>499,677</u>	<u>307,581</u>
Total liabilities, preferred stock and stockholders' equity	<u>\$ 523,121</u>	<u>\$ 329,364</u>

See accompanying notes to unaudited consolidated financial statements.

ANAPTYSBIO, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
(in thousands, except per share data)
(unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Collaboration revenue	\$ 5,000	\$ —	\$ 5,000	\$ 7,000
Operating expenses:				
Research and development	17,883	6,697	40,276	21,837
General and administrative	4,004	2,390	11,783	6,793
Total operating expenses	21,887	9,087	52,059	28,630
Loss from operations	(16,887)	(9,087)	(47,059)	(21,630)
Other income (expense), net:				
Interest expense	(400)	(452)	(1,287)	(1,319)
Change in fair value of liability for preferred stock warrants	—	—	—	(1,366)
Interest income	1,369	358	3,851	762
Other income (expense), net	(40)	91	(167)	344
Total other income (expense), net	929	(3)	2,397	(1,579)
Net loss	(15,958)	(9,090)	(44,662)	(23,209)
Unrealized income (loss) on available for sale securities	136	16	(115)	(43)
Other comprehensive income (loss)	136	16	(115)	(43)
Comprehensive loss	\$ (15,822)	\$ (9,074)	\$ (44,777)	\$ (23,252)
Net loss per common share:				
Basic and diluted	\$ (0.66)	\$ (0.45)	\$ (1.86)	\$ (1.24)
Weighted-average number of shares outstanding:				
Basic and diluted	24,146	20,382	23,961	18,668

See accompanying notes to unaudited consolidated financial statements.

ANAPTYSBIO, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)
(unaudited)

	Nine Months Ended September 30,	
	2018	2017
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	\$ (44,662)	\$ (23,209)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	209	136
Stock-based compensation	7,340	3,246
Change in fair value of liability for preferred stock warrants	—	1,366
(Income) loss from investments	(555)	16
Non-cash interest expense	481	460
Changes in operating assets and liabilities:		
Receivable from collaborative partners	(5,000)	1,225
Australian tax incentive receivable	1,428	2,632
Prepaid expenses and other assets	(1,403)	(1,581)
Accounts payable and other liabilities	5,946	1,081
Net cash used in operating activities	(36,216)	(14,628)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Acquisition of investments	(123,995)	(110,701)
Sales and maturities of investments	148,551	20,866
Purchases of property and equipment	(857)	(166)
Net cash provided by (used in) investing activities	23,699	(90,001)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Proceeds from public offerings, net of underwriters' fees	227,476	80,213
Proceeds from issuance of common stock, upon the exercise of stock options	2,138	814
Proceeds from issuance of common stock, upon the exercise of warrants	76	536
Payments on notes payable	(5,000)	—
Proceeds (payments) for offering costs, net	46	(1,497)
Net cash provided by financing activities	224,736	80,066
Net increase (decrease) in cash, cash equivalents, and restricted cash	212,219	(24,563)
Cash, cash equivalents and restricted cash, beginning of period	81,249	51,292
Cash, cash equivalents and restricted cash, end of period	\$ 293,468	\$ 26,729
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION		
Interest paid	\$ 835	\$ 762
Non-cash investing and financing activities:		
Amounts accrued for property and equipment	\$ 160	\$ 12
Amounts accrued for offering costs	\$ 241	\$ 215
Reclassification of warrants to equity	\$ —	\$ 4,607

See accompanying notes to unaudited consolidated financial statements.

ANAPTYSBIO, INC.
NOTES TO UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS

1. Description of the Business

AnaptysBio, Inc. (“we,” “us,” “our,” or the “Company”) was incorporated in the state of Delaware in November 2005. We are a biotechnology company developing first-in-class antibody product candidates focused on unmet medical needs in inflammation. We develop our product candidates using our proprietary, antibody discovery technology platform, which is designed to replicate, *in vitro*, the natural process of antibody generation. We currently generate revenue from milestones achieved under our collaborative research and development arrangements.

Since our inception, we have devoted our primary effort to raising capital and research and development activities. Our financial support has been provided primarily from the sale of our common and preferred stock, as well as through funds received under our collaborative research and development agreements, proceeds from our Term Loans as discussed in Note 5 below, and the issuance of convertible debt. Going forward, as we continue our expansion, we may seek additional financing and/or strategic investments. However, there can be no assurance that any additional financing or strategic investments will be available to us on acceptable terms, if at all. If events or circumstances occur such that we do not obtain additional funding, we will most likely be required to reduce our plans and/or certain discretionary spending, which could have a material adverse effect on our ability to achieve our intended business objectives. Management believes its currently available resources will provide sufficient funds to enable the Company to meet its operating plans for at least the next twelve months. The accompanying consolidated financial statements do not include any adjustments that might be necessary if we are unable to continue as a going concern.

Public Offerings and Related Transactions

Initial Public Offering

On January 31, 2017, we completed an initial public offering, or IPO, selling 5,750,000 shares of common stock at \$15.00 per share. Proceeds from our initial public offering net of underwriting discounts and commissions were \$80.2 million.

In addition, each of the following occurred in connection with the completion of the IPO on January 31, 2017:

- the conversion of all outstanding shares of convertible preferred stock into 11,520,698 shares of common stock; and
- the conversion of warrants to purchase 377,195 shares of convertible preferred stock into warrants to purchase 377,195 shares of common stock and the resultant reclassification of the warrant liability to additional paid-in capital.

Reverse Stock Split

On January 13, 2017, we amended and restated our certificate of incorporation to effect a one for seven reverse stock split of every outstanding share of our preferred and common stock. The financial statements and accompanying footnotes have been retroactively restated to reflect the reverse stock split.

Follow-on Public Offerings

On October 17, 2017, we completed an underwritten public offering selling 3,000,000 shares of common stock. All shares were offered by us at a price to the public of \$68.50 per share. The aggregate net proceeds received by us from the offering were \$194.7 million, net of underwriting discounts and commissions. As part of the underwritten public offering, on November 14, 2017, the underwriters exercised an additional 271,380 shares of common stock at a discounted price to the public of \$68.50 per share for aggregate net proceeds of \$17.6 million, net of underwriting discounts and commissions.

On September 28, 2018, we completed an underwritten public offering of 2,530,000 shares of common stock, which included the exercise of the underwriters’ option to purchase an additional 330,000 shares of common stock. All shares were

offered by us at a price to the public of \$94.46 per share. The aggregate net proceeds received by us from the offering were \$227.5 million, net of underwriting discounts and commissions.

2. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying unaudited consolidated financial statements have been prepared pursuant to the rules and regulations of the Securities and Exchange Commission, or the SEC. Certain information and note disclosures normally included in annual financial statements prepared in accordance with U.S. generally accepted accounting principles, or U.S. GAAP, have been omitted. The accompanying unaudited consolidated financial statements include all known adjustments necessary for a fair presentation of the results of interim periods as required by U.S. GAAP. These adjustments consist primarily of normal recurring accruals and estimates that impact the carrying value of assets and liabilities. Operating results for the three and nine months ended September 30, 2018 are not necessarily indicative of the results that may be expected for the year ending December 31, 2018. The financial statements should be read in conjunction with our audited financial statements for the year ended December 31, 2017, included in our Annual Form 10-K, as amended on September 14, 2018.

Basis of Consolidation

The accompanying consolidated financial statements include us and our wholly-owned Australian subsidiary. All intercompany accounts and transactions have been eliminated in consolidation. We operate in one reportable segment and our functional and reporting currency is the U.S. dollar.

Use of Estimates

The preparation of the accompanying consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements and reported amounts of revenues and expenses during the reporting periods. Actual results could differ from those estimates. We base our estimates and assumptions on historical experience when available and on various factors that we believe to be reasonable under the circumstances. We evaluate our estimates and assumptions on an ongoing basis. Our actual results could differ from these estimates under different assumptions or conditions.

Revenue Recognition

Revenue is recognized in accordance with revenue recognition accounting guidance, which utilizes five basic steps to determine whether revenue can be recognized and to what extent: (i) identify the contract with a customer; (ii) identify the performance obligation; (iii) determine the transaction price; (iv) allocate the transaction price; and (v) determine the recognition period.

Performance Obligations. We evaluate deliverables on a contract by contract basis to determine whether each deliverable represents a good or service that is distinct or has the same pattern of transfer as other deliverables. A deliverable is considered distinct if the customer can benefit from the good or service independently of other goods/services either in the contract or that can be obtained elsewhere, without regard to contract exclusivity, and the entity's promise to transfer the good or service to the customer is separately identifiable from other promises in the contract. If the deliverable is not considered distinct, we combine such deliverables and account for them as a single performance obligation. We allocate the consideration to each deliverable at the inception of the arrangement based on the transaction price.

Our performance obligations may include the following:

- **License Arrangements.** The performance obligations under our collaboration and license agreements generally include exclusive or nonexclusive licenses to one or more products generated using our technologies. Licenses for multiple antibodies within a single contract are generally combined as they have substantially the same pattern of transfer to the customer. Historically, our licenses have held no value to the customer, as the antibodies were in the discovery phase and required our expertise for further development. Accordingly, licenses are not considered distinct.

- **Research and Development Services.** The performance obligations under our collaboration and license agreements generally include research and development services we perform on behalf of or with our collaborators. As discussed within license arrangements above, our licenses have historically held no value without the research and development services we provide. As we generally only provide research and development services for internally generated antibodies that require a license to be utilized by a third party, our research and development services are not considered distinct.
- **Steering Committee Meetings.** The performance obligations under our collaboration and license agreements may also include our participation in a steering committees, which allows us to direct the progression of our discovery programs. As these steering committees would not occur or benefit the customer without the use of our licenses, these are not considered distinct.

We recognize consideration allocated to a performance obligation as the performance obligation is satisfied, and the determination as to whether consideration is recognized over time or at a point in time is made upon contract inception. For our collaboration agreements, this is generally over the period in which research and development services have been performed.

Transaction Price. Our collaboration and license agreements generally include both fixed and variable consideration. Fixed payments, such as those for upfront fees are included in the transaction price at contract value, while variable consideration such as reimbursement for research and development services, milestone and royalty payments are estimated and then evaluated for constraints upon inception of the contract and evaluated on a quarterly basis thereafter. Research and development services are updated for actual invoices. Given the nature of our agreements, milestones are estimated using the most likely amount and are evaluated on a quarterly basis. Upon commercialization, royalty payments are recognized in the period incurred.

Net Loss Per Common Share

Basic net loss per common share is computed by dividing net loss by the weighted-average number of common shares outstanding during the period. Diluted net loss per share is computed by dividing net loss by the weighted-average number of common equivalent shares outstanding for the period. Diluted net loss per share includes any dilutive effect from outstanding stock options and warrants using the treasury stock method. For each period presented, there is no difference in the number of shares used to calculate basic and diluted net loss per share.

The following table sets forth the outstanding potentially dilutive securities that have been excluded in the calculation of diluted net loss per share because to do so would be anti-dilutive (in common stock equivalent shares):

(in thousands)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Options to purchase common stock	2,402	1,755	2,514	1,883
Warrants to purchase common stock	—	—	3	209
Total	2,402	1,755	2,517	2,092

Accounting Pronouncements Recently Adopted

In May 2014, the FASB issued ASU 2014-09, *Revenue from Contracts with Customers*, which outlines a single comprehensive model for entities to use in accounting for revenue from contracts with customers and supersedes most current revenue recognition guidance, including industry-specific guidance. This standard is based on the principle that an entity should recognize revenue to depict the transfer of goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. This standard also requires additional disclosure about the nature, amount, timing and uncertainty of assets recognized from costs incurred to fulfill a contract and became effective for our annual reporting period beginning January 1, 2018, including interim periods within that reporting period. Entities have the option of using either a full retrospective or a modified retrospective approach for the adoption of the new standard. We assessed all potential impacts of the standard, and the most significant impacts relate to our accounting for variable consideration including revenues related to contingent “milestone” based payments and our disclosures required under the new standard as it relates to our two ongoing collaboration agreements, TESARO and Celgene. Application of the new standard requires that variable consideration be recognized to the extent that it is probable that a significant reversal in the amount of revenue will not occur when the uncertainty associated with the variable consideration is subsequently resolved. Accordingly, we may be required to recognize milestone payments earlier in the period in which we determine a significant reversal will not occur, rather than when the milestone is achieved. However, we have reviewed the TESARO and Celgene agreements and have determined

that given the nature of potential milestones owed to us under these agreements, and the inherent risk involved in developing drugs, and have determined that these potential milestones were not recognizable as of the standard adoption date. Additionally, while we currently disaggregate our revenue disclosures by collaborative agreement, additional discussion surrounding significant estimates made by management was required in our disclosure and included in Note 4 below. We adopted this standard using the modified retrospective approach for our annual reporting period beginning January 1, 2018, and did not record any adjustments upon adoption of this standard.

In January 2016, the FASB issued ASU 2016-01, *Financial Instruments—Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities*, which intends to enhance the reporting model for financial instruments by providing users of financial instruments with more decision-useful information. The standard also addresses certain aspects of the recognition, measurement, presentation, and disclosure of financial instruments and requires additional disclosure about the nature, amount, timing and uncertainty of assets recognized from costs incurred to fulfill a contract and became effective for our annual reporting period beginning January 1, 2018, including interim periods within that reporting period; early adoption is permitted. We adopted this standard as of January 1, 2018 and there was no material impact on our consolidated financial statements. We did not record any adjustments upon adoption of this standard and have consistently applied our accounting policies to all periods presented in the consolidated financial statements.

In May 2017, the FASB issued ASU 2017-09, *Compensation - Stock Compensation (Topic 718)*, which provides further guidance as to what constitutes a modification to the terms of shared based compensation, in order to create consistency in practice amongst all entities. ASU 2017-09 became effective for annual reporting periods beginning after December 15, 2017, including interim periods thereafter; early adoption is permitted, including adoption in an interim period. We adopted this standard as of January 1, 2018, and the impact was not material on our consolidated financial statements. We did not record any adjustments upon adoption of this standard.

Recent Accounting Pronouncements

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)*, which requires that lessees recognize a right-of-use, or “ROU”, asset and a related lease liability on the balance sheet for all leases with a term longer than 12 months. Topic 842 was subsequently amended by ASU 2018-01, *Land Easement Practical Expedient for Transition to Topic 842*; ASU 2018-10, *Codification Improvements to Topic 842, Leases*; and ASU 2018-11, *Targeted Improvements*. ASU 2016-02 becomes effective for our annual reporting period beginning January 1, 2019, including interim periods thereafter; early adoption is permitted. A modified retrospective transition approach is required, applying the new standard to all leases existing at the date of initial application. An entity may choose to use either (i) its effective date or (ii) the beginning of the earliest comparative period presented in the financial statements as its date of initial application. We expect to adopt the new standard on January 1, 2019 and use the effective date as our date of initial application. The new standard provides a number of optional practical expedients in transition. We expect to elect the ‘package of practical expedients’, which permits us not to reassess under the new standard our prior conclusions about lease identification, lease classification and initial direct costs. While we continue to assess all of the effects of adoption, we expect the recognition of new ROU assets and lease liabilities on our balance sheet for current real estate leases as well as the enhanced disclosure requirements will not have a material effect on our financial statements.

3. Balance Sheet Accounts and Supplemental Disclosures

Property and Equipment

Property and equipment consist of the following:

(in thousands)	September 30, 2018	December 31, 2017
Laboratory equipment	\$ 4,138	\$ 3,687
Office furniture and equipment	723	605
Leasehold improvements	575	351
Property and equipment, gross	\$ 5,436	\$ 4,643
Less: accumulated depreciation and amortization	(4,092)	(3,978)
Total property and equipment, net	\$ 1,344	\$ 665

Accrued Expenses

Accrued expenses consist of the following:

(in thousands)	September 30, 2018	December 31, 2017
Accrued compensation and related expenses	\$ 2,176	\$ 1,588
Accrued research and contract manufacturing expenses	4,196	2,961
Other	773	326
Total accrued expenses	<u>\$ 7,145</u>	<u>\$ 4,875</u>

4. Collaborative Research and Development Agreements

TESARO Collaboration

In March 2014, we entered into a Collaboration and Exclusive License Agreement, or the TESARO Agreement, with TESARO, Inc. and TESARO Development, Inc., or collectively, TESARO, an oncology-focused biopharmaceutical company. Under the terms of the agreement, we agreed to perform certain discovery and early preclinical development of therapeutic antibodies with the goal of generating immunotherapy antibodies for subsequent preclinical, clinical, regulatory and commercial development to be performed by TESARO. Under the terms of the agreement, TESARO paid an upfront license fee of \$17.0 million in March 2014 and agreed to provide funding to us for research and development services related to antibody discovery programs for three specific targets. In November 2014, we and TESARO entered into Amendment No. 1 to the Agreement to add an antibody discovery program against an undisclosed fourth target for an upfront license fee of \$2.0 million.

For each development program, we are eligible to receive milestone payments of up to \$18.0 million if certain preclinical and clinical trial events are achieved by TESARO, up to an additional \$90.0 million if certain U.S. and European regulatory submissions and approvals in multiple indications are achieved, and up to an additional \$165.0 million upon the achievement of specified levels of annual worldwide net sales. We will also be eligible to receive tiered single-digit royalties related to worldwide net sales of products developed under the collaboration. Unless earlier terminated by either party upon specified circumstances, the agreement will terminate, with respect to each specific developed product, upon the latter of the 12th anniversary of the first commercial sale of the product or the expiration of the last to expire of any patent. Prior to the adoption of ASC Topic 606, we determined that the upfront license fees and research funding under the agreement, as amended, should be accounted for as a single unit of accounting and that the upfront license fees should be deferred and recognized as revenue over the same period that the research and development services are performed. In December 2015, we determined that the research and development services would be extended through December 31, 2016. As a result, the period over which the unrecognized license fees and milestones were recognized was extended through December 31, 2016, and have been recognized in full.

We assessed this arrangement in accordance with ASC Topic 606 and concluded that the contract counterparty, TESARO, is a customer. We identified the following material promises under the TESARO Agreement: (1) the licenses under certain patent rights relating to six discovery programs (four targets) and transfer of certain development and regulatory information, (2) R&D services and (3) Joint Steering Committee meetings. We considered the research and discovery capabilities of TESARO for these specific programs, TESARO's inability to sub-license, and the fact that the discovery and optimization of these antibodies is proprietary and could not, at the time of the contract inception, be provided by other vendors, to conclude that the license does not have stand-alone functionality and is therefore not distinct. Additionally, we determined that the steering committee participation would not have been provided without the R&D services and license agreement. Based on these assessments, we identified all services to be interrelated, and therefore concluded that the promises should be combined into a single performance obligation at the inception of the arrangement.

As of September 30, 2018, the transaction price includes the upfront payment, research reimbursement revenue, and milestones earned to date, which are allocated in their entirety to the single performance obligation. We recognized one future clinical milestone for \$5.0 million during the three months ended September 30, 2018 upon determination that a significant reversal of revenue would not be probable. No other future clinical or regulatory milestones have been included in the transaction price, as all milestone amounts were subject to the revenue constraint. As part of the constraint evaluation, we considered numerous factors including the fact that the receipt of milestones is outside of our control and contingent upon success in future clinical trials, an outcome that is difficult to predict, and the licensees' efforts. Any consideration related to

sales-based milestones, including royalties, will be recognized when the related sales occur as they were determined to relate predominantly to the IP license granted to TESARO and therefore have also been excluded from the transaction price. We will re-evaluate the variable transaction price in each reporting period and as uncertain events are resolved or other changes in circumstances occur.

Milestones recognized through September 30, 2018 under the TESARO Agreement are as follows:

Milestone Event	Anti-PD-1 (TSR042)		Anti-TIM-3 (TSR022)		Anti-LAG-3 (TSR033)	
	Amount	Quarter Recognized	Amount	Quarter Recognized	Amount	Quarter Recognized
Initiated <i>in vivo</i> toxicology studies using good laboratory practices (GLPs)	\$1.0M	Q2'15	\$1.0M	Q4'15	\$1.0M	Q3'16
IND clearance from the FDA	\$4.0M	Q1'16	\$4.0M	Q2'16	\$4.0M	Q2'17
Phase 2 clinical trial initiation	\$3.0M	Q2'17	\$3.0M	Q4'17	—	—
Phase 3 clinical trial initiation	\$5.0M	Q3'18	—	—	—	—

Milestones achieved during the discovery period were recognized as revenue pro-rata through December 31, 2016. Milestones achieved during fiscal 2017 were recognized as revenue in the period earned, while milestones after December 31, 2017 were recognized upon determination that a significant reversal of revenue would not be probable. Cash is generally received within 30 days of milestone achievement.

Revenue from future contingent milestone payments will be recognized when it is more likely than not that the revenue will not be reversed in future periods.

We recognized \$5.0 million in revenue under this agreement during the three and nine months ended September 30, 2018 related to one milestone upon determination that a significant reversal of revenue would not be probable, and \$7.0 million in revenue under this agreement during the nine months ended September 30, 2017 related to two milestones. There was no revenue recognized under this agreement during the three months ended September 30, 2017.

Antibody Generation Agreement with Celgene Corporation

In December 2011, we entered into a license and collaboration agreement with Celgene, or the Celgene Agreement, to develop therapeutic antibodies against multiple targets. We granted Celgene the option to obtain worldwide commercial rights to antibodies generated against each of the targets under the agreement, which option was triggered on a target-by-target basis by our delivery of antibodies meeting certain pre-specified parameters pertaining to each target under the agreement.

The agreement provided for an upfront payment of \$6.0 million from Celgene, which we received in 2011 and recognized through 2014, milestone payments of up to \$53.0 million per target, low single-digit royalties on net sales of antibodies against each target, and reimbursement of specified research and development costs.

We assessed this arrangement in accordance with ASC Topic 606 and concluded that the contract counterparty, Celgene, is a customer. We identified the following material promises under the Celgene Agreement: (1) the licenses under certain patent rights relating to four targets and transfer of certain development and regulatory information, (2) R&D services, (3) a written report documenting findings and (4) Steering Committee meetings. We considered the research and discovery capabilities of Celgene, Celgene's inability to sub-license the four targets, and the fact that the discovery and optimization of these antibodies is proprietary and could not, at the time of the contract inception, be provided by other vendors, to conclude that the license does not have stand-alone functionality and is therefore not distinct. Additionally, we determined that the report of findings and steering committee participation would not have been provided without the R&D services and license agreement. Based on these assessments, we identified all services to be interrelated, and therefore concluded that the promises should be combined into a single performance obligation at the inception the arrangement.

As of September 30, 2018, the transaction price includes the upfront payment, success fees, expense reimbursement, and milestones earned to date, which are allocated in their entirety to the single performance obligation. None of the future clinical or regulatory milestones have been included in the transaction price, as all milestone amounts were subject to the revenue constraint. As part of the constraint evaluation, we considered numerous factors, including the fact that the receipt of milestones is outside of our control and contingent upon success in future clinical trials and the licensees' efforts. Any consideration related

to sales-based milestones, including royalties, will be recognized when the related sales occur as they were determined to relate predominantly to the IP license granted to Celgene and therefore have also been excluded from the transaction price. We will re-evaluate the transaction price in each reporting period and as uncertain events are resolved or other changes in circumstances occur.

Milestones achieved through September 30, 2018 under the Celgene Agreement are as follows:

Milestone Event	Anti-PD-1 (CC-90006)	
	Amount	Quarter Recognized
Completion of first <i>in vivo</i> toxicology studies using GLPs	\$0.5M	Q2'16
Phase I clinical trial initiation	\$1.0M	Q4'16

Revenue from future contingent milestone payments will be recognized when it is more likely than not that the revenue will not be reversed in future periods. Cash is generally received within 30 days of milestone achievement.

There was no revenue recognized under this agreement during the three and nine months ended September 30, 2018 and 2017.

5. Notes Payable

On December 24, 2014, we entered into a Loan and Security Agreement, as amended from time to time, the Loan Agreement, with a bank and a financial institution whereby we may borrow up to \$15.0 million in three separate draws of \$5.0 million each. The Term A Loans, for an aggregate of \$5.0 million, were drawn on December 24, 2014 with a fixed interest rate of 6.97%.

In connection with the issuance of the Term A Loans, we issued detachable, fully vested warrants to purchase an aggregate of 41,208 shares of Series C Preferred Stock at an exercise price of \$4.55 per share to the lenders. The grant-date fair value of the warrants of \$0.1 million was recorded as a liability, with a reduction to the carrying value of the Term A Loans, and which is recognized as additional interest expense over the remaining term of the Loans. The initial fair value of the warrants was determined using the Black-Scholes option pricing model with the following assumptions: a stock price volatility of 70.2%, an expected life equal to the contractual term of the warrants of ten years and a risk-free interest rate of 1.97%.

In January 2016, the Loan Agreement was amended to combine Term B Loans and Term C Loans for a total of \$10.0 million available for draw through December 31, 2016 and delay the beginning of our Term A Loans' principal repayments from February 1, 2016 until February 1, 2017. The Term B Loans and Term C Loans became available for draw on July 1, 2016. In December 2016, we further amended the Loan Agreement to (i) allow for the Term B Loans and Term C Loans to be drawn on December 30, 2016, (ii) delay principal repayments of all Term Loans until February 1, 2018 and (iii) amend the interest rate for each Term Loan. The Term B Loans and the Term C Loans were drawn on December 30, 2016, and Term A, B and C Loans are now collectively referred to as the Term Loans. Principal repayments began in February 2018, and as of September 30, 2018, there are 16 monthly principal and interest payments remaining on the Term Loans, with final maturity in January 2020. The Term Loans bear interest equal to the greater of 3-month U.S. LIBOR plus 6.37% or 7.3%. The interest rate was 8.69% as of September 30, 2018.

In connection with the issuance of the Term B & C Loans, we issued detachable, fully vested warrants to purchase an aggregate of 82,416 shares of Series C Preferred Stock at an exercise price of \$4.55 per share to the lenders. The grant-date fair value of the warrants of \$0.9 million was recorded as a liability, with a reduction to the carrying value of the Term B & C Loans, and which is recognized as additional interest expense over the remaining term of the Loans. The initial fair value of the warrants was determined using the Black-Scholes option pricing model with the following assumptions: a stock price volatility of 79.2%, an expected life equal to the contractual term of the warrants of ten years and a risk-free interest rate of 2.45%. As discussed in Note 1 above, all of the outstanding warrants to purchase shares of preferred stock automatically converted into warrants to purchase shares of common stock in connection with the IPO and were accounted for as equity from the conversion date forward. All warrants related to Term Loans were exercised during the year ended December 31, 2017.

The costs incurred to issue the Term Loans were deferred and are included in the discount to the carrying value of the Term Loans in the accompanying balance sheet. The Term Loans also include a final payment fee of \$0.8 million due at the

earlier of prepayment or the maturity date of the Term Loans. The deferred costs and the final payment fee are being amortized to interest expense over the expected term of the Term A Loans using the effective interest method.

As of September 30, 2018, the carrying amount of the Term Loans was \$9.9 million, which is net of unamortized discounts of \$0.1 million and of which \$7.5 million is classified as current liabilities as of September 30, 2018. The effective interest rate on the Term Loans at September 30, 2018 was 13.08%. As of September 30, 2018, future principal maturities of the Term Loans were \$1.9 million, \$7.5 million and \$0.6 million in 2018, 2019 and 2020, respectively.

The Term Loans are secured by a first priority interest in most of our assets, excluding intellectual property. As of September 30, 2018, we were in compliance with the covenants contained in the Loan Agreement.

6. Fair Value Measurements and Available for Sale Investments

Fair Value Measurements

Our financial instruments consist principally of cash, cash equivalents, restricted cash, short-term and long-term investments, receivables, accounts payable, notes payable and, through January 31, 2017, preferred stock warrant liabilities. Certain of our financial assets and liabilities have been recorded at fair value in the consolidated balance sheet in accordance with the accounting standards for fair value measurements.

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants on the measurement date. Accounting guidance also establishes a fair value hierarchy that requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. The standard describes three levels of inputs that may be used to measure fair value:

Level 1 - Observable inputs that reflect quoted prices (unadjusted) for identical assets or liabilities in active markets.

Level 2 - Inputs are observable, unadjusted quoted prices in active markets for similar assets or liabilities, unadjusted quoted prices for identical or similar assets or liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the related assets or liabilities; and

Level 3 - Unobservable inputs that are supported by little or no market activities, therefore requiring an entity to develop its own assumptions.

Assets and Liabilities Measured at Fair Value on a Recurring Basis

The following table summarizes our assets and liabilities that require fair value measurements on a recurring basis and their respective input levels based on the fair value hierarchy:

(in thousands)	Fair Value Measurements at End of Period Using:			
	Fair Value	Quoted Market Prices for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
At September 30, 2018				
Money market funds ⁽¹⁾	\$ 51,442	\$ 51,442	\$ —	\$ —
Mutual funds ⁽¹⁾	236,332	236,332	—	—
U.S. treasury securities ⁽²⁾	95,086	95,086	—	—
Certificates of deposit ⁽²⁾	959	—	959	—
Agency securities ⁽²⁾	44,647	—	44,647	—
Commercial and corporate obligations ⁽¹⁾⁽²⁾	80,646	—	80,646	—
At December 31, 2017				
Money market funds ⁽¹⁾	\$ 41,318	\$ 41,318	\$ —	\$ —
Mutual funds ⁽¹⁾	28,817	28,817	—	—
U.S. treasury securities ⁽²⁾	79,397	79,397	—	—
Agency securities ⁽²⁾	59,948	—	59,948	—
Commercial and corporate obligations ⁽²⁾	111,660	—	111,660	—

(1) Included in cash and cash equivalents, and restricted cash in the accompanying consolidated balance sheets.

(2) Included in short-term or long-term investments in the accompanying consolidated balance sheets depending on the respective maturity date.

The following methods and assumptions were used to estimate the fair value of our financial instruments for which it is practicable to estimate that value:

Marketable Securities. For fair values determined by Level 1 inputs, which utilize quoted prices in active markets for identical assets, the level of judgment required to estimate fair value is relatively low. For fair values determined by Level 2 inputs, which utilize quoted prices in less active markets for similar assets, the level of judgment required to estimate fair value is also considered relatively low.

Warrant Liabilities. Our preferred stock warrants were accounted for as derivative liabilities and measured at fair value on a recurring basis through January 31, 2017 as they contained features that were either not afforded equity classification or embodied risks that were not clearly and closely related to host contracts. We estimated the fair value of these derivatives utilizing the Black-Scholes option-pricing model, which required Level 3 inputs.

As discussed in Note 1 above, all of the outstanding warrants to purchase shares of preferred stock automatically converted into warrants to purchase shares of common stock in connection with the IPO and are accounted for as equity from the conversion date forward. Prior to the conversion, we estimated the fair value of convertible preferred stock warrants at the time of issuance and upon subsequent remeasurement using the Black-Scholes option-pricing model at each reporting date.

Estimating fair values of derivative financial instruments, including Level 3 instruments, requires the use of significant and subjective inputs that may, and are likely to, change over the duration of the instrument with related changes in internal and external market factors, including changes in the estimated fair value of our equity securities.

The following weighted-average assumptions were utilized in estimating the value of the liabilities for Series C preferred stock warrants using the Black-Scholes option-pricing model as of January 31, 2017, the conversion date:

	January 31, 2017
Fair value of preferred stock	\$ 16.95
Exercise price	\$ 4.55
Risk-free interest rate	1.4%
Volatility	88.8%
Dividend Yield	—%
Contractual term (in years)	3.8
Weighted-average measurement date fair value per share	\$ 13.71

The following table summarizes the activity in liabilities measured at fair value on a recurring basis using significant unobservable inputs (Level 3 Inputs):

(in thousands)	Nine Months Ended September 30, 2017
Preferred Stock Warrant Liabilities:	
Beginning balance	\$ (3,241)
Net gains (losses) included in other expense	(1,366)
Reclassification of warrant liabilities to equity	4,607
Ending balance	\$ —

Fair Value of Other Financial Instruments

The fair value of our other financial instruments estimated as of September 30, 2018 and December 31, 2017 are presented below:

	September 30, 2018		December 31, 2017	
	Carrying Amount	Fair Value	Carrying Amount	Fair Value
Notes payable	\$ 9,909	\$ 10,671	\$ 14,428	\$ 15,650

The following methods and assumptions were used to estimate the fair value of our notes payable:

Notes Payable—We use the income approach to value the aforementioned debt instrument. We use a present value calculation to discount principal and interest payments and the final maturity payment on these liabilities using a discounted cash flow model based on observable inputs. We discount these debt instruments based on what the current market rates would offer us as of the reporting date. Based on the assumptions used to value these liabilities at fair value, these debt instruments are categorized as Level 2 in the fair value hierarchy.

The carrying amounts of certain of our financial instruments, including cash and cash equivalents, Australian tax incentive receivable, accounts payable, and accrued expenses approximate fair value due to their short-term nature.

Available for Sale Investments

We invest our excess cash in agency securities, debt instruments of financial institutions and corporations, commercial obligations, and U.S. Treasury securities, which we classify as available-for-sale investments. These investments are carried at fair value and are included in the tables above. The aggregate market value, cost basis, and gross unrealized gains and losses of available-for-sale investments by security type, classified in cash equivalents, short-term and long-term investments as of September 30, 2018 are as follows:

(in thousands)	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Total Fair Value
Agency securities ⁽¹⁾	\$ 44,832	\$ —	\$ (185)	\$ 44,647
Certificates of deposit ⁽²⁾	959	—	—	959
Commercial and corporate obligations ⁽³⁾	80,812	1	(167)	80,646
US Treasury securities ⁽⁴⁾	95,276	—	(190)	95,086
Total available-for-sale investments	<u>\$ 221,879</u>	<u>\$ 1</u>	<u>\$ (542)</u>	<u>\$ 221,338</u>

(1) Of our outstanding agency securities, \$42.9 million have maturity dates of less than one year and \$1.7 million have a maturity date of between one to two years as of September 30, 2018.

(2) All of our outstanding certificates of deposit have a maturity date of between one to two years as of September 30, 2018.

(3) Of our outstanding commercial and corporate obligations, \$74.6 million have maturity dates of less than one year and \$6.1 million have a maturity date of between one to two years as of September 30, 2018.

(4) Of our outstanding U.S. Treasury securities \$85.2 million have maturity dates of less than one year and \$9.9 million have a maturity date of between one to two years as of September 30, 2018.

7. Stockholders' Equity

Common and Preferred Stock

On January 31, 2017, upon completion of our IPO, we amended our Certificate of Incorporation to increase the number of authorized shares of common stock to 500,000,000 with a par value of \$0.001 and decrease the number of authorized shares of preferred stock to 10,000,000 with a par value of \$0.001 per share.

Common Stock

Of the 500,000,000 shares of common stock authorized, 26,748,713 shares were issued and outstanding as of September 30, 2018. Common stock reserved for future issuance upon the exercise, issuance or conversion of the respective equity instruments at September 30, 2018 are as follows:

Issued and Outstanding:	
Stock options	2,308,389
Shares Reserved For:	
2017 Equity Incentive Plan	2,038,194
Employee Stock Purchase Plan	455,913
Total	<u>4,802,496</u>

Warrant Exercises

During the nine months ended September 30, 2018, 16,770 shares of common stock were issued as a result of warrant exercises. During the nine months ended September 30, 2017, warrants for the purchase of 476,251 shares of common stock were exercised, of which 358,342 were exercised by a net exercise method. As a result, we issued 397,445 shares of common stock, net. As of September 30, 2018, all warrants have been exercised.

8. Equity Incentive Plans

2017 Equity Incentive Plan

On January 12, 2017, our board of directors and stockholders approved and adopted the 2017 Equity Incentive Plan, or the 2017 Plan. The 2017 Plan became effective upon the execution and delivery of the underwriting agreement for our initial public offering on January 26, 2017, and replaced our existing 2006 Equity Incentive Plan, or the 2006 Plan. Under the 2017 Plan we may grant stock options, stock appreciation rights, restricted stock, restricted stock units and other awards to individuals who are then our employees, officers, directors or consultants. In addition, the number of shares of stock available for issuance under the 2017 Plan will be automatically increased each January 1, beginning on January 1, 2018, by 4% of the aggregate number of outstanding shares of our common stock as of the immediately preceding December 31 or such lesser number as determined by our board of directors. The 2017 Plan automatically increased by 951,656 shares as of January 1, 2018.

Employee Stock Purchase Plan

On January 12, 2017, our board of directors and stockholders approved and adopted the 2017 Employee Stock Purchase Plan or the ESPP. The ESPP became effective upon the execution and delivery of the underwriting agreement for our initial public offering on January 26, 2017. In addition, the number shares of stock available for issuance under the ESPP will be automatically increased each January 1, beginning on January 1, 2018, by 1% of the aggregate number of outstanding shares of our common stock as of the immediately preceding December 31 or such lesser number as determined by our board of directors. The ESPP automatically increased by 237,913 shares as of January 1, 2018.

Stock Options

Stock options granted to employees and non-employees generally vest over a four-year period while stock options granted to directors vest over a one year period. Additionally, new non-employee directors receive stock options that vest over a three-year period. Each have a maximum term of ten years from the date of grant, subject to earlier cancellation prior to vesting upon cessation of service to us. A summary of the activity related to stock option awards during the nine months ended September 30, 2018 is as follows:

	Shares Subject to Options	Weighted-Average Exercise Price per Share	Weighted-Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in thousands)
Outstanding at January 1, 2018	2,425,903	\$ 12.03		
Granted	339,557	\$ 100.98		
Exercises	(410,551)	\$ 5.21		
Forfeitures and cancellations	(46,520)	\$ 49.68		
Outstanding at September 30, 2018	<u>2,308,389</u>	\$ 25.57	7.25	\$ 173,085
Exercisable at September 30, 2018	<u>1,330,540</u>	\$ 10.62	6.27	\$ 118,779

Total cash received from the exercise of stock options was approximately \$2.1 million during the nine months ended September 30, 2018.

Certain stock option grants under the 2006 Plan provide for exercise of the stock option prior to vesting. Shares of common stock issued upon exercise of unvested options are subject to repurchase by us at the respective original exercise price until vested. Consideration received for the exercise of unvested stock options is recorded as a liability and reclassified into equity as the related award vests.

Stock-Based Compensation Expense

The estimated fair values of stock option awards granted to employees were determined on the date of grant using the Black-Scholes option valuation model with the following weighted average assumptions:

	Nine Months Ended September 30,	
	2018	2017
Risk-free interest rate	2.6%	2.0%
Expected volatility	68.0%	64.4%
Expected dividend yield	—%	—%
Expected term (in years)	6.25	6.25
Weighted average grant date fair value per share	\$ 63.49	\$ 22.54

We determine the appropriate risk free interest rate, expected term for employee stock based awards, contractual term for non-employee stock based awards, and volatility assumptions. The weighted-average expected option term for employee and director stock based awards reflects the application of the simplified method, which defines the life as the average of the contractual term of the options and the weighted average vesting period for all option tranches. The weighted average expected term for non-employee stock based awards is the remaining contractual life of the award. Estimated volatility incorporates historical volatility of our common stock and similar entities whose share prices are publicly available. The risk free interest rate is based upon U.S. Treasury securities with remaining terms similar to the expected or contractual term of the share based payment awards. The assumed dividend yield is based on our expectation of not paying dividends in the foreseeable future.

There were 339,557 and 1,061,106 stock options granted during the nine months ended September 30, 2018 and 2017, respectively.

Total non-cash stock-based compensation expense for all stock awards that was recognized in the consolidated statements of operations and comprehensive loss is as follows:

(in thousands)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Research and development	\$ 837	\$ 198	\$ 2,492	\$ 997
General and administrative	1,695	744	4,848	2,249
Total	\$ 2,532	\$ 942	\$ 7,340	\$ 3,246

At September 30, 2018, there was \$27.8 million of unrecognized compensation cost related to unvested stock option awards, which is expected to be recognized over a remaining weighted average vesting period of 2.46 years.

9. Australia Research and Development Tax Incentive

Our Australian subsidiary, which conducts core research and development activities on our behalf, is eligible to receive a 43.5% refundable tax incentive for qualified research and development activities during fiscal 2018 and fiscal 2017. For the three months ended September 30, 2018 and 2017, less than \$0.1 million and \$0.2 million, respectively, were recorded as a reduction to research and development expenses in the consolidated statements of operations and comprehensive loss. For the nine months ended September 30, 2018 and 2017 \$0.1 million and \$1.4 million, respectively, were recorded as a reduction to research and development expenses in the consolidated statements of operations and comprehensive loss. As of September 30, 2018 our tax incentive receivable from the Australian government was \$0.2 million. We received approximately \$1.5 million and \$4.6 million in cash during the nine months ended September 30, 2018 and 2017, respectively, related to the tax incentive.

10. Commitments and Contingencies

Operating Leases

In May 2018, we entered into a three year sub-lease agreement for an additional 18,000 square feet of office space. We also continue to lease our headquarters under a non-cancellable operating lease for which we early exercised our option to renew for an additional five-year period in fiscal 2015. Both leases expire in 2021.

At September 30, 2018, the future minimum annual obligations under non-cancellable operating lease commitments are as follows:

Years Ending December 31, (in thousands)	
2018	\$ 201
2019	938
2020	968
2021	726
2022	—
Thereafter	—
Total minimum payments required	\$ 2,833

Other Commitments and Contingencies

We have entered into agreements with certain vendors for the provision of goods and services, which includes manufacturing services with contract manufacturing organizations and development services with contract research organizations. These agreements may include certain provisions for purchase obligations and termination obligations that could require payments for the cancellation of committed purchase obligations or for early termination of the agreements. The amount of the cancellation or termination payments vary and are based on the timing of the cancellation or termination and the specific terms of the agreement.

We also have certain obligations under licensing agreements with third parties that are contingent upon achieving various development, regulatory and commercial milestones. Pursuant to these license agreements, we are required to make milestone payments if certain development, regulatory and commercial sales milestones are achieved. Also, pursuant to the terms of each of these license agreements, when and if commercial sales of a product commence, we will pay royalties to our licensors on net sales of the respective products.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q (Quarterly Report) contains forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended (Exchange Act), and section 27A of the Securities Act of 1933, as amended (Securities Act). The words “believe,” “may,” “will,” “potentially,” “estimate,” “continue,” “anticipate,” “intend,” “could,” “would,” “project,” “plan” and “expect,” and similar expressions that convey uncertainty of future events or outcomes are intended to identify forward-looking statements.

The forward-looking statements in this report include, among other things, statements about:

- the success, cost and timing of our product candidate development activities and ongoing and planned clinical trials;
- our plans to develop and commercialize antibodies, including our lead product candidates etokimab for patients with severe allergic and atopic diseases and ANB019 for patients with generalized pustular psoriasis, or GPP, and palmo-plantar pustular psoriasis, or PPP;
- the likelihood that the clinical data generated in any study we are performing or plan to perform in a non-US jurisdiction will be subsequently accepted by the U.S. Food and Drug Administration, or FDA and/or by foreign regulatory authorities outside of the jurisdiction where the study was being performed;
- the timing and ability of our collaborators to develop and commercialize our partnered product candidates;
- the potential benefits and advantages of our product candidates and approaches versus those of our competitors;
- our ability to execute on our strategy, including advancing our lead product candidates, identifying emerging opportunities in key therapeutic areas, continuing to expand our wholly-owned pipeline and retaining rights to strategic products in key commercial markets;
- our ability to obtain funding for our operations, including funding necessary to complete further development and commercialization of our product candidates;
- the timing of and our ability to obtain and maintain regulatory approvals for etokimab and ANB019 and our other product candidates;
- our ability to develop our product candidates;
- the rate and degree of market acceptance and clinical utility of any approved product candidates;
- the size and growth potential of the markets for any approved product candidates, and our ability to serve those markets;
- our commercialization, marketing and manufacturing capabilities and strategy;
- our expectations regarding our ability to obtain and maintain intellectual property protection for our product candidates;
- regulatory developments in the United States, the United Kingdom, Australia and other foreign countries;
- the success of competing therapies that are or may become available;
- our ability to attract and retain key scientific or management personnel;
- our use of the net proceeds from our public offerings;
- our ability to identify additional products or product candidates with significant commercial potential that are consistent with our commercial objectives; and
- our estimates regarding expenses, future revenue, capital requirements and needs for additional financing.

These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including those described in Part II, Item 1A, “Risk Factors,” and elsewhere in this Quarterly Report. Moreover, we operate in a competitive and rapidly changing environment, and new risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors,

may cause actual results to differ materially from those contained in any forward-looking statements we may make. In light of these risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this Quarterly Report may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements.

You should not rely upon forward-looking statements as predictions of future events. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee that the future results, levels of activity, performance or events and circumstances reflected in the forward-looking statements will be achieved or occur. We undertake no obligation to update publicly any forward-looking statements to conform these statements to actual results or to changes in our expectations, except as required by law.

You should read this Quarterly Report with the understanding that our actual future results, levels of activity, performance, and events and circumstances may be materially different from what we expect.

Unless the context indicates otherwise, as used in this Quarterly Report, the terms “AnaptysBio,” “company,” “we,” “us” and “our” refer to AnaptysBio, Inc., a Delaware corporation, and its subsidiaries taken as a whole, unless otherwise noted. AnaptysBio is our common law trademark. This Quarterly Report contains additional trade names, trademarks and service marks of other companies, which are the property of their respective owners. We do not intend our use or display of other companies’ trade names, trademarks or service marks to imply a relationship with, or endorsement or sponsorship of us by, these other companies.

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

You should read the following discussion and analysis of our financial condition and results of operations together with our unaudited consolidated financial statements and related notes for the nine months ended September 30, 2018, included in Part I, Item 1 of this report and with our audited consolidated financial statements and related notes thereto for the year ended December 31, 2017, included in the Company's Form 10-K, as amended. This discussion and other parts of this report contain forward-looking statements that involve risks and uncertainties, such as our plans, objectives, expectations, intentions and beliefs. Our actual results could differ materially from those discussed in these forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those identified below and those discussed in the section entitled "Risk Factors" included in Part II, Item 1A of this report.

Overview

We are a clinical stage biotechnology company developing first-in-class antibody product candidates focused on unmet medical needs in inflammation. We develop our product candidates to address emerging biological targets using our proprietary antibody discovery technology platform, which is based upon a breakthrough understanding of the natural process of antibody generation, known as somatic hypermutation, or SHM, and replicates this natural process of antibody generation *in vitro*. Our strategy is to advance the development and commercialization of our proprietary product candidates, and for certain programs, establish partnerships with leading biopharmaceutical companies where we retain certain development and commercialization rights in the United States.

Our most advanced wholly-owned antibody programs, etokimab and ANB019, neutralize therapeutic targets that are genetically associated with severe inflammatory disorders in humans. Etokimab is the nonproprietary name adopted by the United States Adopted Names Council, in consultation with the World Health Organization International Nonproprietary Names Expert Committee, for our anti-IL-33 antibody drug candidate previously referred to as ANB020. Etokimab inhibits the activity of the interleukin-33 cytokine, or IL-33, which we believe is broadly applicable to the treatment of atopic inflammatory disorders, such as moderate-to-severe atopic dermatitis, eosinophilic asthma, chronic rhinosinusitis with nasal polyps and potentially other allergic conditions. We have completed a Phase 1 trial of etokimab in healthy volunteers in Australia, the results of which were presented at the 2017 American Academy of Dermatology, or AAD, Annual Meeting and the American Academy of Allergy, Asthma and Immunology, or AAAAI, 2017 Annual Meeting in March 2017. We believe the results of this Phase 1 trial demonstrate a favorable safety profile of etokimab, which was well-tolerated and for which no dose-limiting toxicities were observed, and favorable pharmacodynamic properties of etokimab, where a single dose was sufficient to suppress IL-33 function for approximately three months post-dosing as measured by an *ex vivo* pharmacodynamic assay.

We have subsequently completed a Phase 2a proof-of-concept trial of etokimab in 12 moderate-to-severe adult atopic dermatitis patients, under an approved Clinical Trial Authorisation, or CTA, with the U.K. Medicines and Healthcare Products Regulatory Agency, or MHRA, announced top-line data from an interim analysis of this trial in October 2017 and presented data upon completion of this trial at the 2018 AAD Annual Meeting in February 2018 and the 2018 European Academy of Allergy and Clinical Immunology, or EAACI, Congress in May 2018.

This Phase 2a trial enrolled 12 moderate-to-severe adult atopic dermatitis patients, who were initially administered a single intravenous dose of placebo within 14 days of enrollment, followed by a single intravenous 300mg dose of etokimab one week subsequent to placebo. Prior to enrollment in the study, patients were not permitted any systemic or topical medications during a wash-out period. Patients were permitted to take a monitored amount of topical corticosteroids as rescue therapy during the course of the study. Clinical response was assessed by a number of endpoints, including the improvement of each patient's Eczema Area Severity Index, or EASI, score, a tool used to measure the extent and severity of atopic dermatitis, at key time points following etokimab administration relative to their enrollment baseline. Additional efficacy endpoints measured during the trial included the 5-dimensional pruritus, or 5-D pruritus, scale which measures itchiness, the 5-point Investigator's Global Assessment, or IGA, scale, Dermatology Life Quality Index, or DLQI, and the SCORing Atopic Dermatitis, or SCORAD, scale. The average baseline EASI score at enrollment amongst all 12 patients was 32. All 12 patients were inadequately controlled by topical corticosteroids and seven of these 12 patients were treated with systemic non-biologic anti-inflammatory therapy prior to the screening washout period of this trial, and exhibited an average EASI baseline score of 36 upon enrollment, while the remaining five of 12 enrolled patients did not require systemic immuno-modulators pre-study and exhibited an average EASI baseline score of 27. Biomarkers included blood eosinophil levels, an *ex vivo* pharmacodynamic assay measuring IL-33 mediated interferon-gamma release, granulocyte infiltration and cytokine levels in localized skin lesions measured five days after placebo administration and five days after etokimab administration.

We believe the data from this trial demonstrate proof-of-concept for etokimab in moderate-to-severe adult atopic dermatitis and suggest that etokimab may provide meaningful differentiation in terms of patient convenience. Based on our analysis of publicly available data sources and interviews with physicians and key opinion leaders in the field, atopic dermatitis

affects approximately 1.4 million adults in the United States, and we estimate that 280,000 of these patients have moderate-to-severe atopic dermatitis.

As further development in atopic dermatitis, we are enrolling a Phase 2b randomized, double-blinded, placebo-controlled, multi-dose study in 300 adults patients with moderate-to-severe atopic dermatitis, also referred to as the ATLAS trial, to assess different dose levels and dosing frequencies of subcutaneously-administered etokimab for a 16-week treatment period followed by an eight-week monitoring period, with top-line data expected in the second half of 2019. Sixty patients are being randomized into each of five arms in the ATLAS trial where dosing will occur as follows: (i) initial 600mg loading dose followed by 300mg monthly doses of etokimab, (ii) initial 300mg loading dose followed by 150mg monthly doses of etokimab, (iii) initial 300mg loading dose followed by 150mg doses of etokimab every eight weeks, (iv) monthly 20mg doses of etokimab and (v) monthly doses of placebo.

We are conducting, under a CTA with the MHRA in the United Kingdom and under an Investigational New Drug Application, or IND, with the U.S. Food and Drug Administration, or FDA, a randomized, placebo-controlled Phase 2a trial of etokimab in 25 severe adult eosinophilic asthma patients who were randomized between a single 300mg intravenous dose of etokimab or placebo upon enrollment (Day 1) at six sites located in the United States and the United Kingdom. Upon screening, which occurred 7 to 14 days prior to enrollment, patients were required to have a blood eosinophil count of at least 300 per microliter, confirmed clinical diagnosis of severe asthma according to the Global Initiative for Asthma, or GINA, 2016, pre-bronchodilator Forced Expiratory Volume in One Second, or FEV₁, of less than 80% of predicted and at least one asthma exacerbation within the past 12 months requiring use of rescue medication. Patients were required to be stably maintained on high-dose inhaled corticosteroids, or ICS, and long-acting beta-2-agonists, or LABA, for at least three months prior to screening and were required to continue ICS/LABA therapy during the course of this trial. Baseline clinical assessments were conducted for each patient on Day 1 prior to etokimab or placebo dose, and patients completed follow-up clinical assessments on Days 2, 8, 22, 36 and 64 as of an interim analysis. The last monitoring visit for each patient will occur on Day 127 post-dose. Baseline parameters of etokimab-dosed patients (n=12) were 545 blood eosinophils per microliter, 2.5 liters FEV₁ and 65% predicted FEV₁, while placebo-dosed patients (n=13) had 705 blood eosinophils per microliter, 2.5 liters FEV₁ and 66% predicted FEV₁. Nine of 12 (75%) etokimab-dosed patients were male with an average age of 41, while nine of 13 (69%) placebo-dosed patients were male with an average age of 36.

We announced top-line data from this Phase 2a trial in September 2018, which we believe demonstrated proof-of-concept for etokimab in severe adult eosinophilic asthma patients with rapid and sustained FEV₁ improvement. Etokimab-dosed patients rapidly improved lung function by Day 2, where FEV₁ increased by 8% over placebo. FEV₁ increase was sustained at Day 64, where etokimab-dosed patients demonstrated 11% increase over placebo. Blood eosinophil reduction, which is a biomarker illustrative of etokimab's mechanistic breadth, was observed at 31% over placebo at Day 2 and sustained to 46% over placebo at Day 64. This reduction correlated with FEV₁ improvement and was consistent with the blood eosinophil effects observed in a prior single dose etokimab trial in moderate-to-severe atopic dermatitis patients. Etokimab was generally well-tolerated by all patients and no serious adverse events have been reported to date. No treatment-emergent adverse events were deemed to be etokimab-related, and the most frequent treatment-emergent adverse events reported were single occurrences of moderate strep throat in two etokimab-dosed patients and single occurrences of mild vomiting in two placebo-dosed patients. No exacerbations or rescue therapy usage has been reported as of the interim analysis. This Phase 2a trial is currently ongoing and the company plans to report full data from this trial at a medical conference in 2019 following trial completion. In addition, we plan to continue development of etokimab in eosinophilic asthma with a multi-dose Phase 2b randomized, double-blinded, placebo-controlled trial, which is expected to be initiated in 2019. We estimate that approximately 1.1 million adults in the United States are diagnosed with severe asthma that is uncontrolled through standard-of-care, and 50% of these patients have eosinophilic asthma.

We have cleared an IND to the FDA and have initiated a randomized, placebo-controlled Phase 2 trial of etokimab in approximately 100 adult patients with chronic rhinosinusitis with nasal polyps, or CRSwNP, which is a debilitating atopic disorder associated with elevated IL-33 pathway signaling. Patients in this trial, also known as the ECLIPSE trial, will be randomized between three subcutaneous dosing cohorts, each in combination with mometasone furoate nasal spray as background therapy, as follows: (i) initial 300mg loading dose followed by 150mg monthly doses of etokimab, (ii) initial 300mg loading dose followed by 150mg doses of etokimab every eight weeks, and (iii) monthly doses of placebo. Efficacy will be assessed at week 16 post-dosing, with an eight week monitoring period, using the bilateral endoscope Nasal Polyp Score and Sino-Nasal Outcome Test and we anticipate top-line data from this trial to be available in the second half of 2019. Based on publicly available data sources, CRSwNP affects approximately 1.3 million adults in the United States and we estimate that 400,000 of these patients are inadequately controlled with standard-of-care.

As a result of market assessment regarding the adoption of the peanut oral food challenge in future commercial usage of etokimab in peanut allergy patients, we have decided to deprioritize further company-sponsored clinical development of etokimab in moderate-to-severe baseline adult peanut allergy patients. We therefore do not intend to utilize our capital or

clinical development resources to pursue a Phase 2b clinical trial of etokimab in peanut allergy, however we may pursue potential investigator-sponsored trials related to this indication.




ANB019 inhibits the interleukin-36 receptor, or IL-36R, for the treatment of rare inflammatory diseases including generalized pustular psoriasis, or GPP, and palmoplantar pustulosis, or PPP, previously referred to as palmo-plantar pustular psoriasis. We have completed, under an approved Clinical Trial Notification, or CTN, a Phase 1 clinical trial in healthy volunteers for which we announced positive top-line results from an interim analysis of this trial and subsequently presented completed data from this trial at the 2018 EAACI Congress. In the double-blinded, placebo-controlled healthy volunteer Phase 1 trial, 36 subjects were administered a single subcutaneous or intravenous dose of ANB019 ranging between 10 mg and 750 mg, 18 subjects were administered multiple ascending doses of ANB019 intravenously ranging between 40 mg and 300 mg weekly for four consecutive weeks and 18 subjects were dosed with placebo. ANB019 was well-tolerated by all subjects and no dose-limiting toxicities were observed. The most frequent treatment-emergent adverse events observed in the single ascending dose cohorts were upper respiratory tract infections in 10 of 36 (28%) subjects dosed with ANB019 versus six of 12 (50%) subjects dosed with placebo, and headache in 10 of 36 (28%) subjects dosed with ANB019 versus three of 12 (25%) subjects dosed with placebo. In the multiple ascending dose cohorts, the most frequent treatment-emerging adverse events observed were headache in seven of 18 (39%) subjects dosed with ANB019 versus one of six (17%) subjects dosed with placebo. No serious adverse events were reported among any subjects in the trial. The *in vivo* half-life of ANB019 was approximately 28 days for both subcutaneous and intravenous routes of administration, with bioavailability of approximately 90 percent. A single dose of ANB019 at certain dose levels was able to completely suppress IL-36 cytokine function for 85 days, as measured by IL-36 cytokine-mediated release of IL-8 using an *ex vivo* pharmacodynamic assay. The favorable pharmacokinetics and pharmacodynamic properties of ANB019 and other results demonstrated by this Phase 1 trial support advancement of ANB019 into Phase 2 studies for GPP and PPP.

We have received clearance of a CTA filing to the MHRA and an IND filing with the FDA, and have initiated a 10-patient open-label, multi-dose, single-arm Phase 2 trial of ANB019 in GPP patients, also referred to as the GALLOP trial, where top-line data are anticipated in mid 2019. All patients in the GALLOP study are dosed with a 750mg intravenous loading dose of ANB019 upon enrollment, followed by 100mg subcutaneously-administered monthly doses of ANB019 for a treatment period of up to 16 weeks post enrollment and then monitored for a total of 8 weeks. We have cleared an IND with the FDA and have initiated, in the United States, a randomized, double-blind, placebo-controlled approximately 50-patient multi-dose trial of ANB019 in PPP, also referred to as the POPLAR trial, where patients are randomized between two subcutaneous dosing cohorts, as follows: (i) an initial loading dose of 200mg followed by 100mg monthly doses of ANB019 and (ii) monthly doses of placebo, for a treatment period of 16 weeks post enrollment, with a subsequent monitoring period of 8 weeks. We intend to submit a CTA filing to the MHRA to permit expansion of the POPLAR trial in the United Kingdom. We anticipate top-line data from the POPLAR trial in the second half of 2019.

In addition to etokimab and ANB019, our wholly-owned pipeline includes novel anti-inflammatory checkpoint receptor modulator antibodies that we believe is applicable for treatment of certain autoimmune diseases where immune checkpoint receptors are insufficiently activated, and have demonstrated efficacy in an animal model of graft-versus-host disease, where we anticipate an IND for the first such antibody in the second half of 2019.

In addition to our wholly-owned antibody programs, multiple AnaptysBio-developed antibody programs have been advanced to preclinical and clinical milestones under our collaborations. Our collaborations include an immuno-oncology-focused collaboration with TESARO, Inc. and TESARO Development, Ltd., or collectively, TESARO and an inflammation-focused collaboration with Celgene Corporation, or Celgene, as discussed in Part I—Note 4 above.

The following table summarizes certain key information about our wholly-owned and partnered product candidates:

Program	Therapeutic Indication	Development Stage & Anticipated Milestones					Commercial Rights
		Discovery	Preclinical	Phase 1	Phase 2	Phase 3	
Etokimab (ANB020): Anti-IL-33	Atopic Dermatitis				Phase 2a Data Presented at AAD and EAACI 2018	ATLAS: Phase 2b Top-Line Data H2 2019	
	Eosinophilic Asthma				Phase 2a Top-Line Data Sep 2018	Phase 2b To Be Initiated in 2019	
	Chronic Rhinosinusitis With Nasal Polyps				ECLIPSE: Phase 2 Top-Line Data H2 2019		
ANB019: Anti-IL-36R	Generalized Pustular Psoriasis				Phase 1 Data Presented at EAACI 2018	GALLOP: Phase 2 Top-Line Data Q2 2019	
	Palmoplantar Pustulosis				POPLAR: Phase 2 Top-Line Data H2 2019		
Anti-Inflammatory Checkpoint Modulator	Inflammation		IND Filing H2 2019				
TSR-042: Anti-PD-1	Immuno-Oncology				Registration Trial Ongoing		
TSR-022: Anti-TIM-3	Immuno-Oncology				TSR-042 Combination Trial Ongoing		
TSR-033: Anti-LAG-3	Immuno-Oncology				TSR-042 Combination Trial Ongoing		
TSR-075: Anti-PD-1/ LAG-3 Bispecific	Immuno-Oncology		IND-Enabling Studies Ongoing				
CC-90006: Anti-PD-1 Agonist	Psoriasis				Ongoing		
Undisclosed	Inflammation		Ongoing				

Components of Operating Results

Collaboration Revenue

We have not generated any revenue from product sales. Our revenue has been derived from amortization of upfront payments, research and development funding and milestone payments under collaboration and license agreements with our collaborators. From inception through September 30, 2018, we have received \$76.6 million in cash in non-dilutive funding from our collaborators.

Research and Development Expense

Research and development expenses consist of costs associated with our research and development activities, including drug discovery efforts, preclinical and clinical development of our programs, and manufacturing. Our research and development expenses include:

- External research and development expenses incurred under arrangements with third-parties, such as Contract Research Organizations, or CROs, consultants, members of our scientific and therapeutic advisory boards, and Contract Manufacturing Organizations, or CMOs;
- Employee-related expenses, including salaries, benefits, travel and stock-based compensation;
- Facilities, depreciation and other allocated expenses, which include direct and allocated expenses for rent and maintenance of facilities, depreciation of leasehold improvements and equipment, and laboratory supplies; and
- License and sub-license fees.

We expense research and development costs as incurred. We account for nonrefundable advance payments for goods and services that will be used in future research and development activities as expense when the service has been performed or when the goods have been received.

We recognize the Australian Research and Development Tax Incentive, or the Tax Incentive, as a reduction of research and development expense. The amounts are determined on a cost reimbursement basis based on our eligible research and development expenditures and are non-refundable, provided that in order to qualify for the Australian benefits we must have

revenue of less than AUD \$20.0 million during the reimbursable period and cannot be controlled by income tax exempt entities. The Tax Incentive is recognized when there is reasonable assurance that the Tax Incentive will be received, the relevant expenditure has been incurred, and the amount can be reliably measured.

We are conducting research and development activities primarily on inflammation programs. We have a research and development team that conducts antibody discovery, characterization, translational studies, IND-enabling preclinical studies and clinical development. We conduct some of our early research and preclinical activities internally and plan to rely on third parties, such as CROs and CMOs, for the execution of certain of our research and development activities, such as *in vivo* toxicology and pharmacology studies, drug product manufacturing and clinical trials.

We have completed Phase 1 trials for etokimab and ANB019 and have ongoing Phase 2a and 2b clinical trials as well. We expect our research and development expenses to be higher for the foreseeable future as we continue to advance our product candidates.

General and Administrative Expense

General and administrative expenses consist primarily of salaries and related benefits, including stock-based compensation, for our executive, finance, legal, business development, human resource and support functions. Other general and administrative expenses include allocated facility-related costs not otherwise included in research and development expenses, travel expenses and professional fees for auditing, tax and legal services.

Interest Expense

Interest expense consists of floating interest payments and amortization of discounts on our outstanding notes payable relating to our Loan and Security Agreement with Oxford Finance LLC and Silicon Valley Bank, as amended, which we refer to as the Loan Agreement.

Change in Fair Value of Liability for Preferred Stock Warrants

Income and expense from the change in fair value of our liability for preferred stock warrants results from the valuation of our outstanding warrants to purchase shares of our preferred stock, which are valued at each period end. Upon the closing of our initial public offering on January 31, 2017, the warrants to purchase shares of preferred stock converted into warrants to purchase shares of common stock, the preferred stock warrant liabilities have been reclassified to additional paid-in capital and periodic fair value adjustments are no longer required.

Interest Income

Interest income consists primarily of interest earned on our short-term and long-term investments, and is recognized when earned.

Critical Accounting Policies and Use of Estimates

Our management's discussion and analysis of our financial condition and results of operations are based on our financial statements, which have been prepared in accordance with U.S. generally accepted accounting principles, or U.S. GAAP. The preparation of these financial statements requires us to make judgments and estimates that affect the reported amounts of assets, liabilities, revenues, and expenses and the disclosure of contingent assets and liabilities in our financial statements. We base our estimates on historical experience, known trends and events, and various other factors that are believed to be reasonable under the circumstances. Actual results may differ from these estimates under different assumptions or conditions. On an ongoing basis, we evaluate our judgments and estimates in light of changes in circumstances, facts and experience. We believe there have been no significant changes in our critical accounting policies as discussed in our Annual Report on Form 10-K filed with the SEC on March 5, 2018, as amended on September 14, 2018, other than to revenue recognition upon adoption of ASC Topic 606, as discussed below.

Revenue Recognition

Revenue is recognized in accordance with revenue recognition accounting guidance, which utilizes five basic steps to determine whether revenue can be recognized and to what extent: (i) identify contract with customer; (ii) identify the performance obligation; (iii) determine the transaction price; (iv) allocate the transaction price; and (v) determine the recognition period.

Performance Obligations. We evaluate deliverables on a contract by contract basis to determine whether each deliverable represents a good or service that is distinct or has the same pattern of transfer as other deliverables. A deliverable is considered distinct if the customer can benefit from the good or service independently of other goods/services either in the contract or that can be obtained elsewhere, without regard to contract exclusivity, and the entity's promise to transfer the good or service to the customer is separately identifiable from other promises in the contract. If the deliverable is not considered distinct, we combine such deliverables and account for them as a single performance obligation. We allocate the consideration to each deliverable at the inception of the arrangement based on the transaction price.

Our performance obligations may include the following:

- **License Arrangements.** The performance obligations under our collaboration and license agreements generally include exclusive or nonexclusive licenses to one or more products generated using our technologies. Licenses for multiple antibodies within a single contract are generally combined as they have substantially the same pattern of transfer to the customer. Historically, our licenses have held no value to the customer, as the antibodies were in the discovery phase and required our expertise for further development. Accordingly, licenses are not considered distinct.
- **Research and Development Services.** The performance obligations under our collaboration and license agreements generally include research and development services we perform on behalf of or with our collaborators. As discussed within license arrangements above, our licenses have historically held no value without the research and development services we provide. As we generally only provide research and development services for internally generated antibodies that require a license to be utilized by a third party, our research and development services are not considered distinct.
- **Steering Committee Meetings.** The performance obligations under our collaboration and license agreements may also include our participation in a steering committees, which allows us to direct the progression of our discovery programs. As these steering committees would not occur or benefit the customer without the use of our licenses, these are not considered distinct.

We recognize consideration allocated to a performance obligation as the performance obligation is satisfied, and the determination as to whether consideration is recognized over time or at a point in time is made upon contract inception. For our collaboration agreements, this is generally over the period in which research and development services have been performed.

Transaction Price. Our collaboration and license agreements generally include both fixed and variable consideration. Fixed payments, such as those for upfront fees are included in the transaction price at contract value, while variable consideration such as reimbursement for research and development services, milestone and royalty payments are estimated and then evaluated for constraints upon inception of the contract and evaluated on a quarterly basis thereafter. Research and development services are updated for actual invoices. Given the nature of our agreements, milestones are estimated using the most likely amount and are evaluated on a quarterly basis. Upon commercialization, royalty payments are recognized in the period incurred.

Results of Operations - Comparison of the Three and Nine Months Ended September 30, 2018 and 2017

Collaboration Revenue

We recognized \$5.0 million of collaboration revenue for the three and nine months ended September 30, 2018 related to one TESARO milestone compared to no revenue and \$7.0 million for two TESARO milestones recognized for the three and nine months ended September 30, 2017, respectively. We expect that any collaboration revenue we generate will continue to fluctuate from period to period as a result of the timing and amount of milestones from our existing collaborations.

Research and Development Expenses

We do not track fully burdened research and development costs separately for each of our drug candidates. We review our research and development expenses by focusing on external development and internal development costs. External development expenses consist of costs associated with our external preclinical and clinical trials, including pharmaceutical development and manufacturing. Included in preclinical and other unallocated costs are external corporate overhead costs that are not specific to any one program. Internal costs consist of salaries and wages, share-based compensation and benefits, which are not tracked by product candidate as several of our departments support multiple product candidate research and development programs. The following table summarizes the external costs attributable to each program and internal costs (in thousands):

	Three Months Ended September 30,			Nine Months Ended September 30,		
	2018	2017	Increase	2018	2017	Increase
External Costs						
Etokimab	\$ 7,038	\$ 2,547	\$ 4,491	\$ 13,857	\$ 8,459	\$ 5,398
ANB019	4,295	573	3,722	10,077	2,481	7,596
Preclinical and other unallocated costs	2,904	1,422	1,482	6,123	4,175	1,948
Total External Costs	\$ 14,237	\$ 4,542	\$ 9,695	\$ 30,057	\$ 15,115	\$ 14,942
Internal Costs	3,646	2,155	1,491	10,219	6,722	3,497
Total Costs	\$ 17,883	\$ 6,697	\$ 11,186	\$ 40,276	\$ 21,837	\$ 18,439

Research and development expenses were \$17.9 million during the three months ended September 30, 2018 compared to \$6.7 million during the three months ended September 30, 2017 for an increase of \$11.2 million, primarily due to a \$6.2 million increase in manufacturing expenses, a \$1.5 million increase in clinical expenses primarily related to the initiation of our ATLAS trial, a \$1.5 million increase in personnel costs including stock compensation expense and a \$1.2 million increase in pre-clinical expenses.

Research and development expenses were \$40.3 million during the nine months ended September 30, 2018 compared to \$21.8 million during the nine months ended September 30, 2017 for an increase of approximately \$18.5 million, primarily due to a \$5.9 million increase in manufacturing expenses, a \$4.3 million increase in clinical expenses related to the initiation of our ATLAS trial and our Phase 2a for moderate-to-severe adult atopic dermatitis, a \$3.5 million increase in personnel costs including stock compensation expense, a \$2.9 million increase in outside services for preclinical expenses, and a \$1.3 million decrease in Australian tax incentives recognized.

We expect our research and development expenses to increase substantially for the foreseeable future as we continue to invest in research and development activities related to developing our product candidates, including investments in manufacturing, as our programs advance into later stages of development and as we conduct additional clinical trials.

General and Administrative Expenses

General and administrative expenses were \$4.0 million during the three months ended September 30, 2018 compared to \$2.4 million during the three months ended September 30, 2017 for an increase of \$1.6 million, primarily due to a \$1.4 million increase in personnel costs including stock compensation expense.

General and administrative expenses were \$11.8 million during the nine months ended September 30, 2018 compared to \$6.8 million during the nine months ended September 30, 2017 for an increase of \$5.0 million, primarily due to a \$3.3 million increase in personnel costs including stock compensation expense and a \$0.6 million increase in consulting expenses.

We expect that our general and administrative expenses will increase for the foreseeable future as we incur additional costs associated with being a publicly traded company, including legal, auditing and filing fees, additional insurance premiums, investor relations expenses and general compliance and consulting expenses. We also expect our intellectual property related legal expenses, including those related to preparing, filing, prosecuting and maintaining patent applications, to increase as our intellectual property portfolio expands.

Interest Expense

Interest expense was \$0.4 million and \$1.3 million during the three and nine months ended September 30, 2018, respectively, and represents effective interest of approximately 13.08% on an outstanding principal balance of \$10.0 million. Interest expense was \$0.5 million and \$1.3 million during the three and nine months ended September 30, 2017, respectively, and represented effective interest of 12.08% through September 30, 2017 on an outstanding principal balance of \$15.0 million.

Change in Fair Value of Liabilities for Preferred Stock Warrants

As discussed in Item 1 — Note 1 above, all of the outstanding warrants to purchase shares of preferred stock automatically converted into warrants to purchase shares of common stock upon our IPO and were accounted for as equity from the conversion date forward.

Interest Income

Interest income was \$1.4 million and \$0.4 million during the three months ended September 30, 2018 and 2017, and \$3.9 million and \$0.8 million during the nine months ended September 30, 2018 and 2017, respectively, which primarily related to our short-term and long-term investments, the balance of which increased as a result of the investment of proceeds from our follow-on offering in October 2017.

Other Income (Expense), Net

Other income (expense), net was less than \$0.1 million during the three months ended September 30, 2018 and 2017, respectively and primarily related to foreign exchange transactions through our Australian subsidiary.

Other income (expense), net was a loss of \$0.2 million and a gain of \$0.3 million during the nine months ended September 30, 2018 and 2017, respectively and primarily related to foreign exchange transactions through our Australian subsidiary.

Liquidity and Capital Resources

From our inception through September 30, 2018, we have received an aggregate of \$712.1 million to fund our operations which included \$616.4 million from the sale of equity securities, \$76.6 million from our collaboration agreements and \$19.1 million from venture debt. As of September 30, 2018, we had \$512.4 million in cash, cash equivalents and investments.

In addition to our existing cash, cash equivalents and investments, we are eligible to earn milestone and other contingent payments for the achievement of defined collaboration objectives and certain nonclinical, clinical, regulatory and sales-based events, and royalty payments under our collaboration agreements. Our ability to earn these milestone and contingent payments and the timing of achieving these milestones is primarily dependent upon the outcome of our collaborators' research and development activities and is uncertain at this time. Our rights to payments under our collaboration agreements are our only committed external source of funds.

On September 28, 2018, we completed an underwritten public offering of 2,530,000 shares of common stock, which included the exercise of the underwriters' option to purchase an additional 330,000 shares of common stock. All shares were offered by us at a price to the public of \$94.46 per share. The aggregate net proceeds received by us from the offering were \$227.5 million, net of underwriting discounts and commissions.

We may seek to obtain additional financing in the future through equity or debt financings or through collaborations or partnerships with other companies. If we are unable to obtain additional financing on commercially reasonable terms, our business, financial condition and results of operations will be materially adversely affected.

Under our original Loan Agreement, we could borrow up to \$15.0 million in three separate draws of \$5.0 million each. In January 2016, we amended the Loan Agreement to combine Term B Loans and Term C Loans for a total of \$10.0 million available for draw and delay the principal repayments for our Term A Loans from February 1, 2016 until February 1, 2017.

In December 2016, we further amended the Loan Agreement to (i) allow for the Term B Loans and Term C Loans to be drawn on December 30, 2016, (ii) delay principal repayments of all Term Loans until February 1, 2018 and (iii) amend the interest rate for each Term Loan. The Term B Loans and the Term C Loans were drawn on December 30, 2016; principal repayments began in February 2018. As of September 30, 2018, there are 16 equal monthly principal and interest payments remaining on the Term Loans, with final maturity in January 2020. The Term Loans bear interest equal to the greater of 3-month U.S. LIBOR plus 6.37% or 7.3%. The interest rate was 8.69% as of September 30, 2018.

Funding Requirements

Our primary uses of capital are, and we expect will continue to be, third-party clinical and preclinical research and development services, including manufacturing, laboratory and related supplies, compensation and related expenses, legal, patent and other regulatory expenses and general overhead costs. We have entered into agreements with certain vendors for the provision of services, including services related to commercial manufacturing, that we are unable to terminate for convenience. Under such agreements, we are contractually obligated to make certain minimum payments to the vendors, with the amounts to be based on the timing of the termination and the specific terms of the agreement.

As a publicly traded company, we incur significant legal, accounting and other expenses that were not required as a private company. In addition, the Sarbanes-Oxley Act of 2002, as well as rules adopted by the SEC and The Nasdaq Global Stock Market, requires public companies to implement specified corporate governance practices that were inapplicable to us as

a private company. These rules and regulations have increased our legal and financial compliance costs, have made and will continue to make certain activities more time-consuming and costly.

Cash, cash equivalents and investments totaled \$512.4 million as of September 30, 2018, compared to \$324.3 million as of December 31, 2017. We believe that our existing cash, cash equivalents and investments will fund our current operating plan at least through the end of 2020. We have based this estimate on assumptions that may prove to be wrong, and we could use our capital resources sooner than we expect. Additionally, the process of testing drug candidates in clinical trials is costly, and the timing of progress and expenses in these trials is uncertain.

Cash Flows

The following table summarizes our cash flows for the nine months ended September 30, 2018 and 2017:

(in thousands)	Nine Months Ended September 30,		
	2018	2017	Change
Net cash (used in) provided by:			
Operating activities	\$ (36,216)	\$ (14,628)	\$ 21,588
Investing activities	23,699	(90,001)	(113,700)
Financing activities	224,736	80,066	(144,670)
Net increase (decrease) in cash, cash equivalents and restricted cash	\$ 212,219	\$ (24,563)	\$ (236,782)

Operating Activities

Net cash used in operating activities during the nine months ended September 30, 2018 of \$36.2 million was primarily due to our net loss of \$44.7 million, adjusted for addbacks for non-cash expenses of \$7.5 million which includes stock-based compensation and net increases in working capital of \$1.0 million. Net cash used in operating activities during the nine months ended September 30, 2017 of \$14.6 million was primarily due to our net loss of \$23.2 million, adjusted for non-cash expenses of \$5.2 million which includes stock-based compensation and warrant liability fair value adjustments and decreases in working capital of \$3.4 million.

Investing Activities

Net cash provided by investing activities during the nine months ended September 30, 2018 primarily relates to the maturities of our investments, which was used to acquired additional debt securities and fund our operating expenses, while the cash used in investing activities during the nine months ended September 30, 2017 was primarily due to the acquisition of investments with the proceeds from our IPO.

Financing Activities

The net cash provided by financing activities during the nine months ended September 30, 2018 of \$224.7 million was primarily related to net proceeds of \$227.5 million from our follow-on offering in September 2018 and proceeds of \$2.1 million from the issuance of common stock upon the exercise of stock options, offset by principal payments of \$5.0 million made on our Term Loans. Net cash provided by financing activities during the nine months ended September 30, 2017 of \$80.1 million was primarily related to net proceeds of \$80.2 million from our IPO as well as proceeds of \$1.4 million from the issuance of common stock as a result of option and warrant exercises, offset by \$1.5 million in payments for offering costs.

Contractual Obligations

Operating Leases

In May 2018, we entered into a three year sub-lease agreement for an additional 18,000 square feet of office space. We also lease our headquarters under a non-cancellable operating lease for which we exercised our option to renew for an additional five-year period in fiscal 2015. Both leases expire in 2021.

At September 30, 2018, the future minimum annual obligations under non-cancellable operating lease commitments are \$0.2 million, \$0.9 million, \$1.0 million, and \$0.7 million for the remainder of fiscal years ending 2018, 2019, 2020, and 2021, respectively.

Other Commitments and Contingencies

We have entered into agreements with certain vendors for the provision of goods and services, which includes manufacturing services with contract manufacturing organizations and development services with contract research organizations. These agreements may include certain provisions for purchase obligations and termination obligations that could require payments for the cancellation of committed purchase obligations or for early termination of the agreements. The amount of the cancellation or termination payments vary and are based on the timing of the cancellation or termination and the specific terms of the agreement.

We also have certain obligations under licensing agreements with third parties that are contingent upon achieving various development, regulatory and commercial milestones. Pursuant to these license agreements, we are required to make milestone payments if certain development, regulatory and commercial sales milestones are achieved. Also, pursuant to the terms of each of these license agreements, when and if commercial sales of a product commence, we will pay royalties to our licensors on net sales of the respective products.

Off-Balance Sheet Arrangements

We did not have during the periods presented, and we do not currently have, any off-balance sheet arrangements, as defined in the rules and regulations of the SEC.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

As of September 30, 2018, there have been no material changes surrounding our market risk, including interest rate risk or inflation risk, from the discussion provided in Item 7A. Quantitative and Qualitative Disclosures About Market Risk of our Fiscal 2017 Form 10-K, as amended on September 14, 2018, other than those discussed below.

Foreign Currency Exchange Risk

We conduct a portion of our business with CROs in currencies other than our U.S. dollar functional currency. These transactions give rise to monetary assets and liabilities that are denominated in currencies other than the U.S. dollar. The value of these monetary assets and liabilities are subject to changes in currency exchange rates from the time the transactions are originated until settlement in cash. Our foreign currency exposures are primarily concentrated in the euro, British pound, Australian dollar, and Canadian dollar. Both realized and unrealized gains or losses on the value of these monetary assets and liabilities are included in the determination of net income. We do not hedge our foreign currency exchange rate risk, however, we may do so in the future. As of September 30, 2018, we had less than \$0.3 million of accounts payable and receivables denominated in foreign currencies, and a hypothetical 10% change in foreign currency exchange rates applicable to our business would not have had a material impact on our unaudited consolidated financial statements.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Our disclosure controls and procedures are designed to ensure that information required to be disclosed in the reports we file or submit under the Securities Exchange Act of 1934, as amended, or the “Exchange Act”, is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission’s rules and forms, and that such information is accumulated and communicated to our management, including the Chief Executive Officer and the Chief Financial Officer, to allow timely decisions regarding required disclosures. As of September 30, 2018, our management, with the participation of our Chief Executive Officer and Chief Financial Officer, performed an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e) of the Exchange Act. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that the design and operation of our disclosure controls and procedures were effective at a reasonable assurance level.

Any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objective and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting identified in connection with the evaluation required by Rule 13a-15(f) and 15d-15(f) of the Exchange Act that occurred during the quarter ended September 30, 2018 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

From time to time, we may be involved in legal proceedings arising in the ordinary course of our business. We are not presently a party to any legal proceedings that, in the opinion of management, would have a material adverse effect on our business. Regardless of outcome, litigation can have an adverse impact on us due to defense and settlement costs, diversion of management resources, negative publicity and reputational harm, and other factors.

ITEM 1A. RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider the risks described below, as well as the other information in this report, including our condensed consolidated financial statements and the related notes and "Management's Discussion and Analysis of Financial Condition and Results of Operations," before deciding whether to invest in our common stock. The occurrence of any of the events or developments described below could harm our business, financial condition, results of operations and growth prospects. In such an event, the market price of our common stock could decline, and you may lose all or part of your investment.

Risks Related to Discovery and Development of Our Product Candidates

Our product candidates are in early stages of development and may fail in development or suffer delays that adversely affect their commercial viability. If we or our collaborators are unable to complete development of or commercialize our product candidates or experience significant delays in doing so, our business will be materially harmed.

We are using our proprietary technology platform to develop therapeutic antibodies, including our wholly-owned product candidates, as well as other programs that are being developed by our collaborators. However, all of our wholly-owned and partnered product candidates are in the early stages of development, and, for a wide variety of reasons discussed below, may fail in development or suffer delays that adversely affect their commercial viability.

A product candidate can unexpectedly fail at any stage of preclinical and clinical development. The historical failure rate for product candidates is high due to scientific feasibility, safety, efficacy, changing standards of medical care and other variables. The results from preclinical testing or early clinical trials of a product candidate may not predict the results that will be obtained in later phase clinical trials of the product candidate. For example, results from our initial Phase 2a clinical trials of etokimab may not be representative of the results we will experience in later Phase 2b and registration trials. If our later clinical trials are unsuccessful, etokimab may be delayed in development or fail entirely, which would have a material adverse impact on our business.

We have elected to structure our initial Phase 2a clinical trials in etokimab as investigational studies that enroll a relatively limited number of patients and are intended to allow us to better assess patient responses and potential efficacy results before designing and commencing Phase 2b clinical trials. We believe the results we have observed in the initial Phase 2a clinical trials of etokimab in atopic dermatitis and severe adult eosinophilic asthma suggest a reasonable basis for continuing development of etokimab in these indications through larger Phase 2b clinical trials. However, our Phase 2a trials involve relatively small patient populations, for example 12 patients in our Phase 2a trial in atopic dermatitis and 25 patients in our Phase 2a trial in severe adult eosinophilic asthma. These small numbers may result in variability in our data. The results we have observed in these smaller patient populations may not be predictive of results we will experience in later studies.

In addition, later studies may also include different design elements that could contribute to us experiencing different results than we have observed in our Phase 2a trials. In addition, the initial results we have reported from our completed Phase 2a clinical trials have included interim analyses and top-line results, which may not accurately predict the final results of the clinical trial or the results of future clinical trials. For instance, while we expect FEV1 to be an important endpoint in our later studies, our data from our Phase 2a study of severe adult eosinophilic asthma are from a single dose of drug evaluated only at timepoints through Day 64 and not at the planned Day 127 timepoint.

If our later clinical trials of etokimab are unsuccessful, whether for one of the reasons mentioned above or otherwise, etokimab may be delayed in development or fail entirely, which would have a material adverse impact on our business.

The success of our current product candidates, and any other product candidates we may develop in the future, will depend on many factors, including the following:

- obtaining regulatory permission to initiate clinical trials;
- successful enrollment of patients in, and the completion of, our planned clinical trials;
- receiving marketing approvals from applicable regulatory authorities;
- establishing commercial manufacturing capabilities or making arrangements with third-party manufacturers;
- obtaining and maintaining patent and trade secret protection and non-patent exclusivity for our product candidates and their components;
- enforcing and defending intellectual property rights and claims;
- achieving desirable therapeutic properties for our product candidates' intended indications;
- launching commercial sales of our product candidates, if and when approved, whether alone or in collaboration with third parties;
- acceptance of our product candidates, if and when approved, by patients, the medical community and third-party payors;
- effectively competing with other therapies; and
- maintaining an acceptable safety profile of our product candidates through clinical trials and following regulatory approval.

If we do not achieve one or more of these factors in a timely manner or at all, we could experience significant delays or an inability to successfully commercialize our product candidates, which would harm our business.

Furthermore, delays or difficulties in patient enrollment or difficulties in retaining trial participants can result in increased costs, longer development times or termination of a clinical trial. Clinical trials of a new product candidate require the enrollment of a sufficient number of patients, including patients who are suffering from the disease the product candidate is intended to treat and who meet other eligibility criteria. Rates of patient enrollment are affected by many factors, including the size of the patient population, the eligibility criteria for the clinical trial, the age and condition of the patients, the stage and severity of disease, the nature of the protocol, the proximity of patients to clinical sites and the availability of effective treatments for the relevant disease. We may not be able to initiate our planned clinical trials if we are unable to locate and enroll a sufficient number of eligible patients to participate in these trials as required by the U.S. Food and Drug Administration, or FDA, or foreign regulatory authorities. More specifically, some of our product candidates, including ANB019, initially target indications that are very rare, which can prolong the clinical trial timeline for the regulatory process if sufficient patients cannot be enrolled in a timely manner.

We have only limited data regarding the safety profile of our wholly-owned product candidates when dosed in humans. Our ongoing and planned clinical trials or those of our collaborators may reveal significant adverse events, toxicities or other side effects and may result in a safety profile that could inhibit regulatory approval or market acceptance of any of our product candidates.

In order to obtain marketing approval for any of our product candidates, we must demonstrate the safety and efficacy of the product candidate for the relevant clinical indication or indications through preclinical studies and clinical trials as well as additional supporting data. If our product candidates are associated with undesirable side effects in preclinical studies or clinical trials or have characteristics that are unexpected, we may need to interrupt, delay or abandon their development or limit development to more narrow uses or subpopulations in which the undesirable side effects or other characteristics are less prevalent, less severe or more acceptable from a risk-benefit perspective.

We have conducted various preclinical studies of our product candidates, but we do not know the predictive value of these studies for humans, and we cannot guarantee that any positive results in preclinical studies will successfully translate to human patients. We have only completed early Phase 1 and Phase 2a clinical trials for etokimab and subsequent patient trials with etokimab are currently ongoing. We also have only recently completed a Phase 1 clinical trial with ANB019. It is not uncommon to observe results in human clinical trials that are unexpected based on preclinical testing, or to observe results in later stage clinical trials that are unexpected based on early clinical trials. Many product candidates fail in clinical trials despite

promising preclinical and early clinical results. In addition, top-line results of a clinical trial, which generally reflect preliminary reviews of primary efficacy and/or safety results, do not necessarily predict final results, and any top-line findings or assessments are subject to change pending the completion of final data review procedures. Moreover, preclinical and clinical data are often susceptible to varying interpretations and analyses, and many companies that believed their product candidates performed satisfactorily in preclinical studies and clinical trials have nonetheless failed to obtain marketing approval for their products.

In the single-ascending dose segment of our Phase 1 clinical trial of etokimab, the most common adverse events were upper respiratory tract infection and headache, and we observed one case of severe neutropenia in one individual, which was acute and not persistent, and was not determined to be drug-related. No adverse events were determined to be drug related. All safety information generated under the single-ascending dose segment of our Phase 1 clinical trial was included in the US IND and UK CTA submissions which were subsequently cleared by the FDA and MHRA, respectively. In our Phase 2a proof-of-concept trial for moderate-to-severe adult atopic dermatitis patients, one serious adverse event of severe depression was reported by a single patient on Day 140 post-etokimab, in a subject who had preexisting depression; this adverse event was not determined to be drug related. The most frequent treatment-emergent adverse events reported were mild dizziness in patients subsequent to placebo dosing, and mild headache in patients post-etokimab administration. In our Phase 2a proof-of-concept trial for severe adult eosinophilic asthma patients, no treatment-emergent adverse events were deemed to be etokimab-related, and the most frequent treatment-emergent adverse events reported were single occurrences of moderate strep throat in two etokimab-dosed patients and single occurrences of mild vomiting in two placebo-dosed patients. Subjects in our ongoing and planned clinical trials may in the future suffer significant adverse events or other side effects not observed in our preclinical studies or in our Phase 1 or Phase 2a clinical trials. The observed potency and kinetics of our product candidates in preclinical studies may not be observed in human clinical trials. We have tested the dosing frequency and route of administration of our product candidates in preclinical studies, which will inform our dosing strategy for future clinical trials, however such dose and route of administration may not result in sufficient exposure or pharmacological effect in humans, and may lead to unforeseen toxicity not previously observed in preclinical testing. If preclinical studies of our product candidates fail to provide preliminary evidence of safety to the satisfaction of regulatory authorities or do not otherwise produce satisfactory results, we may incur additional costs or experience delays in initiating and/or advancing the development and commercialization of our product candidates. Further, if clinical trials of our product candidates fail to demonstrate efficacy to the satisfaction of regulatory authorities or do not otherwise produce positive results, we may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of our product candidates.

If further significant adverse events or other side effects are observed in any of our current or future clinical trials, we may have difficulty recruiting patients to the clinical trial, patients may drop out of our trial, or we may be required to abandon the trial or our development efforts of that product candidate altogether. We, the FDA, or other applicable regulatory authorities, or an Institutional Review Board, or IRB, may suspend clinical trials of a product candidate at any time for various reasons, including a belief that subjects in such trials are being exposed to unacceptable health risks or adverse side effects. Some potential therapeutics developed in the biotechnology industry that initially showed therapeutic promise in early-stage studies have later been found to cause side effects that prevented their further development. Even if the side effects do not preclude the drug from obtaining or maintaining marketing approval, undesirable side effects may inhibit market acceptance of the approved product due to its tolerability versus other therapies. Any of these developments could materially harm our business, financial condition and prospects.

Further, if any of our product candidates obtain marketing approval, toxicities associated with our product candidates may also develop after such approval and lead to a requirement to conduct additional clinical safety trials, additional warnings being added to the labeling, significant restrictions on the use of the product or the withdrawal of the product from the market. We cannot predict whether our product candidates will cause toxicities in humans that would preclude or lead to the revocation of regulatory approval based on preclinical studies or early stage clinical testing.

Results from our initial Phase 2a clinical trials of etokimab may not be representative of the results we will experience in later Phase 2b and registration trials. If our later clinical trials are unsuccessful, etokimab may be delayed in development or fail entirely, which would have a material adverse impact on our business.

We have elected to structure our initial Phase 2a clinical trials in etokimab as investigational studies that enroll a relatively limited number of patients and are intended to allow us to better assess patient responses and potential efficacy results before designing and commencing Phase 2b clinical trials. We believe the results we have observed in the initial Phase 2a clinical trials of etokimab in atopic dermatitis and severe adult eosinophilic asthma suggest a reasonable basis for continuing development of etokimab in these indications through larger Phase 2b clinical trials. However, our Phase 2a trials involve relatively small patient populations, for example 12 patients in our Phase 2a trial in atopic dermatitis and 25 patients in our Phase 2a trial in severe adult eosinophilic asthma. The results we have observed in these smaller patient populations may not be

predictive of results we will experience in later studies. Furthermore, the average results reported from our Phase 2a trials (for example, the average change in FEV1 reported in connection with our Phase 2a trial in severe adult eosinophilic asthma) are subject to significant variability due to the small number of patients enrolled, and are not expected to be, and are unlikely to be, statistically significant.

In addition, later studies may also include different design elements that could contribute to us experiencing different results than we have observed in our Phase 2a trials. In addition, the initial results we have reported from our completed Phase 2a clinical trials have included interim analyses and top-line results, which may not accurately predict the final results of the clinical trial or the results of future clinical trials. For instance, while we expect FEV1 to be an important endpoint in our later studies, our data from our Phase 2a study of severe adult eosinophilic asthma are from a single dose of drug evaluated only at timepoints through Day 64 and not at the planned Day 127 timepoint.

If our later clinical trials of etokimab are unsuccessful, whether for one of the reasons mentioned above or otherwise, etokimab may be delayed in development or fail entirely, which would have a material adverse impact on our business.

We and/or our collaborators may be unable to obtain, or may be delayed in obtaining, required regulatory approvals in the United States or in foreign jurisdictions, which would materially impair our ability to commercialize and generate revenue from our product candidates.

Our ability to continue to develop our product candidates, and to have the potential to achieve and sustain profitability, depends on the FDA and foreign regulatory authorities permitting us to conduct human clinical trials and, if our products are safe and effective, obtaining approval from the FDA and foreign regulatory authorities to market them and subsequently successfully commercializing them, either alone or with our collaborators. The research, testing, manufacturing, labeling, approval, selling, marketing and distribution of drug and biologic products are subject to extensive regulation by the FDA and foreign regulatory authorities. Though we have cleared an IND and CTA to conduct clinical trials for both etokimab and ANB019 in the United States and United Kingdom, respectively, before commencing clinical trials in the United States for any other product candidate, we must submit an IND to the FDA; foreign regulatory authorities enforce similar requirements for initiation of clinical trials in other countries. An IND or foreign equivalent requires extensive preclinical studies, and there is no guarantee that the FDA or foreign regulatory authorities will allow clinical trials to proceed based on the IND or equivalent submission. For example, although we have initiated toxicology studies for our product candidates, the FDA in the United States, the Therapeutic Goods Administration in Australia or other foreign regulatory authorities, as applicable, may not allow our clinical trials to proceed in the regulatory authority's jurisdiction if we are unable to show safety margins acceptable to the particular regulatory authority in appropriate animal species in our preclinical toxicology studies.

Even if we or our collaborators initiate and complete clinical trials for our product candidates, we will not be permitted to market our product candidates in the United States until we receive approval of a Biologics License Application, or BLA, from the FDA, and will not be permitted to market in other countries without marketing approval from foreign regulatory authorities. Obtaining approval of a BLA or other marketing approvals is often a lengthy, expensive and uncertain process over which the FDA and foreign regulatory authorities have substantial discretion. Other than submitting and receiving acceptance for our CTN for etokimab in Australia, obtaining clearance for our IND for a Phase 2a clinical trial of etokimab in severe adult peanut allergy in the United States, obtaining written responses from the FDA regarding a pre-IND submission for a study of etokimab in moderate to severe atopic dermatitis, obtaining clearance for our CTA for our Phase 2a clinical trial of etokimab in moderate-to-severe adult atopic dermatitis, obtaining clearances for our IND and CTA for a Phase 2a clinical trial of severe eosinophilic asthma patients in the United States and United Kingdom, and obtaining clearance for our CTN for ANB019 in Australia, obtaining clearance for our IND and CTA for a Phase 2 trial of ANB019 in generalized pustular psoriasis patients and obtaining clearance of our IND for a Phase 2 trial of ANB019 in palmo-plantar pustulosis patients, we have not yet discussed with the FDA or foreign regulatory authorities the development plans for any of our product candidates or the designs of any of our later-stage clinical studies. We thus may not have the full benefit of the FDA's or foreign regulatory authorities' current thinking on trial designs or product development for our target indications. For example, we believe a small pivotal trial, potentially with approximately 100 patients, may be sufficient to demonstrate substantial evidence of efficacy of ANB019 in generalized pustular psoriasis, or GPP, patients. However, we have not yet discussed clinical trial design for this indication with the FDA, and the FDA may disagree with our proposed trial design, including the number of patients necessary to demonstrate efficacy and/or may require us to conduct more than one pivotal study in order to obtain approval of a BLA.

Preclinical studies and clinical trials are expensive, difficult to design and implement, can take many years to complete and are uncertain as to outcome. Products, on average, take 10 to 15 years to be developed from the time they are discovered to the time they are approved and available for treating patients. The start or end of a clinical trial is often delayed or halted for many reasons, including:

- imposition of a clinical hold for safety reasons or following an inspection of clinical trial operations or site by the FDA or other regulatory authorities;
- manufacturing challenges;
- insufficient supply or quality of product candidates or other materials necessary to conduct clinical trials;
- delays in reaching or failure to reach agreement on acceptable clinical trial contracts or clinical trial protocols with prospective trial sites and contract research organizations, or CROs, or failure by such CROs or trials sites to carry out the clinical trial in accordance with our agreed-upon terms;
- clinical sites electing to terminate their participation in one of our clinical trials;
- inability or unwillingness of patients or medical investigators to follow clinical trial protocols;
- required clinical trial administrative actions;
- slower than anticipated patient enrollment;
- changing standards of care;
- safety concerns;
- availability or prevalence of use of a comparative drug or required prior therapy; or
- clinical outcomes or financial constraints.

Our product candidates may not be effective, may be only moderately effective or may prove to have undesirable or unintended side effects, toxicities or other characteristics that may preclude our obtaining marketing approval or prevent or limit commercial use. Regulatory authorities may refuse to accept any application or may decide that our data are insufficient for approval and require additional preclinical or other studies or clinical trials. In addition, varying interpretations of the data obtained from preclinical and clinical testing could delay, limit or prevent marketing approval of a product candidate. Moreover, regulatory authorities may determine that the clinical and other benefits of a product candidate do not outweigh the safety or other risks. Changes in marketing approval policies during the development period, changes in or the enactment of additional statutes or regulations, or changes in regulatory review for each submitted product application, may also cause delays in or prevent the approval of an application.

If we experience any of the issues described above, or other similar or related issues, we may:

- be delayed in obtaining marketing approval for our product candidates;
- not obtain marketing approval at all;
- obtain marketing approval in some countries and not in others; obtain approval for indications or patient populations that are not as broad as intended or desired;
- obtain approval with labeling that includes significant use or distribution restrictions or safety warnings, including boxed warnings;
- be subject to additional post-marketing testing requirements; or
- have the product removed from the market after obtaining marketing approval.

We may not be successful in our efforts to use our technology platform to expand our pipeline of product candidates and develop marketable products.

Because we have limited financial and managerial resources, we focus on research programs and product candidates that we identify for specific indications. Our business depends on our successful development and commercialization of the limited number of internal product candidates we have in preclinical and early-stage clinical development. Even if we are successful in continuing to build our pipeline, development of the potential product candidates that we identify will require substantial investment in additional clinical development, management of clinical, preclinical and manufacturing activities, regulatory approval in multiple jurisdictions, obtaining manufacturing supply capability, building a commercial organization, and significant marketing efforts before we generate any revenue from product sales. Furthermore, such product candidates may not be suitable for clinical development, including as a result of their harmful side effects, limited efficacy or other characteristics that indicate that they are unlikely to be products that will receive marketing approval and achieve market acceptance. If we cannot validate our technology platform by successfully developing and commercializing product candidates based upon our technological approach, we may not be able to obtain product or partnership revenue in future periods, which would adversely affect our business, prospects, financial condition and results of operations.

As a result of our current focus on our lead product candidates, we may forego or delay pursuit of opportunities with other product candidates or for other indications that later prove to have greater commercial potential. Our resource allocation decisions may cause us to fail to capitalize on viable commercial products or profitable market opportunities. Our spending on current and future research and development programs and product candidates for specific indications may not yield any commercially viable products. Our understanding and evaluation of biological targets for the discovery and development of new product candidates may fail to identify challenges encountered in subsequent preclinical and clinical development. If we do not accurately evaluate the commercial potential or target market for a particular product candidate, we may relinquish valuable rights to that product candidate through collaboration, licensing or other royalty arrangements in cases in which it would have been more advantageous for us to retain sole development and commercialization rights.

We have recently commenced clinical development of etokimab and ANB019, and have no other history of conducting clinical trials or commercializing biotechnology products, which may make it difficult to evaluate the prospects for our future viability.

Our operations to date have been largely limited to financing and staffing our company, developing our technology and developing our wholly-owned product candidates, and other product candidates in partnerships with our collaborators. As a company, we have only very limited experience conducting clinical trials and have not had previous experience commercializing product candidates, including submitting a BLA to the FDA. In part because of this lack of experience, we cannot be certain that planned clinical trials will begin or be completed on time, if at all, that our planned development programs would be acceptable to the FDA or other regulatory authorities, or that, if approval is obtained, such product candidates can be successfully commercialized. Clinical trials and commercializing our wholly-owned product candidates will require significant additional financial and management resources, and reliance on third-party clinical investigators, CROs, consultants or collaborators. Relying on third-party clinical investigators, CROs or collaborators may result in delays that are outside of our control.

Furthermore, we may not have the financial resources to continue development of, or to enter into collaborations for, a product candidate if we experience any problems or other unforeseen events that delay or prevent regulatory approval of, or our ability to commercialize, product candidates, including:

- negative or inconclusive results from our clinical trials or the clinical trials of others for product candidates similar to ours, leading to a decision or requirement to conduct additional preclinical testing or clinical trials or abandon a program;
- delays in submitting INDs or comparable foreign applications or delays or failure in obtaining the necessary approvals from regulators to commence a clinical trial, or a suspension or termination of a clinical trial once commenced;
- conditions imposed by the FDA or foreign regulatory authorities regarding the number, scope or design of our clinical trials;
- delays in enrolling research subjects in clinical trials;
- high drop-out rates of research subjects;
- inadequate supply or quality of clinical trial materials or other supplies necessary for the conduct of our clinical trials;
- greater than anticipated clinical trial costs;
- poor effectiveness or unacceptable side effects of our product candidates during clinical trials;
- unfavorable FDA or other regulatory agency inspection and review of a clinical trial site;
- failure of our third-party contractors or investigators to comply with regulatory requirements or otherwise meet their contractual obligations in a timely manner, or at all;
- serious and unexpected drug-related side effects experienced by participants in our planned clinical trials or by individuals using drugs similar to our product candidates;
- delays and changes in regulatory requirements, policy and guidelines, including the imposition of additional regulatory oversight around clinical testing generally or with respect to our technology in particular; or
- varying interpretations of data by the FDA and foreign regulatory authorities.

Consequently, any predictions you make about our future success or viability based on our short operating history may not be as accurate as they could be if we had a longer operating history or an established track record in conducting clinical trials or commercializing products.

Further, as a new business, we may encounter unforeseen expenses, difficulties, complications, delays and other known and unknown factors. We will need to transition from a company with a research focus to a company capable of supporting commercial activities. We may not be successful in such a transition.

We face significant competition, and if our competitors develop and market products that are more effective, safer or less expensive than our product candidates, our commercial opportunities will be negatively impacted.

The biotechnology industry is highly competitive and subject to rapid and significant technological change. Products we may develop in the future are also likely to face competition from other drugs and therapies, some of which we may not currently be aware. We have competitors both in the United States and internationally, including major multinational pharmaceutical and biotechnology companies, established biotechnology companies, specialty biotechnology companies, emerging and start-up companies, universities and other research institutions. Many of our competitors have significantly greater financial, manufacturing, marketing, drug development, technical and human resources and commercial expertise than we do. Large pharmaceutical and biotechnology companies, in particular, have extensive experience in clinical testing, obtaining regulatory approvals, recruiting patients and manufacturing biotechnology products. These companies also have significantly greater research and marketing capabilities than we do and may also have products that have been approved or are in late stages of development, and collaborative arrangements in our target markets with leading companies and research institutions. Established pharmaceutical and biotechnology companies may also invest heavily to accelerate discovery and development of novel compounds or to in-license novel compounds that could make the product candidates that we develop obsolete. As a result of all of these factors, our competitors may succeed in obtaining patent protection and/or approval from the FDA or foreign regulatory authorities or discovering, developing and commercializing products in our field before we do.

For asthma, our competitors include omalizumab (Xolair; Roche) which has received FDA approval and functions by inhibiting the binding between free IgE and FcεRI; antibodies that bind IL-5 and inhibit its interaction with the IL-5 receptor such as mepolizumab (Nucala; Glaxosmithkline) and reslizumab (Cinqair; Teva), both of which the FDA has approved for the add-on maintenance treatment in patients with severe eosinophilic asthma; antibodies such as benralizumab (FASENRA, AstraZeneca) that bind the IL-5 receptor; antibodies that bind to IL-13 such as lebrikizumab (Dermira), tralokinumab (AstraZeneca, LEO Pharma) and anrukinzumab (Pfizer), which are in clinical testing; antibodies that bind the IL-4 receptor alpha chain, such as dupilumab (Regeneron, Sanofi) and AMG 317 (Amgen) each in clinical testing, ST2-binding antibodies including Roche's RG6149, GSK's GSK3772847 and Regeneron's REGN3500 each in clinical development for asthma and related conditions, a recently announced IL-33 related program by AstraZeneca (MEDI3506) in a Phase 1 clinical trial indicated for chronic obstructive pulmonary disease and an anti-TSLP antibody called tezepelumab (AMG 157, MEDI9929) being developed by Amgen and AstraZeneca for asthma and atopic dermatitis. For atopic dermatitis, our competitors include dupilumab (Dupixent, Regeneron, Sanofi), which has been approved by the FDA, crisaborole (EUCRISA, Pfizer), which has recently been approved by the FDA, VTP-38543 (Vitae, acquired by Allergan), JAK inhibitors such as baricitinib, PF-04965842 and upadacitinib under development by Lilly/Incyte, Pfizer and Abbvie, respectively, a recently announced IL-33 related program by Pfizer (PF-06817024) in a Phase 1 clinical trial indicated for various indications and a recently announced IL-33 related program by Lilly in a Phase 1 clinical trial indicated for autoimmune disorders and an IL-1 alpha antibody, bermekimab (XBiotech). For GPP and PPP, our competitors include marketed therapies such as secukinumab (Cosentyx; Novartis) which binds IL-17A; ustekinumab (Stelara; Janssen) which blocks IL-12 and 23 cytokine function; and acitretin (Soriatane; Glaxosmithkline), as well as therapies in development such as guselkumab (Janssen) which blocks IL-23 cytokine function, gevokizumab (Xoma 052) and canakinumab (Ilaris, Novartis) which binds IL-1 beta, anakinra (Kineret; Swedish Orphan Biovitrum AB), a recombinant form the IL-1 receptor antagonist and BI-655130 (Boehringer Ingelheim).

With the enactment of the Biologics Price Competition and Innovation Act of 2009, or BPCIA, an abbreviated pathway for the approval of biosimilar and interchangeable biological products was created. The abbreviated regulatory pathway establishes legal authority for the FDA to review and approve biosimilar biologics, including the possible designation of a biosimilar as interchangeable based on its similarity to an existing reference product. Under the BPCIA, an application for a biosimilar product cannot be approved by the FDA until 12 years after the original branded product is approved under a BLA. To date, several biosimilar products have been approved under the BPCIA, but no interchangeable biological products have been approved. The law is complex and is still being interpreted and implemented by the FDA. As a result, its ultimate impact, implementation, and meaning are subject to uncertainty. While it is uncertain when such processes intended to implement BPCIA may be fully adopted by the FDA, any such processes could have a material adverse effect on the future commercial prospects for our biological products.

We believe that if any of our product candidates are approved as a biological product under a BLA it should qualify for the 12-year period of exclusivity. However, there is a risk that the FDA will not consider any of our product candidates to be reference products for competing products, potentially creating the opportunity for biosimilar competition sooner than anticipated. Additionally, this period of regulatory exclusivity does not apply to companies pursuing regulatory approval via their own traditional BLA, rather than via the abbreviated pathway. Moreover, the extent to which a biosimilar, once approved, will be substituted for any one of our reference products in a way that is similar to traditional generic substitution for non-biological products is not yet clear, and will depend on a number of marketplace and regulatory factors that are still developing.

Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize products that are safer, more effective, have fewer or less severe effects, are more convenient, are less expensive or capture significant market share prior to or during our commercialization. Our competitors also may obtain FDA or other regulatory approval for their products more rapidly than we may obtain approval for ours, which could result in our competitors establishing a strong market position before we are able to enter the market. In addition, our ability to compete may be affected in many cases by insurers or other third party payors seeking to encourage the use of biosimilar products. Even if our product candidates achieve marketing approval, they may be priced at a significant premium over competitive biosimilar products if any have been approved by then.

Smaller and other early stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These companies compete with us in recruiting and retaining qualified scientific and management personnel, establishing clinical trial sites and patient registration for planned clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs. In addition, the biotechnology industry is characterized by rapid technological change. If we fail to stay at the forefront of technological change, we may be unable to compete effectively. Technological advances or products developed by our competitors may render our technologies or product candidates obsolete, less competitive or not economical.

Our product candidates may not achieve adequate market acceptance among physicians, patients, healthcare payors and others in the medical community necessary for commercial success.

Even if our product candidates receive regulatory approval, they may not gain adequate market acceptance among physicians, patients, healthcare payors and others in the medical community. The degree of market acceptance of any of our approved product candidates will depend on a number of factors, including:

- the efficacy and safety profile as demonstrated in planned clinical trials;
- the timing of market introduction of the product candidate as well as competitive products;
- the clinical indications for which the product candidate is approved;
- restrictions on the use of our products, if approved, such as boxed warnings or contraindications in labeling, or a risk evaluation and mitigation strategy, or REMS, if any, which may not be required of alternative treatments and competitor products;
- acceptance of the product candidate as a safe and effective treatment by physicians, clinics and patients;
- the potential and perceived advantages of product candidates over alternative treatments, including any similar generic treatments;
- the cost of treatment in relation to alternative treatments;
- the availability of coverage and adequate reimbursement and pricing by third parties and government authorities;
- relative convenience and ease of administration;
- the frequency and severity of adverse events;
- the effectiveness of sales and marketing efforts; and
- unfavorable publicity relating to the product candidate.

If any product candidate is approved but does not achieve an adequate level of acceptance by physicians, hospitals, healthcare payors and patients, we may not generate or derive sufficient revenue from that product candidate and may not become or remain profitable.

If companion diagnostics for our product candidates for which such diagnostics are required, are not successfully, and in a timely manner, validated, developed or approved, we may not achieve marketing approval or realize the full commercial potential of our product candidates.

If companion diagnostics are developed in conjunction with clinical programs, the FDA may require regulatory approval of a companion diagnostic as a condition to approval of the product candidate. For example, if we use a genetic test to determine which patients are most likely to benefit from ANB019 for the treatment of GPP or PPP by designing our pivotal trial or trials of ANB019 in that indication to require that subjects test positive for specific genetic mutations as a criterion for enrollment, then we will likely be required to obtain FDA approval or clearance of a companion diagnostic, concurrent with approval of ANB019, to test for those genetic mutations; we may also be required to demonstrate to the FDA the predictive utility of the companion diagnostic—namely, that the diagnostic selects for patients in whom the biologic therapy will be effective or more effective compared to patients not selected for by the diagnostic. We do not have experience or capabilities in developing or commercializing diagnostics and plan to rely in large part on third parties to perform these functions. We do not currently have any agreement in place with any third party to develop or commercialize companion diagnostics for any of our product candidates. Companion diagnostics are subject to regulation by the FDA and foreign regulatory authorities as medical devices and require separate regulatory approval or clearance prior to commercialization.

If we or our partners, or any third party, are unable to successfully develop companion diagnostics for our product candidates, or experience delays in doing so:

- the development of our product candidates may be adversely affected if we are unable to appropriately select patients for enrollment in our planned clinical trials;
- our product candidates may not receive marketing approval if their safe and effective use depends on a companion diagnostic; and
- we may not realize the full commercial potential of any product candidates that receive marketing approval if, among other reasons, we are unable to appropriately identify patients with the specific genetic alterations targeted by our product candidates.

In addition, although we believe genetic testing is becoming more prevalent in the diagnosis and treatment of various diseases and conditions, our product candidates may be perceived negatively compared to alternative treatments that do not require the use of companion diagnostics, either due to the additional cost of the companion diagnostic or the need to complete additional procedures to identify genetic markers prior to administering our product candidates.

If any of these events were to occur, our business would be harmed, possibly materially.

The manufacture of biologics is complex and our third-party manufacturers may encounter difficulties in production. If any of our third-party manufacturers encounter such difficulties, our ability to provide supply of our product candidates for clinical trials, our ability to obtain marketing approval, or our ability to provide supply of our products for patients, if approved, could be delayed or stopped.

The process of manufacturing biologics is complex, highly-regulated and subject to multiple risks. Manufacturing biologics is highly susceptible to product loss due to contamination, equipment failure, improper installation or operation of equipment, vendor or operator error, inconsistency in yields, variability in product characteristics and difficulties in scaling the production process. Even minor deviations from normal manufacturing processes could result in reduced production yields, product defects and other supply disruptions. If microbial, viral or other contaminations are discovered at the facilities of our manufacturer, such facilities may need to be closed for an extended period of time to investigate and remedy the contamination, which could delay clinical trials and adversely harm our business. Moreover, if the FDA determines that our manufacturer is not in compliance with FDA laws and regulations, including those governing current good manufacturing practices, or cGMPs, the FDA may deny BLA approval until the deficiencies are corrected or we replace the manufacturer in our BLA with a manufacturer that is in compliance.

In addition, there are risks associated with large scale manufacturing for clinical trials or commercial scale including, among others, cost overruns, potential problems with process scale-up, process reproducibility, stability issues, compliance with good manufacturing practices, lot consistency and timely availability of raw materials. Even if we or our collaborators obtain regulatory approval for any of our product candidates, there is no assurance that manufacturers will be able to manufacture the approved product to specifications acceptable to the FDA or other regulatory authorities, to produce it in sufficient quantities to meet the requirements for the potential launch of the product or to meet potential future demand. If our manufacturers are unable to produce sufficient quantities for clinical trials or for commercialization, commercialization efforts would be impaired, which would have an adverse effect on our business, financial condition, results of operations and growth prospects.

Scaling up a biologic manufacturing process is a difficult and uncertain task, and we may not be successful in transferring our production system or the manufacturer may not have the necessary capabilities to complete the implementation and development process. If we are unable to adequately validate or scale-up the manufacturing process with our current manufacturers, we will need to transfer to other manufacturers and complete the manufacturing validation process, which can be lengthy and costly. If we are able to adequately validate and scale-up the manufacturing process for our product candidates with contract manufacturers, we will still need to negotiate with such contract manufacturers agreements for commercial supply and it is not certain we will be able to come to agreement on terms acceptable to us.

Risks Related to Our Financial Position and Capital Needs

We have limited operating revenue and a history of operational losses and may not achieve or sustain profitability. We have no products approved for commercial sale, and to date we have not generated any revenue or profit from product sales.

We are an early-stage biotechnology company with a limited operating history. We have no approved products. To date, our revenue has been primarily derived from our research collaboration and license agreements with third parties, including TESARO and Celgene, and we are significantly dependent on such collaborators for the successful development of product candidates in these collaborations. Our ability to generate revenue and become profitable depends upon our ability, alone or with our collaborators, to successfully complete the development of our product candidates for our target indications and to obtain necessary regulatory approvals.

Since our inception, we have incurred significant operating losses in every year except fiscal year 2014. We had \$5.0 million in collaboration revenue and our net loss was \$44.7 million for the nine months ended September 30, 2018 and our net loss was \$23.2 million for the nine months ended September 30, 2017, with \$7.0 million in collaboration revenue. As of September 30, 2018, we had an accumulated deficit of \$129.7 million.

We have financed our operations primarily through our initial public offering of common stock in January 2017, our follow-on public offering of common stock in October 2017, our follow-on public offering of common stock in September 2018, private placements of our preferred stock and the issuance of debt. We have devoted substantially all of our efforts to research and development. We have only recently initiated clinical development for two of our product candidates and expect that it will be many years, if ever, before we have a product candidate ready for commercialization. We expect to continue to incur significant expenses and increasing operating losses for the foreseeable future, and the net losses we incur may fluctuate significantly from quarter to quarter. Our revenue has been historically derived from amortization of upfront payments, research and development funding and milestone payments under collaboration and license agreements with our collaborators. Our ability to generate future product revenue from our current or future product candidates depends on a number of additional factors, including our or our collaborators' ability to:

- continue our research and preclinical development of our product candidates;
- identify additional product candidates;
- maintain existing and enter into new collaboration agreements;
- conduct additional preclinical studies and initiate clinical trials for our product candidates;
- obtain approvals for the product candidates we develop or developed under our collaboration arrangements;
- establish a sales, marketing and distribution infrastructure to commercialize any product candidates for which we may obtain marketing approval;
- maintain, expand and protect our intellectual property portfolio;
- hire additional executive, clinical, quality control and scientific personnel;
- add operational, financial and management information systems and personnel, including personnel to support our product development and commercialization efforts;
- establish and maintain supply and manufacturing relationships with third parties, and ensure adequate and legally compliant manufacturing of our products;
- obtain coverage and adequate product reimbursement from third-party payors, including government payors;
- acquire or in-license other product candidates and technologies; and
- achieve market acceptance for our or our collaborators' products, if any.

We are unable to predict the timing or amount of increased expenses, or when, or if, we will be able to achieve or maintain profitability because of the numerous risks and uncertainties associated with product development. In addition, our expenses could increase significantly beyond expectations if we are required by the FDA or other regulatory authorities to perform studies or trials in addition to those that we currently anticipate. Even if ANB019 and etokimab, or any of our other product candidates, are approved for commercial sale, we anticipate incurring significant costs associated with the commercial launch of any product candidate.

We are currently only in the clinical development stages for our most advanced product candidates. In order to become and remain profitable we must, alone or with our collaborators, develop and eventually commercialize a product or products with significant market potential. This may require us to be successful in a range of challenging activities, including completing clinical trials of our product candidates, successfully developing companion diagnostics, obtaining marketing approval for these product candidates and manufacturing, marketing and selling those products for which we may obtain marketing approval. We may never succeed in these activities and, even if we do, may never generate revenues that are significant or large enough to achieve profitability. If we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis. Our failure to become and remain profitable would decrease the value of our company and could impair our ability to raise capital, maintain or expand our research and development efforts, expand our business or continue our operations. A decline in the value of our company would also cause you to lose part or even all of your investment.

We will require additional capital to finance our operations, which may not be available to us on acceptable terms, or at all. As a result, we may not complete the development and commercialization of our product candidates or develop new product candidates.

As a research and development company, our operations have consumed substantial amounts of cash since our inception. We expect our research and development expenses to increase substantially in connection with our ongoing activities, particularly as we continue our discovery and preclinical development to identify new clinical candidates, and we and our collaborators conduct clinical trials of, and seek marketing approval for, our product candidates. In addition, if we obtain marketing approval for any of our product candidates, we expect to incur significant commercialization expenses related to product sales, marketing, manufacturing and distribution. Furthermore, we incur additional costs associated with operating as a public company. We believe that our existing cash, cash equivalents and investments will fund our current operating plan at least through the end of 2020. However, circumstances may cause us to consume capital more rapidly than we currently anticipate. For example, as we continue to move our product candidates through preclinical studies, submit INDs or foreign equivalents and conduct clinical development, we may have adverse results requiring us to find new product candidates, or our collaborators may not elect to pursue the development and commercialization of any of our product candidates that are subject to their respective agreements with us. Any of these events may increase our development costs more than we expect. We may need to raise additional funds or otherwise obtain funding through product collaborations to continue development of our product candidates.

If we need to secure additional financing, such additional fundraising efforts may divert our management from our day-to-day activities, which may adversely affect our ability to develop and commercialize our product candidates. In addition, we cannot guarantee that future financing will be available in sufficient amounts or on terms acceptable to us, if at all. If we do not raise additional capital when required or on acceptable terms, we may need to:

- significantly delay, scale back or discontinue the development or commercialization of our product candidates or cease operations altogether;
- seek strategic alliances for research and development programs at an earlier stage than we would otherwise desire or on terms less favorable than might otherwise be available;
- relinquish, or license on unfavorable terms, our rights to technologies or future product candidates that we otherwise would seek to develop or commercialize ourselves; or
- eliminate staff to conserve resources.

If we need to conduct additional fundraising activities and we do not raise additional capital in sufficient amounts or on terms acceptable to us, we may be prevented from pursuing development and commercialization efforts, which will have a material adverse effect on our business, operating results and prospects. Our forecast of the period of time through which our financial resources will adequately support our operations is a forward-looking statement and involves risks and uncertainties, and actual results could vary as a result of a number of factors, including the factors discussed elsewhere in this “Risk Factors” section. We have based this estimate on assumptions that may prove to be wrong, and we could use our available capital resources sooner than we currently expect. Our future funding requirements, both short and long-term, will depend on many factors, including:

- the initiation, progress, timing, costs and results of preclinical studies and clinical trials for our product candidates and future product candidates we may develop;
- the number and size of clinical trials needed to show safety, efficacy and an acceptable risk/benefit profile for any of our product candidates;
- the outcome, timing and cost of seeking and obtaining regulatory approvals from the FDA and foreign regulatory authorities, including the potential for such authorities to require that we perform more studies or trials than those that we currently expect;
- our ability to maintain existing and enter into new collaboration agreements;
- the cost to establish, maintain, expand and defend the scope of our intellectual property portfolio, including the amount and timing of any payments we may be required to make, or that we may receive, in connection with licensing, preparing, filing, prosecuting, defending and enforcing of any patents or other intellectual property rights;
- the effect of competing technological and market developments;
- market acceptance of any approved product candidates;
- the costs of acquiring, licensing or investing in additional businesses, products, product candidates and technologies;
- the cost of recruiting and retaining key employees;
- the cost and timing of selecting, auditing and potentially validating a manufacturing site for commercial-scale manufacturing; and
- the cost of establishing sales, marketing and distribution capabilities for our product candidates for which we may receive regulatory approval and that we determine to commercialize ourselves or in collaboration with our collaborators.

If we cannot expand our operations or otherwise capitalize on our business opportunities due to lack of capital, our business, financial condition and results of operations could be adversely affected.

Raising additional capital may cause dilution to our existing stockholders, restrict our operations or require us to relinquish rights to our product candidates on unfavorable terms to us.

We may seek additional capital through a variety of means, including through public or private equity, debt financings or other sources, including up-front payments and milestone payments from strategic collaborations. To the extent that we raise additional capital through the sale of equity or convertible debt or equity securities, your ownership interest will be diluted, and the terms may include liquidation or other preferences that adversely affect your rights as a stockholder. Such financing may result in dilution to stockholders, imposition of debt covenants, increased fixed payment obligations, or other restrictions that may affect our business. If we raise additional funds through up-front payments or milestone payments pursuant to strategic collaborations with third parties, we may have to relinquish valuable rights to our product candidates, or grant licenses on terms that are not favorable to us. In addition, we may seek additional capital due to favorable market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans.

Risks Related to Managing Growth, Operations and Macroeconomic Conditions

We must attract and retain highly skilled employees in order to succeed.

To succeed, we must recruit, retain, manage and motivate qualified clinical, scientific, technical and management personnel, and we face significant competition for experienced personnel. If we do not succeed in attracting and retaining qualified personnel, particularly at the management level, it could adversely affect our ability to execute our business plan, harm our operating results and increase our capabilities to successfully commercialize our product candidates. In particular, we believe that our future success is highly dependent upon the contributions of our senior management, particularly our President and Chief Executive Officer, as well as our senior scientists and other members of our senior management team. The loss of services of any of these individuals, who all have at-will employment arrangements with us, could delay or prevent the successful development of our product pipeline, completion of our planned clinical trials or the commercialization of our product candidates, if approved. The competition for qualified personnel in the biotechnology field is intense and as a result, we may be unable to continue to attract and retain qualified personnel necessary for the development of our business or to recruit suitable replacement personnel. In addition, certain members of our senior management team, including our Chief Financial Officer, who joined us in January 2017, and our General Counsel, who joined us in August 2018, have worked together for only a relatively short period of time and it may be difficult to evaluate their effectiveness, on an individual or collective basis, and ability to address future challenges to our business.

Many of the other biotechnology companies that we compete against for qualified personnel have greater financial and other resources, different risk profiles and a longer history in the industry than we do. They also may provide more diverse opportunities and better chances for career advancement. Some of these characteristics may be more appealing to high-quality candidates than what we have to offer. If we are unable to continue to attract and retain high-quality personnel, the rate and success at which we can discover and develop product candidates and our business will be limited.

We currently have no marketing and sales force. If we are unable to establish effective sales or marketing capabilities or enter into agreements with third parties to sell or market our product candidates, we may not be able to effectively sell or market our product candidates, if approved, or generate product revenue.

We currently do not have a marketing or sales team for the marketing, sales and distribution of any of our product candidates that are able to obtain regulatory approval. In order to commercialize any product candidates, we must build on a territory-by-territory basis marketing, sales, distribution, managerial and other non-technical capabilities or make arrangements with third parties to perform these services, and we may not be successful in doing so. If our product candidates receive regulatory approval, we may decide to establish an internal sales or marketing team with technical expertise and supporting distribution capabilities to commercialize our product candidates, which will be expensive and time-consuming and will require significant attention of our executive officers to manage. Any failure or delay in the development of our internal sales, marketing and distribution capabilities would adversely impact the commercialization of any of our product candidates that we obtain approval to market. With respect to the commercialization of all or certain of our product candidates, we may choose to collaborate, either globally or on a territory-by-territory basis, with third parties that have direct sales forces and established distribution systems, either to augment our own sales force and distribution systems or in lieu of our own sales force and distribution systems. If we are unable to enter into such arrangements when needed on acceptable terms, or at all, we may not be able to successfully commercialize any of our product candidates that receive regulatory approval or any such commercialization may experience delays or limitations. If we are not successful in commercializing our product candidates, either on our own or through collaborations with one or more third parties, our future product revenue will suffer and we may incur significant additional losses.

We expect to expand our development and regulatory capabilities, and as a result, we may encounter difficulties in managing our growth, which could disrupt our operations.

We expect to experience significant growth in the number of our employees and the scope of our operations, particularly in the areas of product candidate development and growing our capability to conduct clinical trials. To manage our anticipated future growth, we must continue to implement and improve our managerial, operational and financial systems, expand our facilities and continue to recruit and train additional qualified personnel. Due to our limited financial resources and the limited experience of our management team in managing a company with such anticipated growth, we may not be able to effectively manage the expansion of our operations or recruit and train additional qualified personnel. The expansion of our operations may lead to significant costs and may divert our management and business development resources. Any inability to manage growth could delay the execution of our business plans or disrupt our operations.

We conduct significant operations through our Australian wholly-owned subsidiary. If we lose our ability to operate in Australia, or if our subsidiary is unable to receive the research and development tax credit allowed by Australian regulations, our business and results of operations will suffer.

In March 2015, we formed a wholly-owned Australian subsidiary, AnaptysBio Pty Ltd, or AnaptysBio Pty, to develop and commercialize our ANB019 and etokimab antibody program in Australia. Due to the geographical distance and lack of employees currently in Australia, as well as our lack of experience operating in Australia, we may not be able to efficiently or successfully monitor, develop and commercialize our lead products or antibody program in Australia, including conducting clinical trials. Furthermore, we have no assurance that the results of any clinical trials that we conduct for our product candidates in Australia will be accepted by the FDA or foreign regulatory authorities for development and commercialization approvals.

In addition, current Australian tax regulations provide for a refundable research and development tax credit equal to 43.5% of qualified expenditures. If we are ineligible or unable to receive the research and development tax credit, required to repay all or a portion of the credit, lose our ability to operate AnaptysBio Pty in Australia, or if the Australian government significantly reduces or eliminates the tax credit, our business and results of operation would be adversely affected.

The manufacture of biotechnology products is complex, and manufacturers often encounter difficulties in production. If we or any of our third-party manufacturers encounter any loss of our master cell banks or if any of our third-party manufacturers encounter other difficulties, or otherwise fail to comply with their contractual obligations, our ability to provide product candidates for clinical trials or our products to patients, once approved, could be delayed or stopped.

The manufacture of biotechnology products is complex and requires significant expertise and capital investment, including the development of advanced manufacturing techniques and process controls. We and our contract manufacturers must comply with cGMP regulations and guidelines for the manufacturing of biologics used in clinical trials and, if approved, marketed products. Manufacturers of biotechnology products often encounter difficulties in production, particularly in scaling up and validating initial production. Furthermore, if microbial, viral or other contaminations are discovered in our products or in the manufacturing facilities in which our products are made, such manufacturing facilities may need to be closed for an extended period of time to investigate and remedy the contamination. Delays in raw materials availability and supply may also extend the period of time required to develop our products.

All of our therapeutic antibodies are manufactured by starting with cells which are stored in a cell bank. We have one master cell bank for each antibody manufactured in accordance with cGMP and multiple working cell banks and believe we would have adequate backup should any cell bank be lost in a catastrophic event. However, it is possible that we could lose multiple cell banks and have our manufacturing severely impacted by the need to replace the cell banks.

We cannot assure you that any stability or other issues relating to the manufacture of any of our product candidates or products will not occur in the future. Additionally, our manufacturers may experience manufacturing difficulties due to resource constraints or as a result of labor disputes or unstable political environments. If our manufacturers were to encounter any of these difficulties, or otherwise fail to comply with their contractual obligations, our ability to provide product candidates to patients in planned clinical trials and products to patients, once approved, would be jeopardized. Any delay or interruption in the supply of clinical trial supplies could delay the completion of planned clinical trials, increase the costs associated with maintaining clinical trial programs and, depending upon the period of delay, require us to commence new clinical trials at additional expense or terminate clinical trials completely. Any adverse developments affecting clinical or commercial manufacturing of our product candidates or products may result in shipment delays, inventory shortages, lot failures, product withdrawals or recalls, or other interruptions in the supply of our product candidates or products. We may also have to take inventory write-offs and incur other charges and expenses for product candidates or products that fail to meet specifications, undertake costly remediation efforts or seek more costly manufacturing alternatives. Accordingly, failures or difficulties faced at any level of our supply chain could adversely affect our business and delay or impede the development and commercialization of our product candidates or products and could have an adverse effect on our business, prospects, financial condition and results of operations.

We may be vulnerable to disruption, damage and financial obligation as a result of system failures.

Despite the implementation of security measures, any of the internal computer systems belonging to us, our collaborators or our third-party service providers are vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failure. Any system failure, accident or security breach that causes interruptions in our own, in collaborators' or in third-party service vendors' operations could result in a material disruption of our drug discovery and development programs. For example, the loss of clinical trial data from completed or future clinical trials could result in delays in our or our collaborators' regulatory approval efforts and significantly increase our costs in order

to recover or reproduce the lost data. To the extent that any disruption or security breach results in a loss or damage to our data or applications, or inappropriate disclosure of confidential or proprietary information, we may incur liability as a result, our drug discovery programs and competitive position may be adversely affected and the further development of our product candidates may be delayed. Furthermore, we may incur additional costs to remedy the damages caused by these disruptions or security breaches.

Our operations, or the third parties upon whom we depend, are vulnerable to interruption by fire, earthquake, power loss, telecommunications failure, terrorist activity and other events beyond our control, which could harm our business.

Our facilities are located in San Diego, California, which is a seismically active region, and has also historically been subject to wildfires and electrical blackouts as a result of a shortage of available electrical power. We have not undertaken a systematic analysis of the potential consequences to our business and financial results from a major earthquake, fire, power loss, terrorist activity or other disasters and do not have a recovery plan for such disasters. In addition, we do not carry sufficient insurance to compensate us for actual losses from interruption of our business that may occur, and any losses or damages incurred by us could harm our business. We maintain multiple copies of each of our antibody sequences and electronic data records, most of which we maintain at our headquarters. If our facility was impacted by a seismic or wildfire event, we could lose all our antibody sequences, which would have an adverse effect on our ability to perform our obligations under our collaborations and discover new targets.

Furthermore, integral parties in our supply chain are geographically concentrated and operating from single sites, increasing their vulnerability to natural disasters or other sudden, unforeseen and severe adverse events. If such an event were to affect our supply chain, it could have a material adverse effect on our business.

Risks Related to Our Dependence on Third Parties

Our existing collaborations, including those with TESARO and Celgene, are important to our business, and future collaborations may also be important to us. If we are unable to maintain any of these collaborations, or if these collaborations are not successful, our business could be adversely affected.

We have entered into collaborations with other biotechnology companies to develop several of our product candidates, and such collaborations currently represent a significant portion of our product pipeline. In addition, we have entered into other collaborations pursuant to which we have provided access to our technology platform to our collaborators to enable the optimization of their own product candidates. We have entered into antibody generation and/or development collaborations with various collaborators, including TESARO and Celgene, under which we have generated therapeutic quality antibodies using our technology platform and conducted certain preclinical studies in collaboration. We are currently aware that TESARO and Celgene have advanced multiple antibodies generated through our collaboration into clinical trials. If our collaborators terminate any of our collaborations, we may not receive all or any of this funding, which would adversely affect our business or financial condition. Our operational obligations under each of our collaborations has ended.

We are unable to predict the success of our collaborations. Our collaborators have discretion in determining and directing the efforts and resources, including the ability to discontinue all efforts and resources, they apply to the development and, if approval is obtained, commercialization and marketing of the product candidates covered by such collaborations. As a result, our collaborators may elect to de-prioritize our programs, change their strategic focus or pursue alternative technologies in a manner that results in reduced, delayed or no revenue to us. Our collaborators may have other marketed products and product candidates under collaboration with other companies, including some of our competitors, and their corporate objectives may not be consistent with our best interests. Our collaborators may also be unsuccessful in developing or commercializing our products. If our collaborations are unsuccessful, our business, financial condition, results of operations and prospects could be adversely affected. In addition, any dispute or litigation proceedings we may have with our collaborators in the future could delay development programs, create uncertainty as to ownership of intellectual property rights, distract management from other business activities and generate substantial expense.

We may not succeed in establishing and maintaining additional development collaborations, which could adversely affect our ability to develop and commercialize product candidates.

In addition to our current licensing arrangements with TESARO and Celgene, a part of our strategy is to enter into additional strategic product development collaborations in the future, including collaborations to broaden and accelerate clinical development and potential commercialization of our product candidates. We may face significant competition in seeking appropriate development partners and the negotiation process is time-consuming and complex. Moreover, we may not succeed in our efforts to establish a development collaboration or other alternative arrangements for any of our other existing or future product candidates and programs because our research and development pipeline may be insufficient, our product candidates

and programs may be deemed to be at too early a stage of development for collaborative effort and/or third parties may not view our product candidates and programs as having the requisite potential to demonstrate safety and efficacy or to be commercially viable. Even if we are successful in our efforts to establish new development collaborations, the terms that we agree upon may not be favorable to us and we may not be able to maintain such development collaborations if, for example, development or approval of a product candidate is delayed or sales of an approved product candidate are disappointing. Any delay in entering into new development collaboration agreements related to our product candidates could delay the development and commercialization of our product candidates and reduce their competitiveness if they reach the market.

Moreover, if we fail to establish and maintain additional development collaborations related to our product candidates:

- the development of certain of our current or future product candidates may be terminated or delayed;
- our cash expenditures related to development of certain of our current or future product candidates would increase significantly and we may need to seek additional financing;
- we may be required to hire additional employees or otherwise develop expertise, such as sales and marketing expertise, for which we have not budgeted; and
- we will bear all of the risk related to the development of any such product candidates.

If third parties on which we depend to conduct our planned preclinical studies, or any future clinical trials, do not perform as contractually required, fail to satisfy regulatory or legal requirements or miss expected deadlines, our development program could be delayed with adverse effects on our business, financial condition, results of operations and prospects.

We rely on third party clinical investigators, contract research organizations (for non-clinical and clinical activities) or CROs, contract manufacturing organizations, or CMOs, and consultants to design, conduct, supervise and monitor key activities relating to, discovery, manufacturing, non-clinical studies and clinical trials of our product candidates, and we intend to do the same for future activities relating to existing and future programs. Because we rely on third parties and do not have the ability to conduct all required discovery, manufacturing, preclinical studies or clinical trials independently, we have less control over the timing, quality and other aspects of discovery, manufacturing, preclinical studies and clinical trials than we would if we conducted them on our own. These investigators, CROs, CMOs and consultants are not our employees and we have limited control over the amount of time and resources that they dedicate to our programs. These third parties may have contractual relationships with other entities, some of which may be our competitors, which may draw time and resources from our programs. The third parties we contract with might not be diligent, careful or timely in conducting our discovery, manufacturing, preclinical studies or clinical trials, resulting in discovery, manufacturing, preclinical studies or clinical trials being delayed or unsuccessful, in whole or in part.

If we cannot contract with acceptable third parties on commercially reasonable terms, or at all, or if these third parties do not carry out their contractual duties, satisfy legal and regulatory requirements for the conduct of preclinical studies or clinical trials or meet expected deadlines, our clinical development programs could be delayed and otherwise adversely affected. In all events, we are responsible for ensuring that each of our preclinical studies and clinical trials is conducted in accordance with the general investigational plan and protocols for the trial. Our reliance on third parties that we do not control does not relieve us of these responsibilities and requirements. Any such event could have an adverse effect on our business, financial condition, results of operations and prospects.

We rely completely on third parties to manufacture our nonclinical, clinical drug supplies and future commercial supplies of any approved products.

We outsource the manufacture of our product candidates. We do not currently have the infrastructure or internal capability to manufacture supplies of our product candidates for use in development and commercialization. If we were to experience an unexpected loss of supply of our product candidates for any reason, whether as a result of manufacturing, supply or storage issues or otherwise, our business would be harmed, and we could experience delays, disruptions, suspensions or terminations of, or be required to restart or repeat, any pending or ongoing clinical trials. Although we generally do not begin a clinical trial unless we believe we have a sufficient supply of a product candidate to complete the clinical trial, we may be required to manufacture additional supplies of our product candidates to the extent our estimates of the amounts required prove inaccurate, we suffer unexpected losses of product candidate supplies, or to the extent that we are required to have fresh product candidate supplies manufactured to satisfy regulatory requirements or specifications. Any significant delay or discontinuation in the supply of a product candidate, or the raw material components thereof, due to the need to replace a contract manufacturer or other third-party manufacturer, could considerably harm our business and ability to generate revenue and delay completion of our clinical trials, product testing and potential regulatory approval of our product candidates.

Any delays in our preclinical or clinical development could lead to delays or cancellations of forecasted manufacturing batches, which would typically result in significant fees owed by us to the manufacturer and an uncertainty as to when the manufacturer will have the availability for a new time slot to manufacture the batch, which could lead to further delays in the development of the product candidate and have an adverse effect on our business.

Reliance on third-party manufacturers entails additional risks, including the possible breach of the manufacturing agreement by the third party, and the possible termination or nonrenewal of the agreement by the manufacturer at a time that is costly or inconvenient for us. If our contract manufacturers were to breach or terminate their manufacturing arrangements with us, the development or commercialization of the affected product candidates could be significantly delayed, which could have an adverse effect on our business. Any change in our manufacturers could be costly because the commercial terms of any new arrangement could be less favorable and because the expenses relating to the transfer of necessary technology and processes could be significant.

We depend on a small number of suppliers for the raw materials necessary to produce our product candidates. The loss of these suppliers, or their failure to supply us with these raw materials, would materially and adversely affect our business.

We depend on the availability of key raw materials for our product candidates from a small number of third-party suppliers. Because there are a limited number of suppliers for the raw materials that we use to manufacture our product candidates, we may need to engage alternate suppliers to prevent a possible disruption of the manufacture of the materials necessary to produce our product candidates for our clinical trials. We do not have any control over the availability of raw materials. If we or our manufacturers are unable to purchase these raw materials on acceptable terms, at sufficient quality levels, or in adequate quantities, if at all, the development of our product candidates would be delayed or there would be a shortage in supply, which would impair our ability to meet our development objectives for our product candidates or generate revenues from the sale of any approved products.

Risks Related to Regulatory Approval of Our Product Candidates and Other Legal Compliance Matters

Even if our product candidates receive regulatory approval, they will be subject to significant post-marketing regulatory requirements.

Any regulatory approvals that we may receive for our product candidates will require surveillance to monitor the safety and efficacy of the product candidate, may contain significant limitations related to use restrictions for specified age groups, warnings, precautions or contraindications, and may include burdensome post-approval study or risk management requirements. For example, the FDA may require a risk evaluation and mitigation strategy in order to approve our product candidates, which could entail requirements for a medication guide, physician communication plans or additional elements to ensure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. In addition, if the FDA or foreign regulatory authorities approve our product candidates, the manufacturing processes, labeling, packaging, distribution, adverse event reporting, storage, advertising, promotion, import, export and recordkeeping for our product candidates will be subject to extensive and ongoing regulatory requirements. These requirements include submissions of safety and other post-marketing information and reports, registration, as well as continued compliance with cGMPs and good clinical practices, or GCPs, for any clinical trials that we conduct post-approval. In addition, manufacturers of drug products and their facilities are subject to continual review and periodic inspections by the FDA and other regulatory authorities for compliance with cGMP regulations and standards. If we or a regulatory agency discover previously unknown problems with a product, such as adverse events of unanticipated severity or frequency, or problems with the facilities where the product is manufactured, a regulatory agency may impose restrictions on that product, the manufacturing facility or us, including requiring recall or withdrawal of the product from the market or suspension of manufacturing. In addition, failure to comply with FDA and foreign regulatory requirements may, either before or after product approval, if any, subject our company to administrative or judicially imposed sanctions, including:

- restrictions on our ability to conduct clinical trials, including full or partial clinical holds on ongoing or planned trials;
- restrictions on the products, manufacturers or manufacturing process;
- warning or untitled letters;
- civil and criminal penalties;
- injunctions;
- suspension or withdrawal of regulatory approvals;
- product seizures, detentions or import bans;

- voluntary or mandatory product recalls and publicity requirements;
- total or partial suspension of production;
- imposition of restrictions on operations, including costly new manufacturing requirements; and
- refusal to approve pending BLAs or supplements to approved BLAs.

The occurrence of any event or penalty described above may inhibit our ability to commercialize our product candidates and generate revenue.

Advertising and promotion of any product candidate that obtains approval in the United States will be heavily scrutinized by the FDA, the Department of Justice, the Department of Health and Human Services' Office of Inspector General, state attorneys general, members of Congress and the public. Violations, including promotion of our products for unapproved (or off-label) uses, are subject to enforcement letters, inquiries and investigations, and civil and criminal sanctions by the government. Additionally, comparable foreign regulatory authorities will heavily scrutinize advertising and promotion of any product candidate that obtains approval outside of the United States.

In the United States, engaging in the impermissible promotion of our products for off-label uses can also subject us to false claims litigation under federal and state statutes, which can lead to civil and criminal penalties and fines and agreements that materially restrict the manner in which a company promotes or distributes drug products. These false claims statutes include the federal False Claims Act, which allows any individual to bring a lawsuit against a biotechnology company on behalf of the federal government alleging submission of false or fraudulent claims, or causing to present such false or fraudulent claims, for payment by a federal program such as Medicare or Medicaid. If the government prevails in the lawsuit, the individual will share in any fines or settlement funds. Since 2004, these False Claims Act lawsuits against biotechnology companies have increased significantly in volume and breadth, leading to several substantial civil and criminal settlements regarding certain sales practices promoting off-label drug uses involving fines in excess of \$1.0 billion. This growth in litigation has increased the risk that a biotechnology company will have to defend a false claim action, pay settlement fines or restitution, agree to comply with burdensome reporting and compliance obligations, and be excluded from Medicare, Medicaid and other federal and state healthcare programs. If we do not lawfully promote our approved products, we may become subject to such litigation and, if we do not successfully defend against such actions, those actions may have an adverse effect on our business, financial condition and results of operations.

Our failure to obtain regulatory approval in international jurisdictions would prevent us from marketing our product candidates outside the United States.

In order to market and sell our products in other jurisdictions, we must obtain separate marketing approvals and comply with numerous and varying regulatory requirements. The approval procedure varies among countries and can involve additional testing. The time required to obtain approval may differ substantially from that required to obtain FDA approval. The regulatory approval process outside the United States generally includes all of the risks associated with obtaining FDA approval. In addition, in many countries outside the United States, we must secure product reimbursement approvals before regulatory authorities will approve the product for sale in that country. Obtaining foreign regulatory approvals and compliance with foreign regulatory requirements could result in significant delays, difficulties and costs for us and could delay or prevent the introduction of our products in certain countries.

If we fail to comply with the regulatory requirements in international markets and receive applicable marketing approvals, our target market will be reduced and our ability to realize the full market potential of our product candidates will be harmed and our business will be adversely affected. We may not obtain foreign regulatory approvals on a timely basis, if at all. Our failure to obtain approval of any of our product candidates by regulatory authorities in another country may significantly diminish the commercial prospects of that product candidate and our business prospects could decline.

We plan to seek Orphan Drug Designation for ANB019 or certain of our other product candidates and we may not be able to obtain or maintain Orphan Drug Designation or obtain the benefits associated with Orphan Drug status, including market exclusivity.

We plan to seek Orphan Drug Designation for ANB019 or certain of our other product candidates. Regulatory authorities in some jurisdictions, including the United States and the European Union, or EU, may designate biologics for relatively small patient populations as Orphan Drugs. Under the Orphan Drug Act, the FDA may designate a biologic as an Orphan Drug if it is intended to treat a rare disease or condition, which is generally defined as a patient population of fewer than 200,000 individuals in the United States. Generally, if a biologic with an Orphan Drug Designation subsequently receives the first

marketing approval for the indication for which it has such designation, the biologic is entitled to a period of marketing exclusivity, which precludes the FDA, in the United States, or the European Medicines Agency, or EMA, in the EU, from approving another marketing application for a drug containing the same active moiety for the same indication for that time period. The applicable period is seven years in the United States and ten years in the European Union. The EU exclusivity period can be reduced to six years if a biologic no longer meets the criteria for Orphan Drug Designation or if the biologic is sufficiently profitable so that market exclusivity is no longer justified. Orphan Drug exclusivity may be lost if the FDA or EMA determines that the request for designation was materially defective or if the manufacturer is unable to assure sufficient quantity of the drug to meet the needs of patients with the rare disease or condition. In addition, the Orphan Drug Designation does not convey any advantage in, or shorten the duration of, the regulatory review or approval process. Also, regulatory approval for any product candidate may be withdrawn and other candidates may obtain approval before us.

We have not applied for Orphan Drug Designation for ANB019 for any indication, and may not be able to obtain designation or any of the potential benefits associated with it. For example, we plan to seek FDA Orphan Drug Designation for ANB019 for the treatment of GPP and PPP, which will likely require that we demonstrate to FDA that GPP and PPP are distinct diseases from psoriasis generally (a non-rare disease) or that use of ANB019 may be appropriate for the treatment of GPP and PPP but not appropriate for use in the general psoriasis population.

Even if we obtain Orphan Drug Designation, we may not receive Orphan Drug exclusivity, and such exclusivity, if obtained, may not effectively protect the candidate from competition because different drugs or biologics can be approved for the same condition, and only the first biologic with an Orphan Drug Designation to receive regulatory approval for a particular indication will receive marketing exclusivity. Even after a drug or biological with Orphan Drug Designation is approved, the FDA can subsequently approve another biologic containing the same active moiety (which in the case of an antibody is the principal molecular structure) for the same condition if the FDA concludes that the later biologic is clinically superior in that it is shown to be safer, more effective or makes a major contribution to patient care.

Any drugs we develop may become subject to unfavorable third-party reimbursement practices and pricing regulations.

The availability and extent of coverage and adequate reimbursement by governmental and private payors is essential for most patients to be able to afford expensive treatments. Sales of any of our product candidates that receive marketing approval will depend substantially, both in the United States and internationally, on the extent to which the costs of our product candidates will be paid by health maintenance, managed care, pharmacy benefit and similar healthcare management organizations, or reimbursed by government health administration authorities, private health coverage insurers and other third-party payors. If reimbursement is not available, or is available only to limited levels, we may not be able to successfully commercialize our product candidates. Even if coverage is provided, the approved reimbursement amount may not be high enough to allow us to establish or maintain pricing sufficient to realize a sufficient return on our investment. Coverage and reimbursement may impact the demand for, or the price of, any product candidate for which we obtain marketing approval. If coverage and reimbursement are not available or reimbursement is available only to limited levels, we may not successfully commercialize any product candidate for which we obtain marketing approval.

There is significant uncertainty related to the insurance coverage and reimbursement of newly approved products. In the United States, the principal decisions about reimbursement for new products are typically made by the Centers for Medicare & Medicaid Services, or CMS, an agency within the U.S. Department of Health and Human Services, because CMS decides whether and to what extent a new product will be covered and reimbursed under Medicare. Private payors often follow CMS's decisions regarding coverage and reimbursement to a substantial degree. However, one payor's determination to provide coverage for a drug product does not assure that other payors will also provide coverage for the drug product. As a result, the coverage determination process is often a time-consuming and costly process that will require us to provide scientific and clinical support for the use of our products to each payor separately, with no assurance that coverage and adequate reimbursement will be applied consistently or obtained in the first instance.

Increasingly, third-party payors are requiring that drug companies provide them with predetermined discounts from list prices and are challenging the prices charged for medical products. Further, such payors are increasingly challenging the price, examining the medical necessity, and reviewing the cost effectiveness of medical drug products. There may be especially significant delays in obtaining coverage and reimbursement for newly approved drugs. Third-party payors may limit coverage to specific drug products on an approved list, known as a formulary, which might not include all FDA approved drugs for a particular indication. We or our collaborators may need to conduct expensive pharmaco-economic studies to demonstrate the medical necessity and cost effectiveness of our products. Nonetheless, our product candidates may not be considered medically necessary or cost effective. We cannot be sure that coverage and reimbursement will be available for any product that we commercialize and, if reimbursement is available, what the level of reimbursement and the timing of achieving a reimbursement determination will be.

Outside the United States, international operations are generally subject to extensive governmental price controls and other market regulations, and we believe the increasing emphasis on cost containment initiatives in Europe, Canada and other countries has and will continue to put pressure on the pricing and usage of therapeutics such as our product candidates. In many countries, particularly the countries of the European Union, the prices of medical products are subject to varying price control mechanisms as part of national health systems. In these countries, pricing negotiations with governmental authorities can take considerable time after the receipt of marketing approval for a product. To obtain reimbursement or pricing approval in some countries, we may be required to conduct a clinical trial that compares the cost-effectiveness of our product candidate to other available therapies. In general, the prices of products under such systems are substantially lower than in the United States. Other countries allow companies to fix their own prices for products, but monitor and control company profits. Additional foreign price controls or other changes in pricing regulation could restrict the amount that we are able to charge for our product candidates. Accordingly, in markets outside the United States, the reimbursement for our products may be reduced compared with the United States and may be insufficient to generate commercially reasonable revenue and profits.

Moreover, increasing efforts by governmental and third-party payors, in the United States and internationally, to cap or reduce healthcare costs may cause such organizations to limit both coverage and level of reimbursement for new products approved and, as a result, they may not cover or provide adequate payment for our product candidates. We expect to experience pricing pressures in connection with the sale of any of our product candidates due to the trend toward managed healthcare, the increasing influence of health maintenance organizations and additional legislative changes. The downward pressure on healthcare costs in general, particularly prescription drugs and surgical procedures and other treatments, has become very intense. As a result, increasingly high barriers are being erected to the entry of new products into the healthcare market.

In addition to CMS and private payors, professional organizations such as the American Medical Association, or AMA, can influence decisions about reimbursement for new products by determining standards for care. In addition, many private payors contract with commercial vendors who sell software that provide guidelines that attempt to limit utilization of, and therefore reimbursement for, certain products deemed to provide limited benefit to existing alternatives. Such organizations may set guidelines that limit reimbursement or utilization of our product candidates.

Furthermore, some of our target indications, including for GPP, are rare diseases with small patient populations. In order for therapeutics that are designed to treat smaller patient populations to be commercially viable, the reimbursement for such therapeutics must be higher, on a relative basis, to account for the low volume of sales. Accordingly, we will need to implement a coverage and reimbursement strategy for any approved product candidate that accounts for the smaller potential market size.

If we are unable to establish or sustain coverage and adequate reimbursement for any future product candidates from third-party payors, the adoption of those products and sales revenue will be adversely affected, which, in turn, could adversely affect the ability to market or sell those product candidates, if approved. Coverage policies and third-party reimbursement rates may change at any time. Even if favorable coverage and reimbursement status is attained for one or more products for which we or our collaborators receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future.

Recently enacted legislation may increase the difficulty and cost for us to obtain marketing approval of and commercialize our product candidates and affect the prices we may obtain.

Some of the provisions of the ACA have yet to be implemented and there have been judicial and Congressional challenges to certain aspects of the ACA. In addition, the current administration and Congress have previously sought, and will likely continue to seek, legislative and regulatory changes, including repeal and replacement of all or certain provisions of the ACA. While Congress has not passed repeal legislation, the Tax Cuts and Jobs Act of 2017 includes a provision repealing, effective January 1, 2019, the tax-based shared responsibility payment imposed by the ACA on certain individuals who fail to maintain qualifying health coverage for all or part of a year that is commonly referred to as the “individual mandate”. Congress may consider other legislation to repeal or replace elements of the ACA.

We may face difficulties from changes to current regulations and future legislation.

Existing regulatory policies may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our product candidates. We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action, either in the United States or abroad. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval that we may have obtained and we may not achieve or sustain profitability.

More recently, President Trump has signed an executive order and made statements that suggest he plans to seek repeal of all or portions of the ACA. There is uncertainty with respect to which legislation, if any, will be enacted and the impact President Trump's Administration may have, if any, and any changes likely will take time to unfold, and could have an impact on coverage and reimbursement for healthcare items and services covered by plans that were authorized by the ACA. However, we cannot predict the ultimate content, timing or effect of any healthcare reform legislation or the impact of potential legislation on us. In addition, other legislative changes have been proposed and adopted since the ACA was enacted. These changes included aggregate reductions to Medicare payments to providers of up to 2% per fiscal year, effective April 1, 2013, which, due to subsequent legislative amendments, will stay in effect through 2027 unless additional Congressional action is taken. In January 2013, President Obama signed into law the American Taxpayer Relief Act of 2012, which, among other things, reduced Medicare payments to several providers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. These new laws may result in additional reductions in Medicare and other healthcare funding, which could have a material adverse effect on customers for our drugs, if approved, and accordingly, our financial operations.

Likewise, the annual Medicare Physician Fee Schedule update, which, until recently, was based on a target-setting formula system called the Sustainable Growth Rate, or SGR, was adjusted to reflect the comparison of actual expenditures to target expenditures. Because one of the factors for calculating the SGR was linked to the growth in the U.S. gross domestic product, or GDP, the SGR formula often resulted in a negative payment update when growth in Medicare beneficiaries' use of services exceeded GDP growth. Congress repeatedly intervened to delay the implementation of negative SGR payment updates. For example, on April 1, 2014, with the enactment of the Protecting Access to Medicare Act of 2014, Congress prevented the 24 percent cut that was to occur by continuing the previously implemented 0.5 percent payment increase through December 31, 2014 and maintaining a zero percent payment update from January 1, 2015 through March 31, 2015. However, on April 14, 2015, Congress passed the Medicare Access and CHIP Reauthorization Act of 2015, which was signed into law by President Obama on April 16, 2015. This law repeals the SGR methodology from the physician payment formula, institutes a 0% update to the Medicare Physician Fee Schedule for the January 1 to July 1, 2015 period, a 0.5% payment update for July 2015 through the end of 2019, and a 0% payment update for 2020 through 2025, along with a merit-based incentive payment system beginning January 1, 2019, that will replace current incentive programs. For 2026 and subsequent years, the payment update will be either 0.75% or 0.25%, depending on which Alternate Payment Model the physician participates.

We expect that the ACA, as well as other healthcare reform measures that may be adopted in the future, may result in more rigorous coverage criteria and in additional downward pressure on the price that we receive for any approved product. Any reduction in reimbursement from Medicare or other government programs may result in a similar reduction in payments from private payors. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability, or commercialize our product candidates.

Legislative and regulatory proposals have been made to expand post-approval requirements and restrict sales and promotional activities for biotechnology products. We cannot be sure whether additional legislative changes will be enacted, or whether FDA regulations, guidance or interpretations will be changed, or what the impact of such changes on the marketing approvals of our product candidates, if any, may be. In addition, increased scrutiny by the U.S. Congress of the FDA's approval process may significantly delay or prevent marketing approval, as well as subject us to more stringent product labeling and post-marketing testing and other requirements.

Our business entails a significant risk of product liability and our ability to obtain sufficient insurance coverage could have an adverse effect on our business, financial condition, results of operations or prospects.

Our business exposes us to significant product liability risks inherent in the development, testing, manufacturing and marketing of therapeutic treatments. Product liability claims could delay or prevent completion of our development programs. If we succeed in marketing products, such claims could result in an FDA investigation of the safety and effectiveness of our products, our manufacturing processes and facilities or our marketing programs and potentially a recall of our products or more serious enforcement action, limitations on the approved indications for which they may be used or suspension or withdrawal of approvals. Regardless of the merits or eventual outcome, liability claims may also result in decreased demand for our products, injury to our reputation, costs to defend the related litigation, a diversion of management's time and our resources, substantial monetary awards to trial participants or patients and a decline in our stock price. We currently have product liability insurance that we believe is appropriate for our stage of development and may need to obtain higher levels prior to marketing any of our product candidates. Any insurance we have or may obtain may not provide sufficient coverage against potential liabilities. Furthermore, clinical trial and product liability insurance is becoming increasingly expensive. As a result, we may be unable to obtain sufficient insurance at a reasonable cost to protect us against losses caused by product liability claims that could have an adverse effect on our business.

Our relationships with customers and third-party payors will be subject to applicable anti-kickback, fraud and abuse, transparency and other healthcare laws and regulations, which could expose us to, among other things, criminal sanctions, civil penalties, contractual damages, reputational harm, administrative burdens and diminished profits and future earnings.

Healthcare providers and third-party payors play a primary role in the recommendation and prescription of any product candidates for which we obtain marketing approval. Our future arrangements with third-party payors and customers may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which we market, sell and distribute our products for which we obtain marketing approval. Restrictions under applicable federal and state healthcare laws and regulations, include the following:

- the federal Anti-Kickback Statute prohibits, among other things, persons and entities from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward, or in return for, either the referral of an individual for, or the purchase, order or recommendation of, any good or service, for which payment may be made under a federal healthcare program such as Medicare and Medicaid;
- the federal false claims and civil monetary penalties laws, including the civil False Claims Act, impose criminal and civil penalties, including civil whistleblower or qui tam actions, against individuals or entities for, among other things, knowingly presenting, or causing to be presented, to the federal government, claims for payment that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government;
- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, imposes criminal and civil liability for, among other things, executing or attempting to execute a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters;
- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act and its implementing regulations, also imposes obligations, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information;
- the federal Physician Payments Sunshine Act requires applicable manufacturers of covered drugs, devices, biologics, and medical supplies for which payment is available under Medicare, Medicaid, or the Children’s Health Insurance Program, with specific exceptions, to report to CMS annually information regarding payments and other transfers of value to physicians and teaching hospitals as well as information regarding ownership and investment interests held by physicians and their immediate family members. The information was made publicly available on a searchable website in September 2014 and will be disclosed on an annual basis; and
- analogous state and foreign laws and regulations, such as state anti-kickback and false claims laws, may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers.

Some state laws require biotechnology companies to comply with the biotechnology industry’s voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government and may require drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures. For example, several states now require prescription drug companies to report certain expenses relating to the marketing and promotion of drug products and to report gifts and payments to individual healthcare practitioners in these states. Other states prohibit various marketing-related activities, such as the provision of certain kinds of gifts or meals. Still other states require the posting of information relating to clinical studies and their outcomes. Some states require the reporting of certain pricing information, including information pertaining to and justifying price increases, or prohibit prescription drug price gouging. And states such as California, Connecticut, Nevada, and Massachusetts require pharmaceutical companies to implement compliance programs and/or marketing codes. Other states are considering similar proposals. Compliance with these laws is difficult and time consuming, and companies that do not comply with these state laws face civil penalties.

State and foreign laws also govern the privacy and security of health information in some circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts. For example, the collection and use of health data in the EU is governed by the General Data Protection Regulation (GDPR), which became fully applicable in May 2018. The GDPR extends the geographical scope of EU Data protection law to non-EU entities under certain conditions, tightens existing EU data protection principles and creates new obligations for companies and new rights for individuals. The GDPR is new and guidance, interpretation and application under the GDPR are still developing. Failure to comply with the GDPR may result in substantial fines and other administrative penalties. The GDPR may increase our responsibility and liability in relation to personal data that we process and we may be required to put in place additional

mechanisms ensuring compliance with the GDPR. The GDPR is new and the pending European Union ePrivacy Regulation is expected to establish, new requirements applicable to the handling of personal data and imposes penalties for non-compliance of up to the greater of €20 million or 4% of worldwide revenue. Additionally, in June 2018, California passed the California Consumer Privacy Act, or CCPA, which provides new data privacy rights for consumers and new operational requirements for companies effective in 2020. The costs of compliance with, and other burdens imposed by, the GDPR, CCPA and other U.S., European Union and worldwide laws may impose onerous requirements on our business and, if our efforts to comply with such laws are not successful, our business could be adversely affected.

Efforts to ensure that our current and future business arrangements with third parties will comply with applicable healthcare laws and regulations will involve substantial costs. It is possible that governmental authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant penalties, including civil, criminal and administrative penalties, damages, fines, disgorgement, imprisonment, exclusion from participation in government funded healthcare programs, such as Medicare and Medicaid, contractual damages, reputational harm, diminished profits and future earnings, and the curtailment or restructuring of our operations. Defending against any such actions can be costly, time-consuming and may require significant financial and personnel resources. Therefore, even if we are successful in defending against any such actions that may be brought against us, our business may be impaired. Further, if any of the physicians or other healthcare providers or entities with whom we expect to do business is found to be not in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs.

Our employees may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements and insider trading.

We are exposed to the risk of employee fraud or other misconduct. Misconduct by employees could include failures to comply with FDA regulations, to provide accurate information to the FDA, to comply with federal and state health care fraud and abuse laws and regulations, to report financial information or data accurately or to disclose unauthorized activities to us. In particular, sales, marketing and business arrangements in the health care industry are subject to extensive laws and regulations intended to prevent fraud, misconduct, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive programs and other business arrangements. Employee misconduct could also involve the improper use of information obtained in the course of clinical trials, which could result in regulatory sanctions and serious harm to our reputation. We have adopted a code of conduct, but it is not always possible to identify and deter employee misconduct, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to comply with these laws or regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, including the imposition of significant fines or other sanctions.

Risks Related to Intellectual Property

If we are unable to obtain or protect intellectual property rights, we may not be able to compete effectively in our market.

Our success depends in significant part on our and our licensors', licensees' or collaborators' ability to establish, maintain and protect patents and other intellectual property rights and operate without infringing the intellectual property rights of others. We have filed numerous patent applications both in the United States and in foreign jurisdictions to obtain patent rights to inventions we have discovered. We have also licensed from third parties rights to patent portfolios. Some of these licenses give us the right to prepare, file and prosecute patent applications and maintain and enforce patents we have licensed, and other licenses may not give us such rights. The patent prosecution process is expensive and time-consuming, and we and our current or future licensors, licensees or collaborators may not be able to prepare, file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. It is also possible that we or our licensors, licensees or collaborators will fail to identify patentable aspects of inventions made in the course of development and commercialization activities before it is too late to obtain patent protection on them. Moreover, in some circumstances, we may not have the right to control the preparation, filing and prosecution of patent applications, or to maintain the patents, covering technology that we license from or license to third parties and are reliant on our licensors, licensees or collaborators. Therefore, these patents and applications may not be prosecuted and enforced in a manner consistent with the best interests of our business. If our current or future licensors, licensees or collaborators fail to establish, maintain or protect such patents and other intellectual property rights, such

rights may be reduced or eliminated. If our licensors, licensees or collaborators are not fully cooperative or disagree with us as to the prosecution, maintenance or enforcement of any patent rights, such patent rights could be compromised.

The patent position of biotechnology companies generally is highly uncertain, involves complex legal and factual questions and has in recent years been the subject of much litigation. As a result, the issuance, scope, validity, enforceability and commercial value of our and our current or future licensors', licensees' or collaborators' patent rights are highly uncertain. Our and our licensors', licensees' or collaborators' pending and future patent applications may not result in patents being issued which protect our technology or products, in whole or in part, or which effectively prevent others from commercializing competitive technologies and products. The patent examination process may require us or our licensors, licensees or collaborators to narrow the scope of the claims of our or our licensors', licensees' or collaborators' pending and future patent applications, which may limit the scope of patent protection that may be obtained. In the past, we have not always been able to obtain the full scope of patent protection we have initially sought in our patent applications, and as described above and as is typical for most biotechnology patent prosecution, we have been required to narrow or eliminate patent claims as part of the patent prosecution process. In addition, some patent applications that we or our licensors have filed have not resulted in issued patents because we or our licensors have abandoned those patent applications as changes in business and/or legal strategies dictated.

We cannot assure you that all of the potentially relevant prior art relating to our patents and patent applications has been found. If such prior art exists, it can invalidate a patent or prevent a patent from issuing from a pending patent application. Even if patents do successfully issue and even if such patents cover our product candidates, third parties may initiate opposition, interference, re-examination, post-grant review, inter partes review, nullification or derivation action in court or before patent offices, or similar proceedings challenging the validity, enforceability or scope of such patents, which may result in the patent claims being narrowed or invalidated. Our and our licensors', licensees' or collaborators' patent applications cannot be enforced against third parties practicing the technology claimed in such applications unless and until a patent issues from such applications, and then only to the extent the issued claims cover the technology.

Because patent applications in the United States and most other countries are confidential for a period of time after filing, and some remain so until issued, we cannot be certain that we or our licensors were the first to file any patent application related to a product candidate. Furthermore, if third parties have filed such patent applications on or before March 15, 2013, an interference proceeding in the United States can be initiated by such third parties to determine who was the first to invent any of the subject matter covered by the patent claims of our applications. If third parties have filed such applications after March 15, 2013, a derivation proceeding in the United States can be initiated by such third parties to determine whether our invention was derived from theirs. Even where we have a valid and enforceable patent, we may not be able to exclude others from practicing our invention where the other party can show that they used the invention in commerce before our filing date or the other party benefits from a compulsory license. In addition, patents have a limited lifespan. In the United States, if all maintenance fees are timely paid, the natural expiration of a patent is generally 20 years from its earliest U.S. filing date. Various extensions may be available, but the life of a patent, and the protection it affords, is limited. Even if patents covering our product candidates are obtained, once the patent life has expired for a product, we may be open to competition from competitive medications, including biosimilar or generic medications.

Furthermore, given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. As a result, our owned and licensed patent portfolio may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours. We expect to seek extensions of patent terms where these are available in any countries where we are prosecuting patents. This includes in the United States under the Drug Price Competition and Patent Term Restoration Act of 1984, which permits a patent term extension of up to five years beyond the expiration of the patent. However the applicable authorities, including the FDA and the U.S. Patent and Trademark Office, or USPTO, in the United States, and any equivalent foreign regulatory authority, may not agree with our assessment of whether such extensions are available, and may refuse to grant extensions to our patents, or may grant more limited extensions than we request. If this occurs, our competitors may take advantage of our investment in development and clinical trials by referencing our clinical and preclinical data and launch their product earlier than might otherwise be the case.

We may not be able to protect our intellectual property rights throughout the world.

Filing, prosecuting, enforcing and defending patents on product candidates in all countries throughout the world would be prohibitively expensive, and our or our licensors' or collaborators' intellectual property rights may not exist in some countries outside the United States or may be less extensive in some countries than in the United States. In addition, the laws of some foreign countries do not protect intellectual property rights to the same extent as federal and state laws in the United States. Consequently, we and our licensors or collaborators may not be able to prevent third parties from practicing our and our

licensors' or collaborators' inventions in all countries outside the United States, or from selling or importing products made using our and our licensors' or collaborators' inventions in and into the United States or other jurisdictions. Competitors may use our and our licensors' or collaborators' technologies in jurisdictions where we have not obtained patent protection to develop their own products and, further, may export otherwise infringing products to territories where we and our licensors or collaborators have patent protection, but enforcement is not as strong as that in the United States. These products may compete with our product candidates, and our and our licensors' or collaborators' patents or other intellectual property rights may not be effective or sufficient to prevent them from competing.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents and other intellectual property protection, particularly those relating to biotechnology, which could make it difficult for us and our licensors or collaborators to stop the infringement of our and our licensors' or collaborators' patents or marketing of competing products in violation of our and our licensors' or collaborators' proprietary rights generally. Proceedings to enforce our and our licensors' or collaborators' patent rights in foreign jurisdictions could result in substantial costs and divert our and our licensors' or collaborators' efforts and attention from other aspects of our business, could put our and our licensors' or collaborators' patents at risk of being invalidated or interpreted narrowly and our and our licensors' or collaborators' patent applications at risk of not issuing and could provoke third parties to assert claims against us or our licensors or collaborators. We or our licensors or collaborators may not prevail in any lawsuits that we or our licensors or collaborators initiate, and the damages or other remedies awarded, if any, may not be commercially meaningful.

Changes in patent law could diminish the value of patents in general, thereby impairing our ability to protect our product candidates.

As is the case with other biopharmaceutical companies, our success is highly dependent on intellectual property, particularly patents. Obtaining and enforcing patents in the biopharmaceutical industry involve technological and legal complexity, and obtaining and enforcing biopharmaceutical patents is costly, time-consuming, and inherently uncertain.

Patent reform legislation could increase the uncertainties and costs surrounding the prosecution of our and our licensors' or collaborators' patent applications and the enforcement or defense of our or our licensors' or collaborators' issued patents. On September 16, 2011, the Leahy-Smith America Invents Act, or the Leahy-Smith Act, was signed into law. The Leahy-Smith Act includes a number of significant changes to U.S. patent law. These include provisions that affect the way patent applications are prosecuted and may also affect patent litigation.

An important change introduced by the AIA is that, as of March 16, 2013, the United States transitioned to a "first-to-file" system for deciding which party should be granted a patent when two or more patent applications are filed by different parties claiming the same invention. A third party that files a patent application in the USPTO after that date but before us could therefore be awarded a patent covering an invention of ours even if we had made the invention before it was made by the third party. This will require us to be cognizant going forward of the time from invention to filing of a patent application, but circumstances could prevent us from promptly filing patent applications on our inventions.

Among some of the other changes introduced by the AIA are changes that limit where a patentee may file a patent infringement suit and providing opportunities for third parties to challenge any issued patent in the USPTO. This applies to all of our U.S. patents, even those issued before March 16, 2013. Because of a lower evidentiary standard in USPTO proceedings compared to the evidentiary standard in United States federal courts necessary to invalidate a patent claim, a third party could potentially provide evidence in a USPTO proceeding sufficient for the USPTO to hold a claim invalid even though the same evidence would be insufficient to invalidate the claim if first presented in a district court action. Accordingly, a third party may attempt to use the USPTO procedures to invalidate our patent claims that would not have been invalidated if first challenged by the third party as a defendant in a district court action. The Leahy-Smith Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents.

The USPTO has developed new regulations and procedures to govern administration of the Leahy-Smith Act, and many of the substantive changes to patent law associated with the Leahy-Smith Act, and, in particular, the first to file provisions, only became effective in 2013. It is not clear what, if any, impact the Leahy-Smith Act will have on the operation of our business. However, the Leahy-Smith Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our or our licensors' or collaborators' patent applications and the enforcement or defense of our or our licensors' or collaborators' issued patents, all of which could have an adverse effect on our business and financial condition. Moreover, in recent years, the Supreme Court and the U.S. Court of Appeals for the Federal Circuit have rendered decisions in several patent cases such as *Association for Molecular Pathology v. Myriad Genetics, Inc. (Myriad I)*, *BRCA1- & BRCA2-Based Hereditary*

Cancer Test Patent Litig., (Myriad II), Mayo Collaborative Services v. Prometheus Laboratories, Inc., and Alice Corporation Pty. Ltd. v. CLS Bank International, either narrowing the scope of patent protection available in certain circumstances or weakening the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to our and our licensors' or collaborators' ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on decisions by Congress, the federal courts, and the USPTO, the laws and regulations governing patents could change in unpredictable ways that would weaken our and our licensors' or collaborators' ability to obtain new patents or to enforce existing patents and patents that we and our licensors or collaborators may obtain in the future.

Obtaining and maintaining our patent protection depends on compliance with various procedural, document submission, fee payment and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements.

Periodic maintenance and annuity fees on any issued patent are due to be paid to the USPTO and foreign patent agencies in several stages over the lifetime of the patent. The USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. While an inadvertent lapse can in many cases be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Non-compliance events that could result in abandonment or lapse of a patent or patent application include failure to respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. If we or our licensors or collaborators fail to maintain the patents and patent applications covering our product candidates, our competitors might be able to enter the market, which would have an adverse effect on our business.

Our reliance on third parties requires us to share our trade secrets, which increases the possibility that a competitor will discover them or that our trade secrets will be misappropriated or disclosed.

Because we collaborate with various collaborators on the development and commercialization of one or more of our product candidates and because we rely on third parties to manufacture our product candidates, we must, at times, share trade secrets with them. We seek to protect our wholly-owned technology in part by entering into confidentiality agreements and, if applicable, material transfer agreements, consulting agreements or other similar agreements with our advisors, employees, third-party contractors and consultants prior to disclosing proprietary information. These agreements typically limit the rights of the third parties to use or disclose our confidential information, including our trade secrets. Despite the contractual provisions employed when working with third parties, the need to share trade secrets and other confidential information increases the risk that such trade secrets become known by our competitors, are inadvertently incorporated into the technology of others, or are disclosed or used in violation of these agreements. Given that our proprietary position is based, in part, on our know-how and trade secrets, a competitor's discovery of our trade secrets or other unauthorized use or disclosure would impair our competitive position and may have an adverse effect on our business.

In addition, these agreements typically restrict the ability of our advisors, employees, third-party contractors and consultants to publish data potentially relating to our trade secrets, although our agreements may contain certain limited publication rights. For example, any academic institution that we may collaborate with in the future may be granted rights to publish data arising out of such collaboration, provided that we are notified in advance and given the opportunity to delay publication for a limited time period in order for us to secure patent protection of intellectual property rights arising from the collaboration, in addition to the opportunity to remove confidential or trade secret information from any such publication. Our existing collaborative research and development programs may require us to share trade secrets under the terms of our research and development collaborations or similar agreements. Despite our efforts to protect our trade secrets, our competitors may discover our trade secrets, either through breach of our agreements with third parties, independent development or publication of information by any of our third-party collaborators. A competitor's discovery of our trade secrets would impair our competitive position and have an adverse impact on our business.

We may become involved in lawsuits to protect or enforce our intellectual property, which could be expensive, time-consuming and unsuccessful and have an adverse effect on the success of our business.

Third parties may infringe our or our licensors' or collaborators' patents or misappropriate or otherwise violate our or our licensors' or collaborators' intellectual property rights. In the future, we or our licensors or collaborators may initiate legal proceedings to enforce or defend our or our licensors' or collaborators' intellectual property rights, to protect our or our licensors' or collaborators' trade secrets or to determine the validity or scope of intellectual property rights we own or control. Also, third parties may initiate legal proceedings against us or our licensors or collaborators to challenge the validity or scope

of intellectual property rights we own or control. These proceedings can be expensive and time-consuming, and many of our or our licensors' or collaborators' adversaries in these proceedings may have the ability to dedicate substantially greater resources to prosecuting these legal actions than we or our licensors or collaborators. In addition, in an infringement proceeding, a court may decide that a patent owned by or licensed to us is invalid or unenforceable, or may refuse to stop the other party from using the technology at issue on the grounds that our or our licensors' or collaborators' patents do not cover the technology in question. Furthermore, an adverse result in any litigation or administrative proceeding could put one or more of our or our licensors' or collaborators' patents at risk of being invalidated, held unenforceable or interpreted narrowly.

Accordingly, despite our or our licensors' or collaborators' efforts, we or our licensors or collaborators may not prevent third parties from infringing upon or misappropriating intellectual property rights we own or control, particularly in countries where the laws may not protect those rights as fully as in the United States. In addition, litigation and administrative proceedings could result in substantial costs and diversion of management resources, which could harm our business and financial results.

Within and outside of the United States, there has been a substantial amount of litigation and administrative proceedings regarding patent and other intellectual property rights in the pharmaceutical industry including opposition, derivation, reexamination, inter partes review or interference proceedings, or other preissuance or post-grant proceedings in the United States or other jurisdictions. Such proceedings may be provoked by third parties or by us or our licensors or collaborators to protect or enforce our or our licensors' or collaborators' patents or patent applications. Additionally, third-party preissuance submission of prior art to the USPTO or other foreign jurisdictions may jeopardize the issuance or scope of our or our licensors' or collaborators' patent applications. An unfavorable outcome in any such proceedings could require us or our licensors or collaborators to cease using the related technology, or to attempt to license rights to it from the prevailing party. Our business could be harmed if the prevailing party does not offer us or our licensors or collaborators a license on commercially reasonable terms or at all, and we could be forced to stop commercializing our product candidates. Even if we or our licensors or collaborators obtain a license, it may be non-exclusive, thereby giving our competitors access to the same technologies licensed to us or our licensors or collaborators.

In addition, if the breadth or strength of protection provided by our or our licensors' or collaborators' patents and patent applications is threatened, it could dissuade companies from collaborating with us to license, develop or commercialize current or future product candidates. Even if we successfully defend such litigation or proceeding, we may incur substantial costs, and it may distract our management and other employees. We could be found liable for monetary damages, including treble damages and attorneys' fees if we are found to have willfully infringed a patent.

Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. There could also be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have an adverse effect on the price of shares of our common stock.

If we breach the license agreements related to our product candidates, we could lose the ability to continue the development and commercialization of our product candidates.

Our commercial success depends upon our ability, and the ability of our licensors and collaborators, to develop, manufacture, market and sell our product candidates and use our and our licensors' or collaborators' wholly-owned technologies without infringing the proprietary rights of third parties. A third party may hold intellectual property, including patent rights that are important or necessary to the development of our products. As a result, we are a party to a number of technology licenses that are important to our business and expect to enter into additional licenses in the future. For example, we have licensed the rights to certain intellectual property relating to SHM under our in-license agreement with the Medical Research Council, which is the subject of issued patents and pending patent applications in certain countries. If we fail to comply with the obligations under these agreements, including payment and diligence terms, our licensors may have the right to terminate these agreements, in which event we may not be able to develop, manufacture, market or sell any product that is covered by these agreements or may face other penalties under the agreements. Such an occurrence could adversely affect the value of the product candidate being developed under any such agreement. Termination of these agreements or reduction or elimination of our rights under these agreements may result in our having to negotiate new or reinstated agreements, which may not be available to us on equally favorable terms, or at all, or cause us to lose our rights under these agreements, including our rights to intellectual property or technology important to our development programs.

Disputes may arise regarding intellectual property subject to a licensing agreement, including:

- the scope of rights granted under the license agreement and other interpretation-related issues;

- the extent to which our technology and processes infringe on intellectual property of the licensor that is not subject to the licensing agreement;
- the sublicensing of patent and other rights under any collaboration relationships we might enter into in the future;
- our diligence obligations under the license agreement and what activities satisfy those diligence obligations;
- the ownership of inventions and know-how resulting from the joint creation or use of intellectual property by our licensors and us and our collaborators; and
- the priority of invention of patented technology.

If disputes over intellectual property that we have licensed prevent or impair our ability to maintain our current licensing arrangements on acceptable terms, we may be unable to successfully develop and commercialize the affected product candidates.

Third parties may initiate legal proceedings against us alleging that we infringe their intellectual property rights or we may initiate legal proceedings against third parties to challenge the validity or scope of intellectual property rights controlled by third parties, the outcome of which would be uncertain and could have an adverse effect on the success of our business.

Third parties may initiate legal proceedings against us or our licensors or collaborators alleging that we or our licensors or collaborators infringe their intellectual property rights, or we or our licensors or collaborators may initiate legal proceedings against third parties to challenge the validity or scope of intellectual property rights controlled by third parties, including in oppositions, interferences, reexaminations, inter partes reviews or derivation proceedings in the United States or other jurisdictions. These proceedings can be expensive and time-consuming, and many of our or our licensors' or collaborators' adversaries in these proceedings may have the ability to dedicate substantially greater resources to prosecuting these legal actions than we or our licensors or collaborators.

Parties making claims against us may obtain injunctive or other equitable relief, which could effectively block our ability to further develop and commercialize one or more of our product candidates. Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of management and employee resources from our business. An unfavorable outcome could require us or our licensors or collaborators to cease using the related technology or developing or commercializing our product candidates, or to attempt to license rights to it from the prevailing party. Our business could be harmed if the prevailing party does not offer us or our licensors or collaborators a license on commercially reasonable terms or at all. Even if we or our licensors or collaborators obtain a license, it may be non-exclusive, thereby giving our competitors access to the same technologies licensed to us or our licensors or collaborators. In addition, we could be found liable for monetary damages, including treble damages and attorneys' fees, if we are found to have willfully infringed a patent. A finding of infringement could prevent us from commercializing our product candidates or force us to cease some of our business operations, which could harm our business.

We may be subject to claims by third parties asserting that our employees or we have misappropriated their intellectual property, or claiming ownership of what we regard as our own intellectual property.

Many of our employees, including our senior management, were previously employed at universities or at other biopharmaceutical companies, including our competitors or potential competitors. Some of these employees executed proprietary rights, non-disclosure and non-competition agreements in connection with such previous employment. Although we try to ensure that our employees do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that we or these employees have used or disclosed confidential information or intellectual property, including trade secrets or other proprietary information, of any such employee's former employer. Litigation may be necessary to defend against these claims.

If we fail in prosecuting or defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel or sustain damages. Such intellectual property rights could be awarded to a third party, and we could be required to obtain a license from such third party to commercialize our technology or products, and could be non-exclusive, thereby giving our competitors access to the same technologies licensed to us. Such a license may not be available on commercially reasonable terms or at all. Even if we successfully prosecute or defend against such claims, litigation could result in substantial costs and distract management.

Our inability to protect our confidential information and trade secrets would harm our business and competitive position.

In addition to seeking patents for some of our technology and products, we also rely on trade secrets, including unpatented know-how, technology and other proprietary information, to maintain our competitive position. We seek to protect these trade secrets, in part, by entering into non-disclosure and confidentiality agreements with parties who have access to them, such as our employees, corporate collaborators, outside scientific collaborators, contract manufacturers, consultants, advisors and other third parties. We also enter into confidentiality and invention or patent assignment agreements with our employees and consultants. Despite these efforts, any of these parties may breach the agreements and disclose our proprietary information, including our trade secrets, and we may not be able to obtain adequate remedies for such breaches. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, expensive and time-consuming, and the outcome is unpredictable. In addition, some courts both within and outside the United States may be less willing or unwilling to protect trade secrets. Furthermore, if a competitor lawfully obtained or independently developed any of our trade secrets, we would have no right to prevent such competitor from using that technology or information to compete with us, which could harm our competitive position. Additionally, if the steps taken to maintain our trade secrets are deemed inadequate, we may have insufficient recourse against third parties for misappropriating the trade secret.

If we do not obtain protection under the Hatch-Waxman Amendments and similar foreign legislation for extending the term of patents covering each of our product candidates, our business may be harmed.

Depending upon the timing, duration and conditions of FDA marketing approval of our product candidates, one or more of our U.S. patents may be eligible for limited patent term extension under the Drug Price Competition and Patent Term Restoration Act of 1984, referred to as the Hatch-Waxman Amendments. The Hatch-Waxman Amendments permit a patent term extension of up to five years for a patent covering an approved product as compensation for effective patent term lost during product development and the FDA regulatory review process. However, we may not receive an extension if we fail to apply within applicable deadlines, fail to apply prior to expiration of relevant patents or otherwise fail to satisfy applicable requirements. Moreover, the length of the extension could be less than we request. If we are unable to obtain patent term extension or the term of any such extension is less than we request, the period during which we can enforce our patent rights for that product will be shortened, and our competitors may obtain approval to market competing products sooner. As a result, our revenue from applicable products could be reduced, possibly materially.

Risks Related to Ownership of Our Common Stock

The market price of our stock has been and may continue to be volatile, and you could lose all or part of your investment.

The trading price of our common stock may be highly volatile and subject to wide fluctuations in response to various factors, some of which we cannot control. In addition to the factors discussed in this “Risk Factors” section and elsewhere in this report, these factors include:

- the success of competitive products;
- regulatory actions with respect to our products or our competitors’ products;
- actual or anticipated changes in our growth rate relative to our competitors;
- announcements by us or our competitors of significant acquisitions, strategic collaborations, joint ventures, collaborations or capital commitments;
- results of preclinical studies and clinical trials of our product candidates or those of our competitors;
- regulatory or legal developments in the United States and other countries;
- developments or disputes concerning patent applications, issued patents or other proprietary rights;
- the recruitment or departure of key personnel;
- the level of expenses related to any of our product candidates or clinical development programs;
- developments with respect to our existing collaboration agreements and announcements of new collaboration agreements;
- the results of our efforts to in-license or acquire additional product candidates or products;
- actual or anticipated changes in estimates as to financial results, development timelines or recommendations by securities analysts;

- variations in our financial results or those of companies that are perceived to be similar to us;
- fluctuations in the valuation of companies perceived by investors to be comparable to us;
- share price and volume fluctuations attributable to inconsistent trading volume levels of our shares;
- announcement or expectation of additional financing efforts;
- sales of our common stock by us, our insiders or our other stockholders;
- changes in the structure of healthcare payment systems;
- market conditions in the biotechnology sector; and
- general economic, industry and market conditions.

In addition, the stock market in general, and the Nasdaq Global Select Market and biotechnology companies in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of these companies. Broad market and industry factors may negatively affect the market price of our common stock, regardless of our actual operating performance. The realization of any of the above risks or any of a broad range of other risks, including those described in this “Risk Factors” section, could have a dramatic and adverse impact on the market price of our common stock.

We have broad discretion in the use of the net proceeds from our public offerings and may not use them effectively.

Our management has broad discretion in the application of the net proceeds from our public offerings, and you will be relying on the judgment of our management regarding the application of these proceeds. Our management might not apply the net proceeds from our public offerings in ways that ultimately increase the value of your investment. If we do not invest or apply the net proceeds from our public offerings in ways that enhance stockholder value, we may fail to achieve expected financial results, which could cause our stock price to decline.

We may be subject to securities litigation, which is expensive and could divert management attention.

The market price of our common stock is volatile and, in the past, companies that have experienced volatility in the market price of their stock have been subject to securities class action litigation. We may be the target of this type of litigation in the future. Securities litigation against us could result in substantial costs and divert our management’s attention from other business concerns, which could seriously harm our business.

We are an emerging growth company, and we cannot be certain if the reduced reporting requirements applicable to emerging growth companies will make our common stock less attractive to investors.

We are an emerging growth company, as defined in the Jumpstart Our Business Startups Act of 2012, or JOBS Act. For as long as we continue to be an emerging growth company, we may take advantage of exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies, including not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, as amended, or the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements and exemptions from the requirements of holding nonbinding advisory stockholder votes on executive compensation and stockholder approval of any golden parachute payments not previously approved. We cannot predict if investors will find our common stock less attractive because we may rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile.

Under the JOBS Act, emerging growth companies can also delay adopting new or revised accounting standards until such time as those standards apply to private companies. We have irrevocably elected not to avail ourselves of this exemption from new or revised accounting standards and, therefore, are subject to the same new or revised accounting standards as other public companies that are not emerging growth companies. As a result, changes in rules of U.S. generally accepted accounting principles or their interpretation, the adoption of new guidance or the application of existing guidance to changes in our business could significantly affect our financial position and results of operations.

We will remain an emerging growth company until the earlier of (i) the last day of the fiscal year (a) following the fifth anniversary of the closing of our initial public offering, (b) in which we have total annual gross revenue of at least \$1 billion or (c) in which we are deemed to be a large accelerated filer, which requires the market value of our common stock that is held by

non-affiliates to exceed \$700 million as of the prior June 30th, and (ii) the date on which we have issued more than \$1 billion in non-convertible debt during the prior three-year period.

We will not be an emerging growth company in fiscal year 2018, and will need to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act.

We incur increased costs and devote substantial management time as a result of operating as a public company.

As a public company, we incur significant legal, accounting and other expenses that we did not incur as a private company, and these expenses have increased and will continue to increase even more after we are no longer an “emerging growth company.” We are subject to the reporting requirements of the Exchange Act, the Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Protection Act, as well as rules adopted, and to be adopted, by the SEC and the Nasdaq Global Select Market. Our management and other personnel devote a substantial amount of time to these compliance initiatives. Moreover, these rules and regulations substantially increase our legal and financial compliance costs and make some activities more time-consuming and costly. The increased costs increase our net loss. For example, we expect these rules and regulations to make it more difficult and more expensive for us to obtain director and officer liability insurance and we may be required to incur substantial costs to maintain the sufficient coverage. We cannot predict or estimate the amount or timing of additional costs we may incur to respond to these and future requirements. The impact of these requirements could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors, our board committees or as executive officers.

In addition, as a public company we incur additional costs and obligations in order to comply with SEC rules that implement Section 404 of the Sarbanes-Oxley Act. Under these rules, beginning with our annual report for the year ending December 31, 2017, we were required to make a formal assessment of the effectiveness of our internal control over financial reporting, and as we have ceased to be an emerging growth company for fiscal 2018, we will be required to include an attestation report on internal control over financial reporting issued by our independent registered public accounting firm. To achieve compliance with Section 404 within the prescribed period, we engaged in a process to document and evaluate our internal control over financial reporting, which is both costly and challenging. In this regard, we have dedicated and will need to continue to dedicate internal resources, engage outside consultants and adopt a detailed work plan to assess and document the adequacy of our internal control over financial reporting, continue steps to improve control processes as appropriate, validate through testing that controls are designed and operating effectively, and implement a continuous reporting and improvement process for internal control over financial reporting.

Future sales and issuances of our common stock or rights to purchase common stock, including pursuant to our equity incentive plans, could result in additional dilution of the percentage ownership of our stockholders and could cause our stock price to fall.

We expect that significant additional capital may be needed in the future to continue our planned operations, including conducting clinical trials, commercialization efforts, expanded research and development activities and costs associated with operating a public company. To raise capital, we may sell common stock, convertible securities or other equity securities in one or more transactions at prices and in a manner we determine from time to time. If we sell common stock, convertible securities or other equity securities, investors may be materially diluted by subsequent sales. We also have registered all shares of common stock that we may issue under our equity incentive plans or that are issuable upon exercise of outstanding options. These shares can be freely sold in the public market upon issuance and once vested, subject to volume limitations applicable to affiliates. If any of these additional shares are sold, or if it is perceived that they will be sold, in the public market, the market price of our common stock could decline. Such sales may also result in material dilution to our existing stockholders, and new investors could gain rights, preferences and privileges senior to the holders of our common stock.

Our disclosure controls and procedures may not prevent or detect all errors or acts of fraud.

We are subject to the periodic reporting requirements of the Exchange Act. We designed our disclosure controls and procedures to reasonably assure that information we must disclose in reports we file or submit under the Exchange Act is accumulated and communicated to management, and recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC. We believe that any disclosure controls and procedures or internal controls and procedures, no matter how well-conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met.

These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by

collusion of two or more people or by an unauthorized override of the controls. Accordingly, because of the inherent limitations in our control system, misstatements due to error or fraud may occur and not be detected.

We do not intend to pay dividends on our common stock so any returns will be limited to the value of our stock.

We have never declared or paid any cash dividend on our common stock. We currently anticipate that we will retain future earnings for the development, operation and expansion of our business and do not anticipate declaring or paying any cash dividends for the foreseeable future. Any return to stockholders will therefore be limited to the appreciation of their stock.

Provisions in our restated certificate of incorporation and restated bylaws and Delaware law might discourage, delay or prevent a change in control of our company or changes in our management and, therefore, depress the market price of our common stock.

Our restated certificate of incorporation and restated bylaws contain provisions that could depress the market price of our common stock by acting to discourage, delay or prevent a change in control of our company or changes in our management that the stockholders of our company may deem advantageous. These provisions, among other things:

- establish a classified board of directors so that not all members of our board are elected at one time;
- permit only the board of directors to establish the number of directors and fill vacancies on the board;
- provide that directors may only be removed “for cause” and only with the approval of two-thirds of our stockholders;
- require super-majority voting to amend some provisions in our restated certificate of incorporation and restated bylaws;
- authorize the issuance of “blank check” preferred stock that our board could use to implement a stockholder rights plan (also known as a “poison pill”);
- eliminate the ability of our stockholders to call special meetings of stockholders;
- prohibit stockholder action by written consent, which requires all stockholder actions to be taken at a meeting of our stockholders;
- prohibit cumulative voting; and
- establish advance notice requirements for nominations for election to our board or for proposing matters that can be acted upon by stockholders at annual stockholder meetings.

In addition, Section 203 of the Delaware General Corporation Law may discourage, delay or prevent a change in control of our company. Section 203 imposes certain restrictions on mergers, business combinations and other transactions between us and holders of 15% or more of our common stock.

If securities or industry analysts do not publish research or reports about our business, or if they issue an adverse or misleading opinion regarding our stock, our stock price and trading volume could decline.

The trading market for our common stock is influenced by the research and reports that industry or securities analysts publish about us or our business. If any of the analysts who cover us issue an adverse or misleading opinion regarding us, our business model, our intellectual property or our stock performance, or if our clinical trial results or operating results fail to meet the expectations of analysts, our stock price would likely decline. If one or more of these analysts cease coverage of us or fail to publish reports on us regularly, we could lose visibility in the financial markets, which in turn could cause our stock price or trading volume to decline.

We plan to use potential future operating losses and our federal and state net operating loss, or NOL, carryforwards to offset taxable income from revenue generated from operations or corporate collaborations. However, our ability to use NOL carryforwards could be limited as a result of additional issuances of equity securities.

We plan to use our current year operating losses to offset taxable income from any revenue generated from operations or corporate collaborations. To the extent we have taxable income, we plan to use our NOL carryforwards to offset income that would otherwise be taxable. However, under the Tax Reform Act of 1986, the benefits from the use of our NOL carryforwards may be impaired or limited under Section 382 of the Internal Revenue Code of 1984, as amended, or the Code, if we incur a cumulative ownership change of more than 50%, as interpreted by the U.S. Internal Revenue Service, over a three-year period. In September 2015, we completed a Section 382 and 383 ownership change analysis through December 31, 2014 and

determined that there was an ownership change in 2007 that may limit the utilization of approximately \$5.3 million and \$5.4 million in federal and state NOLs, respectively, and \$0.2 million in both federal and state research tax credits. We extended the analysis period of the study through December 31, 2016, noting no ownership changes during fiscal 2015 or fiscal 2016. Our use of federal NOL carryforwards could be limited further by the provisions of Section 382 of the Code depending upon the timing and amount of additional equity securities that we have issued or will issue. State NOL carryforwards may be similarly limited. Any such disallowances may result in greater tax liabilities than we would incur in the absence of such a limitation and any increased liabilities could adversely affect our business, results of operations, financial condition and cash flow.

On December 22, 2017, the President of the United States, signed into law the Tax Reform Act. The legislation significantly changes U.S. tax law by, among other things, lowering the corporate income tax rates. The Tax Reform Act permanently reduces the U.S. corporate income tax rate from a maximum of 35% to a flat 21% rate, effective January 1, 2018. Additionally, the Tax Reform Act will no longer allow deductions for compensation in excess of \$1 million for certain employees, even if paid as commissions or performance based compensation. We may be subject to these limitations as provided for under Section 162(m) of the Internal Revenue Code in the future. The Tax Reform Act also limits the amount taxpayers are able to deduct for federal net operating loss (NOL) carryforwards generated in taxable years beginning after December 31, 2017 to 80% of the taxpayer's taxable income. The law also generally repeals all carrybacks. However, any NOLs generated in taxable years after December 31, 2017 can be carried forward indefinitely. Losses arising in taxable years beginning before December 31, 2017 may still be carried back two years and are subject to their current expiration period. As of December 31, 2017, we have approximately \$60.1 million of federal NOLs that were generated prior to 2018 which expire beginning December 31, 2028 through December 31, 2037, if not used to reduce income taxes payable in the future. Federal NOLs generated by us subsequent to 2017 may only offset 80% of taxable income.

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

Unregistered Sales of Equity Securities

None.

Use of Proceeds

On January 25, 2017, our Registration Statement on Form S-1 (File No. 333-206849) relating to the IPO of our common stock was declared effective by the SEC. Pursuant to such Registration Statement, we sold an aggregate of 5,750,000 shares of our common stock at a price of \$15.00 per share. Credit Suisse Securities (USA) LLC, Stifel, Nicolaus & Company, Incorporated, JMP Securities LLC and Wedbush Securities Inc. acted as underwriters. On January 31, 2017, we closed the sale of such shares, resulting in aggregate cash proceeds to us of approximately \$80.2 million, net of underwriting discounts and commissions.

There has been no material change in the expected use of the net proceeds from our IPO, as described in our final prospectus filed with the SEC on January 26, 2017 pursuant to Rule 424(b) under the Securities Act of 1933, as amended.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

Not applicable.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

None.

ITEM 6. EXHIBITS

The exhibits filed or furnished as part of this Quarterly Report on Form 10-Q are set forth on the Exhibit Index, below.

EXHIBIT INDEX

Exhibit Number	Exhibit Description
10.15	Employment Agreement, effective August 6, 2018, by and between Registrant and Eric Loumeau
31.1	Certification of Principal Executive Officer, pursuant to Rule 13a-14(a)/15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Principal Financial Officer, pursuant to Rule 13a-14(a)/15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1*	Certification of Chief Executive Officer, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2*	Certification of Chief Financial Officer, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	XBRL Report Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Calculation Linkbase Document
101.LAB	XBRL Taxonomy Label Linkbase Document
101.PRE	XBRL Presentation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document

*This certification is deemed not filed for purpose of section 18 of the Exchange Act or otherwise subject to the liability of that section, nor shall it be deemed incorporated by reference into any filing under the Securities Act or the Exchange Act.

SIGNATURES

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

ANAPTYSBIO, INC.

Date: November 8, 2018

By: /s/ Hamza Suria

Hamza Suria
Chief Executive Officer
(Principal Executive Officer)

Date: November 8, 2018

By: /s/ Dominic G. Piscitelli

Dominic G. Piscitelli
Chief Financial Officer
(Principal Financial and Accounting Officer)

ANAPTYSBIO, INC.
EMPLOYMENT AGREEMENT

This **EMPLOYMENT AGREEMENT** (this “*Agreement*”) is made effective from August 6, 2018 (the “*Effective Date*”) by and among **ANAPTYSBIO, INC.** (the “*Company*”) and Eric Loumeau (“*GC*”). The Company and GC are hereinafter collectively referred to as the “*Parties*,” and individually referred to as a “*Party*.”

RECITAL

The Company desires to employ GC, and GC is willing to accept such employment by Company, on the terms and subject to the conditions set forth in this Agreement.

AGREEMENT

In consideration of the foregoing Recitals and the mutual promises and covenants herein contained, and for other good and valuable consideration, the Parties, intending to be legally bound, agree as follows:

1. EMPLOYMENT.

1.1 Title. Effective as of the Effective Date, GC’s position shall be General Counsel of the Company, subject to the terms and conditions set forth in this Agreement.

1.2 Term. The term of this Agreement shall begin on the Effective Date and shall continue until it is terminated pursuant to Section 4 herein (the “*Term*”).

1.3 Duties. GC shall do and perform all services, acts or things necessary or advisable to manage and conduct the business of the Company and that are normally associated with the position of General Counsel. GC shall also do and perform all services, acts or things necessary or advisable to manage and conduct the business of the Company and that are normally associated with the positions of Secretary and Chief Compliance Officer of the Company. [GC shall report to the Chief Executive Officer].

1.4 Policies and Practices. The employment relationship between the Parties shall be governed by this Agreement and by the policies and practices established by the Company and/or the Board, or any designated committee thereof. In the event that the terms of this Agreement differ from or are in conflict with the Company’s policies or practices or the Company’s Employee Handbook, this Agreement shall control.

1.5 Location. Unless the Parties otherwise agree in writing, during the Term GC shall perform the services GC is required to perform pursuant to this Agreement at the Company’s offices in San Diego, California, provided, however, that the Company may from time to time require GC to travel temporarily to other locations in connection with the Company’s business.

2. LOYALTY; NONCOMPETITION; NONSOLICITATION.

2.1 Loyalty. During GC’s employment with the Company, GC shall devote GC’s full business energies, interest, abilities and productive time to the proper and efficient performance of GC’s duties under this Agreement.

2.2 Agreement not to Participate in Company’s Competitors. During GC’s employment with the Company, GC agrees not to acquire, assume or participate in, directly or indirectly, any position, investment or interest known by GC to be adverse or antagonistic to the Company, its business, or prospects, financial or otherwise, or in any company, person, or entity that is, directly or indirectly, in competition with the business of the Company or any of its Affiliates (as defined below). Ownership by GC, in professionally managed funds over which GC does not have control or discretion in investment decisions, or as a passive investment, of less than two percent (2%) of the outstanding shares of capital stock of any corporation with one or more classes of its capital stock listed on a national securities exchange or publicly traded on a national securities exchange or in the over-the-counter market shall not constitute a breach of this Section. For purposes of this Agreement, “Affiliate,” means, with respect to any specific entity, any other entity that, directly or indirectly, through one or more intermediaries, controls, is controlled by or is under common control with such specified entity.

2.3 Covenant not to Compete. During GC’s employment with the Company, GC shall not engage in competition with the Company and/or any of its Affiliates in any manner or capacity, as adviser, principal, agent,

affiliate, promoter, partner, officer, director, employee, owner, co-owner, consultant, in any phase of the business of developing, manufacturing and marketing of products or services that directly compete with the products or services of the Company, except with the prior written consent of the CEO. GC shall be entitled to request written consent of the CEO with respect to potential advisory and/or director opportunities presented to GC by a third party, which GC believes in good faith will not interfere or compete with the on-going business of the Company.

3. COMPENSATION OF GC.

3.1 Base Salary. The Company shall pay GC a base salary at the annualized rate of \$365,000 (the “*Base Salary*”), less payroll deductions and all required withholdings, payable in regular periodic installments in accordance with the Company’s normal payroll practices. The Base Salary shall be prorated for any partial year of employment on the basis of a 365-day fiscal year.

3.2 Discretionary Bonus. At the sole discretion of the Board and Chief Executive Officer, promptly following each calendar year of employment GC shall be eligible to receive a discretionary cash bonus of up to 40% of GC’s then-current base salary (the “*Bonus*”), based on GC’s achievement relative to certain performance goals (“*Performance Goals*”) to be established by the Chief Executive Officer in writing in a manner reasonably consistent with the Company’s priorities. The determination of whether GC has met the Performance Goals for any given year, and if so, the amount of any Bonus that will be paid for such year (if any), shall be determined by the Board and Chief Executive Officer in their sole and absolute discretion. In order to be eligible to earn or receive any Bonus, GC must remain employed by the Company through and including the date of payment of such Bonus. For the first calendar year of GC’s employment with the Company, the Bonus payable shall be pro-rated in accordance with the percentage of the calendar year that the GC is an employee of the Company.

3.3 Stock Option. As soon as practicable following the Effective Date, GC will be granted an option to purchase up to 40,000 shares of the Company’s Common Stock (the “*Base Option*”) pursuant to the terms of the Company’s 2017 Equity Incentive Plan, as amended from time to time (the “*Plan*”). The Base Option shall be subject to vesting such that, subject to GC’s continued employment with the Company, 1/4 of the shares subject to the Base Option shall vest as of the first anniversary of the Effective Date and 1/48th of the shares subject to the Base Option shall vest in equal monthly installments on the monthly anniversary of the Effective Date of each month for the 36 months thereafter. The exercise price per share of the Base Option will be equal to the closing selling price as reported on the Nasdaq Stock Market on the date the Base Option is granted. The Base Option will be governed by the Plan and shall be granted pursuant to a separate stock option grant notice and stock option agreement.

3.4 Expense Reimbursements. The Company will reimburse GC for all reasonable business expenses GC incurs in conducting his duties hereunder, pursuant to the Company’s usual expense reimbursement policies; provided that GC supplies the appropriate substantiation for such expenses no later than the end of the calendar month following the month in which such expenses were incurred by GC.

3.5 Changes to Compensation. GC’s compensation will be reviewed annually and may be changed from time to time in the Company’s sole discretion.

3.6 Employment Taxes. All of GC’s compensation shall be subject to customary withholding taxes and any other employment taxes as are commonly required to be collected or withheld by the Company.

3.7 Benefits. GC shall, in accordance with Company policy and the terms of the applicable plan documents, be eligible to participate in benefits under any benefit plan or arrangement that may be in effect from time to time and made available to the Company’s senior management employees.

3.8 Holidays and Vacation. GC shall be eligible for paid holiday and vacation time in accordance with Company policy as in effect from time to time.

4. TERMINATION.

4.1 Termination by the Company. GC’s employment with the Company is at will and may be terminated by the Company at any time and for any reason, or for no reason, including, but not limited to, under the following conditions:

4.1.1 Termination by the Company for Cause. The Company may terminate GC’s employment under this Agreement for “*Cause*” (as defined below) by delivery of written notice to GC. Any notice of

termination given pursuant to this section shall effect termination as of the date of the notice, or as of such other date specified in the notice.

4.1.2 Termination by the Company without Cause. The Company may terminate GC's employment under this Agreement without Cause at any time and for any reason, or for no reason. Such termination shall be effective on the date GC is so informed, or as otherwise specified by the Company.

4.2 Termination by GC. GC may terminate his employment with the Company at any time and for any reason, or for no reason, upon thirty (30) days written notice to the Company.

4.3 Termination for Death or Disability. GC's employment with the Company shall automatically terminate effective upon the date of GC's death or Disability (as defined in the Plan).

4.4 Termination by Mutual Agreement of the Parties. GC's employment with the Company may be terminated at any time upon a mutual agreement in writing of the Parties. Any such termination of employment shall have the consequences specified in such agreement.

4.5 Compensation upon Termination.

4.5.1 Death or Disability. If GC's employment is terminated by death or Disability, the Company shall pay to GC, or to GC's heirs, GC's accrued and unpaid base salary and accrued and unused vacation benefits earned through the date of termination at the rate in effect at the time of termination, less standard deductions and withholdings. The Company shall thereafter have no further obligations to GC and/or GC's heirs under this Agreement, except as otherwise provided by law.

4.5.2 Termination for Cause. If the Company terminates GC's employment for Cause, then the Company shall pay GC's accrued and unpaid base salary and accrued and unused vacation benefits earned through the date of termination, at the rate in effect at the time of termination, less standard deductions and withholdings. The Company shall thereafter have no further obligations to GC under this Agreement, except as otherwise provided by law.

4.5.3 Termination by Company without Cause or by GC for Good Reason Not In Connection with a Change in Control. If the Company terminates GC's employment without Cause or if GC resigns his employment for "**Good Reason**" (as defined below), in either case at any time other than upon the occurrence of, or within the 13 months immediately following, the effective date of a "**Change in Control**" (as defined below), the Company shall pay GC's accrued and unpaid base salary and accrued and unused vacation benefits earned through the date of termination, at the rate in effect at the time of termination, less standard deductions and withholdings. In addition to the above, if GC furnishes to the Company an executed waiver and release of claims in the form attached hereto as **Exhibit A** (or in such other form as may be specified by the Company) (the "**Release**") within the time period specified therein, but in no event later than 45 days following GC's termination, and if GC allows such Release to become effective in accordance with its terms, then (i) GC shall be entitled to severance in the form of continuation of his base salary, at the base salary rate equal to the greater of the rate in effect at the time of termination or the rate immediately prior to the event giving rise to Good Reason (the "**Severance Payments**"), for a period of nine (9) months following the termination date (the "**Severance Period**"), and (ii) the Company will pay directly to the insurance provider the premium for COBRA continuation coverage for GC and GC's family during the Severance Period or until he obtains new employment, whichever comes first (the "**COBRA Coverage**"); provided that, if the Company determines that it cannot provide the COBRA Coverage without potentially violating applicable law or incurring additional expense under applicable law (including, without limitation, Section 2716 of the Public Health Service Act), the Company will provide GC, in lieu thereof, taxable, continued installment payments equal to the COBRA premium, payable on the last day of a given month, for 9 months (measured from the termination date), which payments will be made regardless of whether GC elects COBRA continuation coverage (the "**COBRA Bonus**"). Notwithstanding the foregoing, the number of months of COBRA Bonus to be paid, in any case, shall be reduced by the number of months of COBRA Coverage previously paid by the Company. The Severance Payments will be subject to standard payroll deductions and withholdings and will be made on the Company's regular payroll cycle, provided, however, that any Severance Payments otherwise scheduled to be made prior to the effective date of the Release shall accrue and be paid in the first payroll period that follows such effective date, *provided, further*, that if the 45 day period to execute the Release spans two calendar years, no Severance Payments will be made until the later calendar year. The Company shall thereafter have no further obligations to GC under this Agreement, except as otherwise provided by law.

4.5.4 Termination by Company without Cause or by GC for Good Reason In Connection with a Change in Control. If the Company terminates GC's employment without Cause or if GC resigns his employment for Good Reason, in either case upon the occurrence of, or within the 13 months immediately following, the effective date of a Change in Control, the Company shall pay GC's accrued and unpaid base salary and accrued and unused vacation benefits earned through the date of termination, at the rate in effect at the time of termination, less standard deductions and withholdings. In addition, if GC furnishes to the Company an executed Release within the time period specified therein, but in no event later than 45 days following GC's termination, and if GC allows such Release to become effective in accordance with its terms, then GC shall be entitled to: (1) the Severance Payments and COBRA payments described in Section 4.5.3 above; provided, however, that the Severance Payments and COBRA payments shall be increased from 9 months to 12 months and (2) accelerated vesting of all of GC's unvested Company equity awards, such that GC shall become vested in 100% of the shares subject to all such equity awards on the effective date of the Release; provided, however, that the vesting of any performance-based awards shall be as if all applicable performance criteria were achieved at target levels. The Company shall thereafter have no further obligations to GC under this Agreement, except as otherwise provided by law.

4.6 Definitions. For purposes of this Agreement, the following terms shall have the

following meanings:

4.6.1 "Cause" shall mean the occurrence of any one or more of the following: (i) GC's commission of any crime involving fraud, dishonesty or moral turpitude; (ii) GC's attempted commission of or participation in a fraud or act of dishonesty against the Company that results in (or might have reasonably resulted in) material harm to the business of the Company; (iii) GC's intentional, material violation of any contract or agreement between GC and the Company or any statutory duty GC owes to the Company; or (iv) GC's conduct that constitutes gross insubordination, incompetence or habitual neglect of duties and that results in (or might have reasonably resulted in) material harm to the business of the Company; *provided, however*, that the action or conduct described in clauses (iii) and (iv) above will constitute "Cause" only if such action or conduct continues after the Company has provided GC with written notice thereof and thirty (30) days to cure, or otherwise remedy to the extent possible under direct control of the GC, the same. An occurrence of "Cause" as set forth in the preceding sentence shall be based upon a good faith determination by the Board. GC's Disability shall not constitute Cause as set forth herein. The determination that a termination is for Cause shall be by the Board in its sole and exclusive judgment and discretion.

4.6.2 "Change in Control" shall have the meaning set forth in the Amended and Restated 2006 Equity Incentive Plan.

4.6.3 "Good Reason" shall mean any of the following actions: (i) the assignment to GC of any duties or responsibilities that results in a material diminution in GC's function as in effect immediately prior to the effective date of the Change in Control; provided, however, that it will be considered a material diminution in GC's function if, following a Change in Control, the GC is not reporting directly to the Chief Executive Officer who is in turn reporting to the Company's (or if applicable ultimate parent entity's) corporate board of directors; (ii) a reduction by the Company in GC's annual base salary as in effect on the effective date of the Change in Control; provided, however, that Good Reason shall not be deemed to have occurred in the event of a reduction in GC's annual base salary that is pursuant to a salary reduction program affecting substantially all of the employees of the Company and that does not adversely affect GC to a greater extent than other similarly situated employees; or (iii) a relocation of GC's primary business office to a location more than 50 miles from the location of GC's primary business office as of the effective date of the Change in Control, except for required travel by GC on the Company's business to an extent substantially consistent with GC's business travel obligations prior to the effective date of the Change in Control. For the purposes of application of this definition of Good Reason to Section 4.5.3, the words "as in effect immediately prior to the effective date of the Change in Control" shall be read to mean as of, or immediately prior to, the date of the event giving rise to Good Reason. In all events, in order for a termination for Good Reason to occur, the GC must provide the Company with written notice of the condition constituting Good Reason within 90 days of the initial occurrence of such condition, and allow the Company a 30-day cure period in which to cure such condition, and the GC must resign employment within 10 days of the end of such 30-day cure period if the Company does not cure the condition in such cure period. For clarity, "corporate board of directors" as used in the definition of Good Reason means the Company's (or if applicable ultimate parent entity's) board of directors as such term is used in Section 141 of the Delaware General Corporation Law, or if the Company (or if applicable ultimate parent entity) is not a corporation

organized under Delaware law, the most senior governing body of the Company (or if applicable ultimate parent entity) the majority of which is comprised of non-employee and independent members and has responsibility and authority for managing the business and affairs of the Company (or if applicable ultimate parent entity).

4.7 Survival of Certain Sections. Sections 3.4, 3.6 and 4 through 18 of this Agreement will survive the termination of this Agreement.

4.8 Parachute Payment. If any payment or benefit GC would receive pursuant to this Agreement (“*Payment*”) would (i) constitute a “*Parachute Payment*” within the meaning of Section 280G of the Internal Revenue Code of 1986, as amended (the “*Code*”), and (ii) but for this sentence, be subject to the excise tax imposed by Section 4999 of the Code (the “*Excise Tax*”), then such Payment shall be equal to the Reduced Amount. The “*Reduced Amount*” shall be either (x) the largest portion of the Payment that would result in no portion of the Payment being subject to the Excise Tax or (y) the largest portion, up to and including the total of the Payment, whichever amount, after taking into account all applicable federal, state and local employment taxes, income taxes, and the Excise Tax (all computed at the highest applicable marginal rate), results in GC’s receipt, on an after-tax basis, of the greatest economic benefit notwithstanding that all or some portion of the Payment may be subject to the Excise Tax. If a reduction in payments or benefits constituting Parachute Payments is necessary so that the Payment equals the Reduced Amount, reduction shall occur in the manner that results in the greatest economic benefit for GC. If more than one method of reduction will result in the same economic benefit, the items so reduced will be reduced pro rata.

In the event it is subsequently determined by the Internal Revenue Service that some portion of the Reduced Amount (as determined pursuant to clause (x) in the preceding paragraph) is subject to the Excise Tax, GC agrees to promptly return to the Company a sufficient amount of the Payment so that no portion of the Reduced Amount is subject to the Excise Tax. For the avoidance of doubt, if the Reduced Amount is determined in accordance with clause (y) in the preceding paragraph, GC will have no obligation to return any portion of the Payment pursuant to the preceding sentence.

Unless GC and the Company agree on an alternative accounting or law firm, the accounting firm then engaged by the Company for general tax compliance purposes shall perform the foregoing calculations. If the accounting firm so engaged by the Company is serving as accountant or auditor for the individual, entity or group effecting the Change in Control, the Company shall appoint a nationally recognized accounting, law or consulting firm to make the determinations required hereunder. The Company shall bear all expenses with respect to the determinations by such accounting, law or consulting firm required to be made hereunder.

The Company shall use commercially reasonable efforts such that the accounting, law or consulting firm engaged to make the determinations hereunder shall provide its calculations, together with detailed supporting documentation, to GC and the Company within 15 calendar days after the date on which GC’s right to a Payment is triggered (if requested at that time by GC or the Company) or such other time as requested by GC or the Company.

4.9 Application of Internal Revenue Code Section 409A. Notwithstanding anything to the contrary set forth herein, any payments and benefits provided under this Agreement (the “*Severance Benefits*”) that constitute “deferred compensation” within the meaning of Section 409A of the Code and the regulations and other guidance thereunder and any state law of similar effect (collectively “*Section 409A*”) shall not commence in connection with GC’s termination of employment unless and until GC has also incurred a “separation from service” (as such term is defined in Treasury Regulation Section 1.409A-1(h) (“*Separation From Service*”), unless the Company reasonably determines that such amounts may be provided to GC without causing GC to incur the additional 20% tax under Section 409A.

It is intended that each installment of the Severance Benefits payments provided for in this Agreement is a separate “payment” for purposes of Treasury Regulation Section 1.409A-2(b)(2)(i). For the avoidance of doubt, it is intended that payments of the Severance Benefits set forth in this Agreement satisfy, to the greatest extent possible, the exemptions from the application of Section 409A provided under Treasury Regulation Sections 1.409A-1(b)(4), 1.409A-1(b)(5) and 1.409A-1(b)(9). However, if the Company (or, if applicable, the successor entity thereto) determines that the Severance Benefits constitute “deferred compensation” under Section 409A and GC is, on the termination of service, a “specified employee” of the Company or any successor entity thereto, as such term is defined in Section 409A(a)(2)(B)(i) of the Code, then, solely to the extent necessary to avoid the incurrence of the adverse personal tax consequences under Section 409A, the timing of the Severance Benefit payments shall be delayed until the earlier to

occur of: (i) the date that is six months and one day after GC's Separation From Service, or (ii) the date of GC's death (such applicable date, the "**Specified Employee Initial Payment Date**"), the Company (or the successor entity thereto, as applicable) shall (A) pay to GC a lump sum amount equal to the sum of the Severance Benefit payments that GC would otherwise have received through the Specified Employee Initial Payment Date if the commencement of the payment of the Severance Benefits had not been so delayed pursuant to this Section and (B) commence paying the balance of the Severance Benefits in accordance with the applicable payment schedules set forth in this Agreement.

Notwithstanding anything to the contrary set forth herein, GC shall receive the Severance Benefits described above, if and only if GC duly executes and returns to the Company within the applicable time period set forth therein, but in no event more than forty-five days following Separation From Service, the Release and permits the Release to become effective in accordance with its terms. Notwithstanding any other payment schedule set forth in this Agreement, none of the Severance Benefits will be paid or otherwise delivered prior to the effective date of the Release. Except to the extent that payments may be delayed until the Specified Employee Initial Payment Date pursuant to the preceding paragraph, on the first regular payroll pay day following the effective date of the Release, the Company will pay GC the Severance Benefits GC would otherwise have received under the Agreement on or prior to such date but for the delay in payment related to the effectiveness of the Release, with the balance of the Severance Benefits being paid as originally scheduled. All amounts payable under the Agreement will be subject to standard payroll taxes and deductions.

5. CONFIDENTIAL AND PROPRIETARY INFORMATION.

GC has already executed, as a condition of GC's employment with the Company, the Company's standard form of Proprietary Information and Inventions Agreement (the "**PIIA**"). The PIIA remains in full force and effect.

6. ASSIGNMENT AND BINDING EFFECT.

This Agreement shall be binding upon and inure to the benefit of GC and GC's heirs, executors, personal representatives, assigns, administrators and legal representatives. Because of the unique and personal nature of GC's duties under this Agreement, neither this Agreement nor any rights or obligations under this Agreement shall be assignable by GC. This Agreement shall be binding upon and inure to the benefit of the Company and its successors, assigns and legal representatives. Any such successor of the Company will be deemed substituted for the Company under the terms of this Agreement for all purposes. For this purpose, "successor" means any person, firm, corporation or other business entity which at any time, whether by purchase, merger or otherwise, directly or indirectly acquires all or substantially all of the assets or business of the Company.

7. NOTICES.

All notices or demands of any kind required or permitted to be given by the Company or GC under this Agreement shall be given in writing and shall be personally delivered (and receipted for) or faxed during normal business hours or mailed by certified mail, return receipt requested, postage prepaid, addressed as follows:

If to the Company:

10421 Pacific Center Court, Suite 200
San Diego, CA 92121
Attention: Chief Executive Officer

If to GC:

Eric Loumeau

Any such written notice shall be deemed given on the earlier of the date on which such notice is personally delivered or three days after its deposit in the United States mail as specified above. Either Party may change its address for notices by giving notice to the other Party in the manner specified in this Section.

8. CHOICE OF LAW.

This Agreement shall be construed and interpreted in accordance with the internal laws of the State of California without regard to its conflict of laws principles.

9. INTEGRATION.

This Agreement, including **Exhibit A** and the PIIA, contains the complete, final and exclusive agreement of the Parties relating to the terms and conditions of GC's employment and the termination of GC's employment, and supersedes any and all prior and/or contemporaneous oral and written employment agreements or arrangements between the Parties.

10. AMENDMENT.

This Agreement cannot be amended or modified except by a written agreement signed by GC and the Company.

11. WAIVER.

No term, covenant or condition of this Agreement or any breach thereof shall be deemed waived, except with the written consent of the Party against whom the waiver is claimed, and any waiver or any such term, covenant, condition or breach shall not be deemed to be a waiver of any preceding or succeeding breach of the same or any other term, covenant, condition or breach.

12. SEVERABILITY.

The finding by a court of competent jurisdiction of the unenforceability, invalidity or illegality of any provision of this Agreement shall not render any other provision of this Agreement unenforceable, invalid or illegal. Such court shall have the authority to modify or replace the invalid or unenforceable term or provision with a valid and enforceable term or provision, which most accurately represents the Parties' intention with respect to the invalid or unenforceable term, or provision.

13. INTERPRETATION; CONSTRUCTION.

The headings set forth in this Agreement are for convenience of reference only and shall not be used in interpreting this Agreement. This Agreement has been drafted by legal counsel representing the Company, but GC has been encouraged to consult with, and has consulted with, GC's own independent counsel and tax advisors with respect to the terms of this Agreement. The Parties acknowledge that each Party and its counsel has reviewed and revised, or had an opportunity to review and revise, this Agreement, and any rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of this Agreement.

14. REPRESENTATIONS AND WARRANTIES.

GC represents and warrants that GC is not restricted or prohibited, contractually or otherwise, from entering into and performing each of the terms and covenants contained in this Agreement, and that GC's execution and performance of this Agreement will not violate or breach any other agreements between GC and any other person or entity.

15. COUNTERPARTS.

This Agreement may be executed in two counterparts, each of which shall be deemed an original, all of which together shall contribute one and the same instrument.

16. ARBITRATION.

To ensure the rapid and economical resolution of disputes that may arise in connection with GC's employment with the Company, GC and the Company agree that any and all disputes, claims, or causes of action, in law or equity, arising from or relating to GC's employment, or the termination of that employment, will be resolved, to the fullest extent permitted by law, by final, binding and confidential arbitration pursuant to both the substantive and procedural provisions of the Federal Arbitration Act in San Diego, California conducted by the Judicial Arbitration and Mediation Services/Endispute, Inc. ("**JAMS**"), or its successors, under the then current rules of JAMS for employment disputes; provided that the arbitrator shall: (a) have the authority to compel adequate discovery for the resolution of the dispute and to award such relief as would otherwise be permitted by law; and (b) issue a written arbitration decision including the arbitrator's essential findings and conclusions and a statement of the award. Accordingly, GC and the Company

hereby waive any right to a jury trial. Both GC and the Company shall be entitled to all rights and remedies that either GC or the Company would be entitled to pursue in a court of law. The Company shall pay any JAMS filing fee and shall pay the arbitrator's fee. Nothing in this Agreement is intended to prevent either GC or the Company from obtaining injunctive relief in court to prevent irreparable harm pending the conclusion of any such arbitration. Notwithstanding the foregoing, GC and the Company each have the right to resolve any issue or dispute involving confidential, proprietary or trade secret information, or intellectual property rights, by Court action instead of arbitration.

17. TRADE SECRETS OF OTHERS.

It is the understanding of both the Company and GC that GC shall not divulge to the Company and/or its subsidiaries any confidential information or trade secrets belonging to others, including GC's former employers, nor shall the Company and/or its Affiliates seek to elicit from GC any such information. Consistent with the foregoing, GC shall not provide to the Company and/or its Affiliates, and the Company and/or its Affiliates shall not request, any documents or copies of documents containing such information.

18. ADVERTISING WAIVER.

GC agrees to permit the Company, and persons or other organizations authorized by the Company, to use, publish and distribute advertising or sales promotional literature concerning the products and/or services of the Company, or the machinery and equipment used in the provision thereof, in which GC's name and/or pictures of GC taken in the course of GC's provision of services to the Company appear. GC hereby waives and releases any claim or right GC may otherwise have arising out of such use, publication or distribution.

[REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the Parties have executed the Agreement as of the date below.

ANAPTYSBIO, INC.

By: /s/ Hamza Suria
Its: President & CEO
Dated: August __, 2018

GC:

/s/ Eric Loumeau
ERIC LOUMEAU

Dated: August __, 2018

[SIGNATURE PAGE TO EMPLOYMENT AGREEMENT]

EXHIBIT A

RELEASE AND WAIVER OF CLAIMS

TO BE SIGNED ON OR FOLLOWING THE SEPARATION DATE ONLY

In consideration of the payments and other benefits set forth in the Employment Agreement effective August 6, 2018, to which this form is attached, I, Eric Loumeau, hereby furnish ANAPTYSBIO, INC. (the “*Company*”), with the following release and waiver (“*Release and Waiver*”). In exchange for the consideration provided to me by the Employment Agreement that I am not otherwise entitled to receive, I hereby generally and completely release the Company and its current and former directors, officers, employees, stockholders, partners, agents, attorneys, predecessors, successors, parent and subsidiary entities, insurers, affiliates, and assigns (collectively, the “*Released Parties*”) from any and all claims, liabilities and obligations, both known and unknown, that arise out of or are in any way related to events, acts, conduct, or omissions occurring prior to or on the date that I sign this Agreement (collectively, the “*Released Claims*”). The Released Claims include, but are not limited to: (a) all claims arising out of or in any way related to my employment with the Company, or the termination of that employment; (b) all claims related to my compensation or benefits from the Company including salary, bonuses, commissions, vacation pay, expense reimbursements, severance pay, fringe benefits, stock, stock options, or any other ownership interests in the Company; (c) all claims for breach of contract, wrongful termination, and breach of the implied covenant of good faith and fair dealing; (d) all tort claims, including claims for fraud, defamation, emotional distress, and discharge in violation of public policy; and (e) all federal, state, and local statutory claims, including claims for discrimination, harassment, retaliation, misclassification, attorneys’ fees, or other claims arising under the federal Civil Rights Act of 1964 (as amended), the federal Americans with Disabilities Act of 1990, the federal Age Discrimination in Employment Act of 1967 (as amended) (the “*ADEA*”), the California Labor Code, and the California Fair Employment and Housing Act (as amended). Notwithstanding the foregoing, the following are not included in the Released Claims (the “*Excluded Claims*”): (a) any rights or claims for indemnification I may have pursuant to the charter or bylaws of the Company or under applicable law; (b) any rights or claims to unemployment compensation, funds accrued in my 401k account, or any vested equity incentives; (c) any rights that are not waivable as a matter of law; or (d) any claims arising from the breach of this Agreement. I hereby represent and warrant that, other than the Excluded Claims, I am not aware of any claims I have or might have against any of the Released Parties that are not included in the Released Claims.

I also acknowledge that I have read and understand Section 1542 of the California Civil Code which reads as follows: “**A general release does not extend to claims which the creditor does not know or suspect to exist in his or her favor at the time of executing the release, which if known by him or her must have materially affected his or her settlement with the debtor.**” I hereby expressly waive and relinquish all rights and benefits under that Section and any law of any jurisdiction, including New York, of similar effect with respect to any claims I may have against the Company.

I acknowledge that, among other rights, I am waiving and releasing any rights I may have under ADEA, that this Release and Waiver is knowing and voluntary, and that the consideration given for this Release and Waiver is in addition to anything of value to which I was already entitled as an executive of the Company. I further acknowledge that I have been advised, as required by the Older Workers Benefit Protection Act, that: (a) the release and waiver granted herein does not relate to claims under the ADEA which may arise after this Release and Waiver is executed; (b) I should consult with an attorney prior to executing this Release and Waiver; and (c) if I am age 40 or older at the time of execution of this release, I have 21 days from the date of termination of my employment with the Company in which to consider this Release and Waiver (although I may choose voluntarily to execute this Release and Waiver earlier); and (d) if I am age 40 or older at the time of execution of this release, I have seven days following the execution of this Release and Waiver to revoke my consent to this Release and Waiver and this Release and Waiver shall not be effective until the seven day revocation period has expired without my having previously revoked this Release and Waiver.

I agree not to disparage the Company and its officers, directors, employees, shareholders and/or agents, in any manner likely to be harmful to them or their business, business reputations or personal reputations; provided that I may respond accurately and fully to any question, inquiry or request for information when required by legal process (e.g., a valid subpoena or other similar compulsion of law) or as part of a government investigation.

I acknowledge my continuing obligations under my Proprietary Information and Inventions Agreement. Pursuant to the Proprietary Information and Inventions Agreement I understand that among other things, I must not use or disclose any confidential or proprietary information of the Company and I must immediately return all Company property and documents (including all embodiments of proprietary information) and all copies thereof in my possession or control. I understand and agree that my right to the severance pay I am receiving in exchange for my agreement to the terms of this Release and Waiver is contingent upon my continued compliance with my Proprietary Information and Inventions Agreement.

This Release and Waiver constitutes the complete, final and exclusive embodiment of the entire agreement between the Company and me with regard to the subject matter hereof. I am not relying on any promise or representation by the Company that is not expressly stated herein. This Release and Waiver may only be modified by a writing signed by both me and a duly authorized officer of the Company.

Date: _

By:

ERIC LOUMEAU

**CERTIFICATION OF PERIODIC REPORT UNDER SECTION 302 OF
THE SARBANES-OXLEY ACT OF 2002**

I, Hamza Suria, certify that:

1. I have reviewed this quarterly report on Form 10-Q of AnaptysBio, 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 and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 8, 2018

/s/ Hamza Suria

Hamza Suria

Chief Executive Officer

(Principal Executive Officer)

**CERTIFICATION OF PERIODIC REPORT UNDER SECTION 302 OF
THE SARBANES-OXLEY ACT OF 2002**

I, Dominic G. Piscitelli, certify that:

1. I have reviewed this quarterly report on Form 10-Q of AnaptysBio, 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 and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 8, 2018

/s/ Dominic G. Piscitelli

Dominic G. Piscitelli

Chief Financial Officer

(Principal Financial Officer)

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

I, Hamza Suria, Chief Executive Officer of AnaptysBio, Inc. (Company), do 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 the best of my knowledge:

- the Quarterly Report on Form 10-Q of the Company for the quarter ended September 30, 2018 (the "Report"), as filed with the Securities and Exchange Commission, fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company for the periods presented therein.

Date: November 8, 2018

/s/ Hamza Suria

Hamza Suria

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**

I, Dominic G. Piscitelli, Chief Financial Officer of AnaptysBio, Inc. (Company), do 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 the best of my knowledge:

- the Quarterly Report on Form 10-Q of the Company for the quarter ended September 30, 2018 (the "Report"), as filed with the Securities and Exchange Commission, fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company for the periods presented therein.

Date: November 8, 2018

/s/ Dominic G. Piscitelli

Dominic G. Piscitelli

Chief Financial Officer

(Principal Financial Officer)

