AVEO PHARMACEUTICALS INC
Form 10-Q
November 04, 2016

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

FORM 10-Q

(Mark One)

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the quarterly period ended September 30, 2016

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 001-34655

AVEO PHARMACEUTICALS, INC.

(Exact Name of Registrant as Specified in Its Charter)

Delaware	04-3581650
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)

One Broadway, 14th Floor, Cambridge, Massachusetts 02142

(Address of Principal Executive Offices) (Zip Code)

(617) 588-1960

(Registrant's Telephone Number, Including Area Code)

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§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 Accelerated filer

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

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

Number of shares of the registrant's Common Stock, $0.001 par value, outstanding on October 28, 2016: 75,862,946

AVEO PHARMACEUTICALS, INC.

FORM 10-Q

FOR THE QUARTER ENDED SEPTEMBER 30, 2016

TABLE OF CONTENTS

2

PART I. FINANCIAL INFORMATION

Item 1. Financial Statements.

AVEO PHARMACEUTICALS, INC.

Condensed Consolidated Balance Sheets

(In thousands, except par value amounts)

(Unaudited)

	September 30, 2016	December 31, 2015
Assets		
Current assets:		
Cash and cash equivalents	$12,370	$26,634
Marketable securities	18,461	7,501
Accounts receivable	990	4,641
Other prepaid expenses and other current assets	2,203	1,600
Total current assets	34,024	40,376
Property and equipment, net	23	23
Other assets	1,071	143
Total assets	$35,118	$40,542
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	$1,179	$1,425
Accrued contract research	2,824	1,966
Other accrued liabilities	1,525	2,140
Loans payable, net of discount	766	2,053
Deferred revenue	510	814
Settlement liability (Note 11)	—	4,000
Total current liabilities	6,804	12,398
Loans payable, net of current portion and discount	13,103	7,418
Deferred revenue	1,824	2,881
Warrant liability (Note 7)	9,162	—
Other liabilities	690	618
Total liabilities	31,583	23,315
Stockholders' equity:		
Preferred stock, $.001 par value: 5,000 shares authorized; no shares issued and outstanding		—
Common stock, $.001 par value: 200,000 shares authorized; 75,863 and 58,182 shares issued and outstanding at September 30, 2016 and December 31, 2015, respectively	76	58
Additional paid-in capital	519,742	512,201
Accumulated other comprehensive income (loss)	28	(3)

Accumulated deficit	(516,311)	(495,029)
Total stockholders’ equity	3,535	17,227
Total liabilities and stockholders’ equity	$35,118	$40,542

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

AVEO PHARMACEUTICALS, INC.

Condensed Consolidated Statements of Operations

(In thousands, except per share amounts)

(Unaudited)

	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
	2016	2015	2016	2015
Collaboration and licensing revenue	$992	$15,158	$2,388	$15,426
Operating expenses:				
Research and development	4,444	4,466	16,020	9,002
General and administrative	2,141	2,225	6,344	8,367
Restructuring and lease exit	—	—	—	4,358
	6,585	6,691	22,364	21,727
(Loss) income from operations	(5,593)	8,467	(19,976)	(6,301)
Other income (expense), net:				
Interest expense, net	(551)	(531)	(1,388)	(1,866)
Change in fair value of warrant liability	1,178	—	182	—
Other expense	—	(22)	—	(245)
Other income (expense), net	627	(553)	(1,206)	(2,111)
(Loss) income before provision for income taxes	(4,966)	7,914	(21,182)	(8,412)
Provision for income taxes	—	—	(100)	—
Net (loss) income	$(4,966)	$7,914	$(21,282)	$(8,412)
Basic net (loss) income per share				
Net (loss) income per share	$(0.07)	$0.14	$(0.32)	$(0.15)
Weighted average number of common shares outstanding	75,861	56,794	67,046	54,880
Diluted net (loss) income per share				
Net (loss) income per share	$(0.07)	$0.14	$(0.32)	$(0.15)
Weighted average number of common shares and dilutive common share equivalents outstanding	75,861	57,016	67,046	54,880

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

4

AVEO PHARMACEUTICALS, INC.

Condensed Consolidated Statements of Comprehensive Loss

(In thousands)

(Unaudited)

	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
	2016	2015	2016	2015
Net (loss) income	$(4,966)	$7,914	$(21,282)	$(8,412)
Other comprehensive income (loss):				
Unrealized gain (loss) on available-for-sale securities	18	1	31	1
Comprehensive (loss) income	$(4,948)	$7,915	$(21,251)	$(8,411)

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

AVEO PHARMACEUTICALS, INC.

Condensed Consolidated Statements of Cash Flows

(In thousands)

(Unaudited)

	Nine Months Ended September 30, 2016			2015		
Operating activities						
Net loss	$	(21,282	)	$	(8,412	)
Adjustments to reconcile net loss to net cash used in operating activities:						
Impairment of property and equipment		—			232	
Depreciation and amortization		7			9,561	
Accretion		—			224	
Loss on disposal of fixed assets		—			230	
Stock-based compensation		829			1,180	
Non-cash interest expense		331			344	
Non-cash change in fair value of warrant liability		(182	)		—	
Amortization of premium and discount on investments		6			33	
Changes in operating assets and liabilities:						
Restricted cash		—			135	
Accounts receivable		3,651			7	
Prepaid expenses and other current assets		(603	)		120	
Other noncurrent assets		(928	)		75	
Accounts payable		(246	)		(2,958	)
Accrued contract research		858			(3,184	)
Other accrued liabilities		(615	)		(664	)

Settlement liability		(4,000)		—
Deferred revenue		(1,361)		573
Lease exit obligation		—		(5,205)
Deferred rent		—		(10,569)
Other liabilities		(78)		37
Net cash used in operating activities		(23,613)		(18,241)
Investing activities				
Purchases of marketable securities		(28,671)		(11,581)
Proceeds from maturities and sales of marketable securities		17,736		9,050
Purchases of property and equipment		(7)		(14)
Proceeds from sale of property and equipment		—		1,241
Net cash used in investing activities		(10,942)		(1,304)
Financing activities				
Proceeds from issuance of common stock and warrants, net of issuance costs		14,846		10,217
Proceeds from issuance of common stock and warrants to related parties		525		—
Proceeds from issuance of loan payable and warrants		5,000		—
Proceeds from exercise of stock options and issuance of common and restricted stock		35		278
Debt issuance costs		(115)		—
Principal payments on loans payable		—		(8,517)
Net cash provided by financing activities		20,291		1,978
Net decrease in cash and cash equivalents		(14,264)		(17,567)
Cash and cash equivalents at beginning of period		26,634		52,306
Cash and cash equivalents at end of period	$	12,370	$	34,739

Supplemental cash flow information				
Cash paid for interest	$	1,088	$	1,619
Non-cash financing activity				
Fair value of warrants issued in connection with long term debt	$	667	$	—
Fair value of warrants issued in connection with private placement	$	9,344	$	—

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

AVEO Pharmaceuticals, Inc.

Notes to Condensed Consolidated Financial Statements

(Unaudited)

(1) Organization

AVEO Pharmaceuticals, Inc. (the "Company") is a biopharmaceutical company dedicated to advancing a broad portfolio of targeted therapeutics for oncology and other areas of unmet medical need. The Company's proprietary platform has delivered unique insights into cancer and related diseases. The Company's strategy is to leverage these biomarker insights and partner resources to advance the development of its clinical pipeline.

The Company's pipeline of product candidates includes tivozanib, a potent, selective, long half-life vascular endothelial growth factor tyrosine kinase inhibitor of all three vascular endothelial growth factors. In June 2013, the U.S. Food and Drug Administration issued a complete response letter denying the Company's application for approval of the use of tivozanib in first-line treatment of advanced renal cell carcinoma ("RCC"), citing concerns regarding the negative trend in overall survival in the Company's pivotal phase 3 trial. In May 2016, the Company initiated enrollment and treatment of patients in a new phase 3 trial of tivozanib in the third-line treatment of patients with refractory RCC ("TIVO-3"), in order to address the overall survival concerns presented in the June 2013 complete response letter from the FDA and to support a request for regulatory approval of tivozanib in the United States as a third-line treatment and as a first-line treatment. The Company expects to report top line data from the TIVO-3 study in the first quarter of 2018.

The Company has also initiated a phase 1/2 trial of tivozanib in combination with Opdivo (nivolumab), an immune checkpoint (PD-1) inhibitor, for the treatment of RCC (the "TiNivo" study). Bristol-Myers Squibb is supplying Opdivo for the TiNivo trial, which is expected to begin enrolling patients in the fourth quarter of 2016 or the first quarter of 2017. The Company expects to report initial safety data from the phase 1 portion of the TiNivo study in the first half of 2017.

In February 2016, EUSA Pharma (UK) Ltd. ("EUSA"), the Company's strategic partner, submitted a Marketing Authorization Application ("MAA") for tivozanib with the European Medicines Agency ("EMA") for the treatment of RCC. The application was validated in March 2016, confirming that the submission was complete and that the EMA would initiate its review process. EUSA received the Day 120 List of Questions from the EMA on July 21, 2016, and has received a standard extension of time to respond. EUSA expects to submit its 120-day responses before the end of 2016 and to receive a decision on the MAA from the EMA in the first half of 2017.

The Company also has a pipeline of monoclonal antibodies, including:

(i) Ficlatuzumab, a potent hepatocyte growth factor ("HGF") antibody that inhibits the activity of the HGF/c-Met pathway. Ficlatuzumab is in early stage clinical development in partnership with Biodesix, Inc. ("Biodesix"). The Company and Biodesix will share equally in all future costs and profits relating to the development of ficlatuzumab.

(ii) AV-203, a potent, high-affinity inhibitor of the ErbB3 pathway. The Company's partner CANbridge Life Sciences Ltd. ("CANbridge") will fund manufacturing and clinical development through proof-of-concept in Esophageal Squamous Cell Carcinoma.

(iii) AV-380, a potent, humanized IgG1 inhibitory monoclonal antibody targeting growth differentiating factor-15, or GDF15, a divergent member of the TGF-ß family, for the potential treatment or prevention of cachexia. The Company has licensed AV-380 to Novartis International Pharmaceutical Ltd. ("Novartis"), which will fund all development, manufacturing and commercialization; and

(iv) AV-353, a potent inhibitory antibody specific to Notch 3. AV-353, which has demonstrated an ability in preclinical models to potentially reverse disease phenotype for pulmonary arterial hypertension ("PAH"). The Company is currently seeking a partner to advance development of AV-353 for the potential treatment of PAH.

As used throughout these condensed consolidated financial statements, the terms "AVEO," and the "Company" refer to the business of AVEO Pharmaceuticals, Inc. and its two wholly-owned subsidiaries, AVEO Pharma Limited and AVEO Securities Corporation.

The Company has devoted substantially all of its resources to its drug development efforts, comprising research and development, manufacturing, conducting clinical trials for its product candidates, protecting its intellectual property and general and administrative functions relating to these operations.

The Company has an accumulated deficit as of September 30, 2016 of approximately $516.3 million and is subject to a number of risks, including the need for substantial additional capital for clinical research and product development and the risk that it is unable to maintain compliance with its financial covenant pursuant to its loan and security agreement (refer to Note 6). The Company will need additional funding to support its planned operating activities and maintain compliance with its financial covenant. Accordingly, the timing and nature of activities contemplated for 2017 and thereafter will be conducted subject to the availability of sufficient financial resources. If the Company is unable to raise capital when needed or on attractive terms, or if it is unable to procure partnership arrangements to advance its programs, it would be forced to delay, reduce or eliminate its research and development programs and any future commercialization efforts.

(2) Basis of Presentation

These condensed consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries, AVEO Pharma Limited and AVEO Securities Corporation. The Company has eliminated all significant intercompany accounts and transactions in consolidation.

The accompanying condensed consolidated financial statements have been prepared in accordance with generally accepted accounting principles (GAAP) for interim financial information and with the instructions to Form 10-Q and Article 10 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by generally accepted accounting principles for complete financial statements. In the opinion of management, all adjustments, consisting of normal recurring accruals and revisions of estimates, considered necessary for a fair presentation of the condensed consolidated financial statements have been included. Interim results for the three months and nine months ended September 30, 2016 are not necessarily indicative of the results that may be expected for the fiscal year ending December 31, 2016 or any other future period.

The information presented in the condensed consolidated financial statements and related footnotes at September 30, 2016, and for the three months and nine months ended September 30, 2016 and 2015, is unaudited, and the condensed consolidated balance sheet amounts and related footnotes as of December 31, 2015 have been derived from the Company’s audited financial statements. For further information, refer to the consolidated financial statements and accompanying footnotes included in the Company’s annual report on Form 10-K for the fiscal year ended December 31, 2015, which was filed with the U.S. Securities and Exchange Commission (“SEC”) on March 15, 2016.

Certain reclassifications have been made to prior periods to conform to current period presentation. Reclassification of prior year amounts has been made to separately present accrued contract research from accrued expenses on the consolidated balance sheets and to present interest expense net of interest income on the consolidated statements of operations. There was no impact on total liabilities, total other expenses or net income (loss) resulting from these reclassifications.

(3) Significant Accounting Policies

Revenue Recognition

The Company's revenues are generated primarily through collaborative research, development and commercialization agreements. The terms of these agreements generally contain multiple elements, or deliverables, which may include (i) licenses, or options to obtain licenses, to the Company's technology, (ii) research and development activities to be performed on behalf of the collaborative partner, and (iii) in certain cases, services in connection with the manufacturing of pre-clinical and clinical material. Payments to the Company under these arrangements typically include one or more of the following: non-refundable, up-front license fees; option exercise fees; funding of research and/or development efforts; milestone payments; and royalties on future product sales.

When evaluating multiple element arrangements, the Company considers whether the deliverables under the arrangement represent separate units of accounting. This evaluation requires subjective determinations and requires management to make judgments about the individual deliverables and whether such deliverables are separable from the other aspects of the contractual relationship. In determining the units of accounting, management evaluates certain criteria, including whether the deliverables have standalone value, based on the relevant facts and circumstances for each arrangement. The consideration received is allocated among the separate units of accounting using the relative selling price method, and the applicable revenue recognition criteria are applied to each of the separate units.

The Company determines the estimated selling price for deliverables within each agreement using vendor-specific objective evidence (“VSOE”) of selling price, if available, third-party evidence (“TPE”) of selling price if VSOE is not available, or best estimate of selling price if neither VSOE nor TPE is available. Determining the best estimate of selling price for a deliverable requires significant judgment. The Company typically uses best estimate of selling price to estimate the selling price for licenses to the Company’s proprietary technology, since the Company often does not have VSOE or TPE of selling price for these deliverables. In those circumstances where the Company utilizes best estimate of selling price to determine the estimated selling price of a license to the Company’s proprietary technology, the Company considers market conditions as well as entity-specific factors, including those factors contemplated in negotiating the agreements and internally developed models that include assumptions related to the market opportunity, estimated development costs, probability of success and the time needed to commercialize a product candidate pursuant to the license. In validating the Company’s best estimate of selling price, the Company evaluates whether changes in the key assumptions used to determine the best estimate of selling price will have a significant effect on the allocation of arrangement consideration among multiple deliverables.

The Company typically receives non-refundable, up-front payments when licensing its intellectual property in conjunction with a research and development agreement. When management believes the license to its intellectual property does not have stand-alone value from the other deliverables to be provided in the arrangement, the Company generally recognizes revenue attributed to the license on a straight-line basis over the Company’s contractual or estimated performance period, which is typically the term of the Company’s research and development obligations. If management cannot reasonably estimate when the Company’s performance obligation ends, then revenue is deferred until management can reasonably estimate when the performance obligation ends. When management believes the license to its intellectual property has stand-alone value, the Company generally recognizes revenue attributed to the license upon delivery. The periods over which revenue should be recognized are subject to estimates by management and may change over the course of the research and development agreement. Such a change could have a material impact on the amount of revenue the Company records in future periods.

Payments or reimbursements resulting from the Company’s research and development efforts for those arrangements where such efforts are considered as deliverables are recognized as the services are performed and are presented on a gross basis so long as there is persuasive evidence of an arrangement, the fee is fixed or determinable, and collection of the related receivable is reasonably assured. Amounts received prior to satisfying the above revenue recognition criteria are recorded as deferred revenue in the accompanying balance sheets.

At the inception of each agreement that includes milestone payments, the Company evaluates whether each milestone is substantive and at risk to both parties on the basis of the contingent nature of the milestone. This evaluation includes an assessment of whether (a) the consideration is commensurate with either (1) the entity’s performance to achieve the milestone, or (2) the enhancement of the value of the delivered item(s) as a result of a specific outcome resulting from the entity’s performance to achieve the milestone, (b) the consideration relates solely to past performance, and (c) the consideration is reasonable relative to all of the deliverables and payment terms within the arrangement. The Company evaluates factors such as the scientific, regulatory, commercial and other risks that must be overcome to achieve the respective milestone, the level of effort and investment required to achieve the respective milestone and whether the milestone consideration is reasonable relative to all deliverables and payment terms in the arrangement in making this assessment.

The Company aggregates its milestones into four categories: (i) clinical and development milestones, (ii) regulatory milestones, (iii) commercial milestones, and (iv) patent-related milestones. Clinical and development milestones are typically achieved when a product candidate advances into a defined phase of clinical research or completes such phase. For example, a milestone payment may be due to the Company upon the initiation of a phase 3 clinical trial for a new indication, which is the last phase of clinical development and could eventually contribute to marketing approval by the U.S. Food and Drug Administration (“FDA”) or other global regulatory authorities. Regulatory milestones are typically achieved upon acceptance of the submission for marketing approval of a product candidate or upon approval to market the product candidate by the FDA or other global regulatory authorities. For example, a milestone payment may be due to the Company upon the FDA's acceptance of a New Drug Application ("NDA"). Commercial milestones are typically achieved when an approved pharmaceutical product reaches certain defined levels of net sales by the licensee, such as when a product first achieves global sales or annual sales of a specified amount. Patent-related milestones are typically achieved when a patent application is filed or a patent is issued with respect to certain intellectual property related to the applicable collaboration.

Revenues from clinical and development, regulatory, and patent-related milestone payments, if the milestones are deemed substantive and the milestone payments are nonrefundable, are recognized upon successful accomplishment of the milestones. The Company has concluded that the clinical and development, regulatory and patent-related milestones pursuant to its current research and development arrangements are substantive. Milestones that are not considered substantive are accounted for as license payments and recognized on a straight-line basis over the remaining period of performance. Revenues from commercial milestone payments are accounted for as royalties and are recorded as revenue upon achievement of the milestone, assuming all other revenue recognition criteria are met.

Research and Development Expenses

Research and development expenses are charged to expense as incurred. Research and development expenses consist of costs incurred in performing research and development activities, including personnel-related costs such as salaries and stock-based compensation, facilities, research-related overhead, clinical trial costs, manufacturing costs and costs of other contracted services, license fees, and other external costs. Nonrefundable advance payments for goods and services that will be used in future research and development activities are expensed when the activity has been performed or when the goods have been received.

Warrants Issued in Connection with Private Placement

The Company accounts for warrant instruments that either conditionally or unconditionally obligate the issuer to transfer assets as liabilities regardless of the timing of the redemption feature or price, even though the underlying shares may be classified as permanent or temporary equity. These warrants are subject to revaluation at each balance sheet date, and any changes in fair value are recorded as a non-cash component of other income (expense), net until the earlier of their exercise or expiration or upon the completion of a liquidation event.

During the three months and nine months ended September 30, 2016, as a result of the fair value adjustment of the warrant liability, the Company recorded a decrease in the fair value of the warrant liability of approximately $1.2 million and $0.2 million, respectively, in its Statements of Operations and Comprehensive Income (Loss). Refer to Note 7, “Common Stock - Private Placement / PIPE Warrants” for further discussion on the calculation of the fair value of the warrant liability.

The following table rolls forward the fair value of the Company’s warrant liability, the fair value of which is determined by Level 3 inputs for the nine months ended September 30, 2016 (in thousands):

	Nine Months Ended September 30, 2016
Fair value at January 1, 2016	$ —
Issuance of warrants on May 13, 2016	9,344
Change in fair value	996
Fair value at June 30, 2016	10,340
Change in fair value	(1,178)
Fair value at September 30, 2016	$ 9,162

Cash and Cash Equivalents

The Company considers all highly liquid investments with original maturities of three months or less at the date of purchase and an investment in a money market fund to be cash equivalents. Changes in the balance of cash and cash equivalents may be affected by changes in investment portfolio maturities, as well as actual cash disbursements to fund operations.

The Company’s cash is deposited in highly-rated financial institutions in the United States. The Company invests in money market funds and high-grade, short-term commercial paper, corporate bonds and U.S. government agency securities, which management believes are subject to minimal credit and market risk. The carrying values of the Company’s cash and cash equivalents approximate fair value due to their short term maturities.

Marketable Securities

Marketable securities consist primarily of investments which have expected average maturity dates in excess of three months, but not longer than 24 months. The Company invests in high-grade corporate obligations, including commercial paper, and U. S. government and government agency obligations that are classified as available-for-sale. Since these securities are available to fund current operations they are classified as current assets on the consolidated balance sheets.

Marketable securities are stated at fair value, including accrued interest, with their unrealized gains and losses included as a component of accumulated other comprehensive income or loss, which is a separate component of stockholders’ equity. The fair value of these securities is based on quoted prices and observable inputs on a recurring basis. The cost of marketable securities is adjusted for amortization of premiums and accretion of discounts to maturity, with such amortization and accretion recorded as a component of interest expense, net. Realized gains and losses are determined on the specific identification method. Unrealized gains and losses are included in other comprehensive loss until realized, at which point they would be recorded as a component of interest expense, net. There were no realized gains or losses recognized on the sale or maturity of marketable securities during the three months and nine months ended September 30, 2016 and 2015.

Below is a summary of cash, cash equivalents and marketable securities at September 30, 2016 and December 31, 2015:

	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
	(in thousands)			
September 30, 2016:				
Cash and cash equivalents:				
Cash and money market funds	$12,370	$ —	$ —	$12,370
Government agency securities	-	—	—	-
Corporate debt securities	-	—	—	-
Total cash and cash equivalents	12,370	—	—	12,370
Marketable securities:				
Corporate debt securities due within 1 year	13,420	27	(1)	13,446
Government agency securities due within 1 year	5,013	2	—	5,015
Total marketable securities	18,433	29	(1)	18,461
Total cash, cash equivalents and marketable securities	$30,803	$ 29	$ (1)	$30,831
December 31, 2015:				
Cash and cash equivalents:				
Cash and money market funds	$21,822	$ —	$ —	$21,822
Corporate debt securities	4,812	—	—	4,812
Total cash and cash equivalents	26,634	—	—	26,634
Marketable securities:				
Corporate debt securities due within 1 year	$6,504	$ —	$ (3)	$6,501
Government agency securities due within 1 year	1,000	—	—	1,000
Total marketable securities	7,504	—	(3)	7,501
Total cash, cash equivalents and marketable securities	$34,138	$ —	$ (3)	$34,135

Concentrations of Credit Risk

Financial instruments that potentially subject the Company to credit risk primarily consist of cash and cash equivalents, marketable securities and accounts receivable. The Company maintains deposits in highly-rated federally-insured financial institutions in excess of federally insured limits. The Company's investment strategy is focused on capital preservation. The Company invests in instruments that meet the high credit quality standards outlined in the Company's investment policy. This policy also limits the amount of credit exposure to any one issue or type of instrument.

The Company's accounts receivable primarily consists of amounts due to the Company from licensees and collaborators. As of September 30, 2016, the Company had $1.0 million of accounts receivable outstanding, primarily due from Biodesix pursuant to the Company's collaboration arrangement for ficlatuzumab (refer to Note 4). The Company has not experienced any material losses related to accounts receivable from individual licensees or collaborators.

Fair Value Measurements

The fair value of the Company's financial assets and liabilities reflects the Company's estimate of amounts that it would have received in connection with the sale of the assets or paid in connection with the transfer of the liabilities in an orderly transaction between market participants at the measurement date. In connection with measuring the fair value of its assets and liabilities, the Company seeks to maximize the use of observable inputs (market data obtained from sources independent from the Company) and to minimize the use of unobservable inputs (the Company's assumptions about how market participants would price assets and liabilities). The following fair value hierarchy is used to classify assets and liabilities based on the observable inputs and unobservable inputs used in order to value the assets and liabilities:

Level 1: Quoted prices in active markets for identical assets or liabilities. An active market for an asset or liability is a market in which transactions for the asset or liability occur with sufficient frequency and volume to provide pricing information on an ongoing basis.

Level 2: Observable inputs other than Level 1 inputs. Examples of Level 2 inputs include quoted prices in active markets for similar assets or liabilities and quoted prices for identical assets or liabilities in markets that are not active.

Level 3: Unobservable inputs based on the Company's assessment of the assumptions that market participants would use in pricing the asset or liability.

Financial assets and liabilities are classified in their entirety within the fair value hierarchy based on the lowest level of input that is significant to the fair value measurement. The Company measures the fair value of its marketable securities by taking into consideration valuations obtained from third-party pricing sources. The pricing services utilize industry standard valuation models, including both income and market based approaches, for which all significant inputs are observable, either directly or indirectly, to estimate fair value. These inputs include reported trades of and broker-dealer quotes on the same or similar securities, issuer credit spreads, benchmark securities and other observable inputs.

As of September 30, 2016, the Company's financial assets valued based on Level 1 inputs consisted of cash and cash equivalents in a money market fund and its financial assets valued based on Level 2 inputs consisted of high-grade corporate bonds, commercial paper and U.S. government agency securities. During the three months and nine months ended September 30, 2016, the Company did not have any transfers of financial assets between Levels 1 and 2.

As of September 30, 2016, the Company's financial liabilities that were recorded at fair value consisted of a warrant liability.

The fair value of the Company's loans payable at September 30, 2016 approximates its carrying value, computed pursuant to a discounted cash flow technique using a market interest rate and is considered a Level 3 fair value measurement. The effective interest rate, which reflects the current market rate, considers the fair value of the warrants issued in connection with the loan, loan issuance costs and the deferred financing charge.

The following table summarizes the assets and liabilities measured at fair value on a recurring basis at September 30, 2016 and December 31, 2015:

Fair Value Measurements of Cash Equivalents and

Marketable Securities as of September 30, 2016

	Level 1	Level 2	Level 3	Total
	(in thousands)			
Financial assets carried at fair value:				
Cash equivalents	$12,370	$—	$—	$12,370
Corporate debt securities	—	-	—	-
Government agency securities	—	-	—	-
Total cash and cash equivalents	$12,370	$—	$—	$12,370
Marketable securities:				
Corporate debt securities due within 1 year	$—	$13,446	$—	$13,446
Government agency securities due within 1 year	—	5,015	—	5,015
Total marketable securities	$—	$18,461	$—	$18,461
Total cash, cash equivalents and marketable securities	$12,370	$18,461	$—	$30,831
Financial liabilities carried at fair value:				
Warrant liability	$—	$—	$9,162	$9,162
Total warrant liability	$—	$—	$9,162	$9,162

	Fair Value Measurements of Cash Equivalents and Marketable Securities as of December 31, 2015			
	Level 1	Level 2	Level 3	Total
	(in thousands)			
Financial assets carried at fair value:				
Cash equivalents	$21,822	$—	$ —	$21,822
Corporate debt securities	—	4,812		4,812
Total cash and cash equivalents	$21,822	$4,812	$ —	$26,634
Marketable securities:				
Corporate debt securities due within 1 year	$—	$6,501	$ —	$6,501
Government agency securities due within 1 year	—	1,000	—	1,000
Total marketable securities	$—	$7,501	$ —	$7,501
Total cash, cash equivalents and marketable securities	$21,822	$12,313	$ —	$34,135
Financial liabilities carried at fair value:				
Warrant liability	$—	$—	$ —	$—
	$—	$—	$ —	$—

Property and Equipment

Property and equipment are stated at cost and are depreciated using the straight-line method over the estimated useful lives of the respective assets. Maintenance and repair costs are charged to expense as incurred. During the quarter ended June 30, 2015, the Company transitioned to new office space and, as a result, revised the estimated useful life of its office furniture, resulting in an increase in depreciation expense of approximately $0.4 million during the nine months ended September 30, 2015.

Long-lived Assets

The Company reviews long-lived assets, including property and equipment, for impairment whenever changes in business circumstances indicate that the carrying amount of the asset may not be fully recoverable. No impairment charges were recognized during the three months and nine months ended September 30, 2016. The Company recognized $0.2 million of impairment from losses for the nine months ended September 30, 2015 related to leasehold improvements.

Basic and Diluted Loss per Common Share

Basic earnings (loss) per share is computed by dividing net income (loss) available to common stockholders by the weighted-average number of common shares outstanding during the period. Diluted earnings (loss) per share is computed by dividing net income (loss) available to common stockholders by the weighted-average number of common shares and dilutive common share equivalents then outstanding which exclude unvested restricted stock. Potential common share equivalents consist of the incremental common shares issuable upon the exercise of stock options and warrants. After applying the treasury stock method for those instruments that were “in-the-money,” the dilutive effect of stock options and warrants resulted in an increase in the weighted-average number of common shares of 222,000 used in calculating diluted earnings per common share for the three months ending September 30, 2015. For periods presented during which the Company had a net loss, the effect of all potentially dilutive securities is anti-dilutive. Accordingly, basic and diluted net loss per common share is the same for those periods.

The following table sets forth the potential common shares excluded from the calculation of net loss per common share-diluted for the three months and nine months ended September 30, 2016 and the nine months ended September 30, 2015 because their inclusion would have been anti-dilutive:

	Outstanding at September 30,	
	2016	2015
	(in thousands)	
Options outstanding	5,811	5,826
Warrants outstanding	19,453	609
	25,264	6,435

13

Stock-Based Compensation

Under the Company's stock-based compensation programs, the Company periodically grants stock options and restricted stock to employees, directors and nonemployee consultants. The Company also issues shares under an employee stock purchase plan. The fair value of all awards is recognized in the Company's statements of operations over the requisite service period for each award.

Awards that vest as the recipient provides service are expensed on a straight-line basis over the requisite service period. Other awards, such as performance-based awards that vest upon the achievement of specified goals, are expensed using the accelerated attribution method if achievement of the specified goals is considered probable. The Company has also granted awards that vest upon the achievement of market conditions. Per Accounting Standards Codification ("ASC") 718 Share-Based Payments, market conditions must be considered in determining the estimated grant-date fair value of share-based payments and the market conditions must be considered in determining the requisite service period over which compensation cost is recognized. The Company estimates the fair value of the awards with market conditions using a Monte-Carlo simulation, which utilizes several assumptions including the risk-free interest rate, the volatility of the Company's stock and the exercise behavior of award recipients. The grant-date fair value of the awards is then recognized over the requisite service period, which represents the derived service period for the awards as determined by the Monte Carlo simulation.

The fair value of equity-classified awards to employees and directors are measured at fair value on the date the awards are granted. Awards to nonemployee consultants are recorded at their fair values and are re-measured as of each balance sheet date until the recipient's services are complete. During the three months and nine months ended September 30, 2016 and 2015, the Company recorded the following stock-based compensation expense:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
	(in thousands)		(in thousands)	
Research and development	$56	$50	$238	$238
General and administrative	149	294	591	873
Restructuring	—	—	—	69
	$205	$344	$829	$1,180

Stock-based compensation expense is allocated to research and development and general and administrative expense based upon the department of the employee to whom each award was granted. Expenses recognized in connection with the modification of awards in connection with the Company's strategic restructurings are allocated to restructuring expense. No related tax benefits of the stock-based compensation expense have been recognized.

Income Taxes

The Company provides for income taxes using the asset-liability method. Under this method, deferred tax assets and liabilities are recognized based on differences between financial reporting and tax bases of assets and liabilities, and are measured using the enacted tax rates and laws that will be in effect when the differences are expected to reverse. The Company calculates its provision for income taxes on ordinary income based on its projected annual tax rate for the year. Uncertain tax positions are recognized if the position is more-likely-than-not to be sustained upon examination by a tax authority. Unrecognized tax benefits represent tax positions for which reserves have been established. As of September 30, 2016, the Company is forecasting a net loss for the year ended December 31, 2016. The Company maintains a full valuation allowance on all deferred tax assets. For the nine months ended September 30, 2016, the Company recorded a $0.1 million provision for income taxes related to withholding taxes incurred in a foreign jurisdiction.

Segment and Geographic Information

Operating segments are defined as components of an enterprise engaging in business activities for which discrete financial information is available and regularly reviewed by the chief operating decision maker in deciding how to allocate resources and in assessing performance. The Company views its operations and manages its business in one operating segment principally in the United States. As of September 30, 2016, the Company has $0.8 million of net assets located in the United Kingdom.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect certain reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting periods. Significant items subject to such estimates and assumptions include contract research accruals and measurement of stock-based compensation. The Company bases its estimates on historical experience and various other assumptions that management believes to be reasonable under the circumstances. Changes in estimates are recorded in the period in which they become known. Actual results could differ from those estimates.

Recent Accounting Pronouncements

The Company did not adopt any new accounting pronouncements during the nine months ended September 30, 2016 that had a material effect on the Company’s condensed consolidated financial statements.

In May 2014, the Financial Accounting Standards Board (“FASB”) issued a comprehensive new revenue recognition standard that will supersede nearly all existing revenue recognition guidance under US GAAP. The standard was originally scheduled to be effective for public entities for annual and interim periods beginning after December 15, 2016. In July 2015, the standard was deferred and will now be effective for annual and interim periods beginning after December 15, 2017. Early adoption is permitted for annual and interim periods beginning after December 15, 2016. The Company will adopt this standard on January 1, 2018 and is currently evaluating the effect this standard will have on its revenue recognition policies and its financial statements, including how the standard will be adopted.

In August 2014, the FASB issued Accounting Standards Update (“ASU”) No. 2014-15, Presentation of Financial Statements—Going Concern (Subtopic 205-40): Disclosure of Uncertainties about an Entity’s Ability to Continue as a Going Concern. This ASU is intended to define management’s responsibility to evaluate whether there is substantial doubt about an organization’s ability to continue as a going concern within one year of the date of issuance of the entity’s financial statements and to provide related footnote disclosures even in circumstances where conditions are mitigated as a result of management’s plans. This guidance is effective for fiscal years ending after December 15, 2016, with early application permitted. If this standard had been adopted as of September 30, 2016 and applied to these financial statements, the guidance would have required additional disclosure in the financial statements. The Company faces certain risks and uncertainties as further described in Note 1, “Organization,” that may have an effect on the Company’s disclosures in future periods.

In March 2016, the FASB issued ASU No. 2016-09, Compensation Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting. This ASU is intended to simplify certain aspects of the accounting for share-based payment transactions, such as allowing entities to elect to account for forfeitures as they occur or to continue to estimate the number of awards that are expected to vest. The standard is effective for public entities for annual and interim periods beginning after December 15, 2016. The Company is currently evaluating the impact that the adoption of this standard will have on its financial statements.

(4) Collaborations and License Agreements

CANbridge

In March 2016, the Company entered into a collaboration and license agreement (the "CANbridge Agreement") with CANbridge Life Sciences Ltd. ("CANbridge"). Under the terms of the CANbridge Agreement, the Company granted CANbridge the exclusive right to develop, manufacture and commercialize AV-203, the Company's proprietary ErbB3 (HER3) inhibitory antibody, for the diagnosis, treatment and prevention of disease in humans and animals in all countries other than the United States, Canada and Mexico (the "Licensed Territory"). Under the terms of the CANbridge Agreement, if the Company determines to grant a license to any ErbB3 inhibitory antibody in the United States, Canada or Mexico, the Company is obligated to first negotiate with CANbridge for the grant to CANbridge of a license to such rights. The effective date of the license agreement is March 16, 2016 (the "Effective Date").

CANbridge made an upfront payment to the Company of $1.0 million in April 2016. This amount was included in accounts receivable on the Company's balance sheet as of March 31, 2016 net of $0.1 million of withholding taxes. CANbridge has agreed to reimburse the Company $1.0 million for certain manufacturing costs and expenses previously incurred by the Company with respect to AV-203, $0.5 million of which will be due to the Company on the earlier of (i) the date of validation by CANbridge of certain manufacturing development activities conducted by the Company prior to the Effective Date or (ii) twelve months from the Effective Date, and the remaining $0.5 million of which will be due to the Company on the earlier of (i) the date of validation by CANbridge of such manufacturing development activities or (ii) eighteen months from the Effective Date. The Company is also eligible to receive up to $42.0 million in potential development and regulatory milestone payments and up to $90.0 million in potential sales based milestone payments based on annual net sales of licensed products. Upon commercialization, the Company is eligible to receive a tiered royalty, with a percentage range in the low double-digits, on net sales of approved licensed products. CANbridge's obligation to pay royalties for each licensed product expires on a country-by-country basis on the later of the expiration of patent rights covering such licensed product in such country, the expiration of regulatory data exclusivity in such country and ten years after the first commercial sale of such licensed product in such country. No milestone payments have been earned as of September 30, 2016.

CANbridge is obligated to use commercially reasonable efforts to develop and commercialize AV-203 in each of China, Japan, the United Kingdom, France, Italy, Spain, and Germany. CANbridge has responsibility for all activities and costs associated with the further development, manufacture, regulatory filings and commercialization of AV-203 in the Licensed Territory.

The term of the CANbridge Agreement commenced on the Effective Date and will continue until the last to expire royalty term applicable to licensed products. Either party may terminate the CANbridge Agreement in the event of a material breach by the other party that remains uncured for a period of 45 days, in the case of a material breach of a payment obligation, and 90 days in the case of any other material breach. CANbridge may terminate the CANbridge Agreement without cause at any time upon 180 days' prior written notice to the Company. The Company may terminate the CANbridge Agreement upon thirty days' prior written notice if CANbridge challenges any of the patent rights licensed to CANbridge under the CANbridge Agreement.

The Company and CANbridge have each agreed to not directly or indirectly develop or commercialize any ErbB3 inhibitory antibody product during the term of the CANbridge Agreement other than pursuant to the CANbridge Agreement.

A percentage of any milestone and royalty payments received by the Company, excluding upfront and reimbursement payments, are due to Biogen Idec International GMBH ("Biogen") as a sublicensing fee under the option and license agreement between the Company and Biogen dated March 18, 2009, as amended.

Activities under the CANbridge Agreement were evaluated under ASC 605-25 Revenue Recognition—Multiple Element Arrangements ("ASC 605-25") to determine whether such activities represented a multiple element revenue arrangement. The CANbridge Agreement includes the following non-contingent deliverables: (i) the Company's grant of an exclusive license to develop and commercialize AV-203 in the licensed territories, (ii) the Company's obligation to transfer all technical knowledge and data useful in the development and manufacture of AV-203 and (iii) the Company's obligation to participate on a joint steering committee during the proof-of-concept development period. The relative selling price of the Company's joint steering committee participation had de minimis value. The Company determined that the delivered license and know-how did have stand-alone value from the undelivered element and have accounted for these items as separate deliverables. The Company allocated the up-front consideration of $1.0 million to the units of accounting and recognized the $1.0 million attributed to the delivered license and know-how during the three months ended March 31, 2016.

The Company believes the regulatory milestones that may be achieved under the CANbridge Agreement are consistent with the definition of a milestone included in ASU 2010-17, Revenue Recognition—Milestone Method, and, accordingly, the Company will recognize payments related to the achievement of such milestones, if any, when each such milestone is achieved. Factors considered in this determination included scientific and regulatory risks that must be overcome to achieve each milestone, the level of effort and investment required to achieve each milestone, and the monetary value attributed to each milestone.

EUSA

In December 2015, the Company entered into a license agreement with EUSA Pharma (UK) Limited ("EUSA") under which the Company granted to EUSA the exclusive, sublicensable right to develop, manufacture and commercialize tivozanib in the territories of Europe (excluding Russia, Ukraine and the Commonwealth of Independent States), Latin

America (excluding Mexico), Africa, Australasia and New Zealand (the “Licensed Territories”) for all diseases and conditions in humans, excluding non-oncologic diseases or conditions of the eye. EUSA filed an application with the EMA in February 2016, which was validated by the EMA in March 2016, for approval of marketing authorization for tivozanib for the treatment of RCC.

Under the license agreement, EUSA made a research and development funding payment to the Company of $2.5 million during the year ended December 31, 2015. EUSA is required to make a further research and development funding payment of $4.0 million upon the grant by the European Medicines Agency (“EMA”) of marketing approval for tivozanib for treatment of RCC. The Company is eligible to receive additional research funding from EUSA, including up to $20.0 million for the Company’s phase 3 study in third-line RCC if EUSA elects to utilize data generated by the study and up to $2.0 million for a potential phase 1 combination study with a checkpoint inhibitor if EUSA elects to utilize data generated by the study. The Company will be entitled to receive milestone payments of $2.0 million per country upon reimbursement approval for RCC in each of France, Germany, Italy, Spain and the United Kingdom, and an additional $2.0 million for the grant of marketing approval in three of the following five countries: Argentina, Australia, Brazil, South Africa and Venezuela. The Company is also eligible to receive a payment of $2.0 million in connection with EUSA’s filing with the EMA for marketing approval for tivozanib for the treatment of each of up to three additional indications and $5.0 million per indication in connection with the EMA’s grant of marketing approval for each of up to three additional indications, as well as potentially up to $335.0 million upon EUSA’s achievement of certain sales thresholds. The Company is also eligible to receive tiered double-digit royalties on net sales, if any, of licensed products in the Licensed Territories ranging from a low double digit up to mid-twenty percent depending on the level of annual net sales. A percentage of any milestone and royalty payments received by AVEO is due to Kyowa Hakko Kirin Co., Ltd. (formerly Kirin Brewery Co., Ltd.) ("KHK") as a sublicensing fee under the license agreement between AVEO and KHK dated as of December 21, 2006, pursuant to which the Company acquired exclusive rights to develop and commercialize tivozanib for all human diseases outside of Asia and the Middle East. The research and development funding payments under the EUSA license agreement are not subject to sublicensing payment to KHK.

EUSA is obligated to use commercially reasonable efforts to develop and commercialize tivozanib throughout the Licensed Territories. With the exception of certain support to be provided by the Company in connection with the application for marketing approval by the EMA, EUSA has responsibility for all activities and costs associated with the further development, manufacture, regulatory filings and commercialization of tivozanib in the Licensed Territories.

Activities under the agreement were evaluated under ASC 605-25 to determine whether such activities represented a multiple element revenue arrangement. The agreement with EUSA includes the following non-contingent deliverables: (i) the Company's grant of an exclusive license to develop and commercialize the tivozanib in the Licensed Territories; (ii) the Company's obligation to transfer all technical knowledge and data useful in the development and manufacture of tivozanib; (iii) the Company's obligation to cooperate with EUSA and support its efforts to file for marketing approval in the Licensed Territories, (iv) the Company's obligation to provide access to certain regulatory information resulting from the Company's ongoing development activities outside of the Licensed Territories and (v) the Company's participation in a joint steering committee. The Company determined that the delivered license did not have stand-alone value from the undelivered elements and have accounted for these items as a single bundled deliverable. The Company allocated up-front consideration of $2.5 million to the bundled unit of accounting and is recognizing it over the Company's performance period through April 2022, the remaining patent life of tivozanib. The Company recognized approximately $0.1 million and $0.3 million as revenue during the three months and nine months ended September 30, 2016, respectively.

The Company believes the regulatory milestones that may be achieved under the EUSA agreement are consistent with the definition of a milestone included in ASU 2010-17, Revenue Recognition—Milestone Method, and, accordingly, the Company will recognize payments related to the achievement of such milestones, if any, when each such milestone is achieved. Factors considered in this determination included scientific and regulatory risks that must be overcome to achieve each milestone, the level of effort and investment required to achieve each milestone, and the monetary value attributed to each milestone. No milestone payments have been earned as of September 30, 2016.

Novartis

In August 2015, the Company entered into a license agreement with Novartis. Under the license agreement, the Company has granted to Novartis the exclusive right to develop and commercialize worldwide the Company's proprietary antibody AV-380 and related AVEO antibodies that bind to Growth Differentiation Factor 15 ("GDF15") for the treatment and prevention of diseases and other conditions in all indications in humans (the "Product").

Pursuant to the license agreement, Novartis made an upfront payment to the Company of $15.0 million in September 2015. Novartis also has acquired the Company's inventory of clinical quality, AV-380 biological drug substance and reimbursed the Company for approximately $3.5 million for such existing inventory. The Company is also eligible to receive up to $53.0 million in potential clinical and development milestone payments and up to $105.0 million in potential regulatory milestone payments tied to the commencement of clinical trials and to regulatory approvals of products developed under the license agreement in the United States, the European Union and Japan, and it is eligible to receive up to $150.0 million in potential commercial milestone payments based on annual net sales of such products. Upon commercialization, the Company is eligible to receive tiered royalties on net sales of approved products ranging from the high single digits to the low double-digits.

Certain milestones achieved by Novartis would trigger milestone payment obligations from the Company to St. Vincent's Hospital Sydney Limited ("St. Vincent's") under the Company's amended and restated license agreement with St. Vincent's. In addition, royalties on approved products will be payable to St. Vincent's, and the Company and Novartis will share that obligation equally.

Novartis has responsibility under the license agreement for the development, manufacture and commercialization of the Company's antibodies and any resulting approved therapeutic products. The Company has agreed that it will not directly or indirectly develop, manufacture or commercialize any GDF15 modulator as a human therapeutic during the term of the license agreement.

Activities under the agreement with Novartis were evaluated under ASC 605-25 to determine whether such activities represented a multiple element revenue arrangement. The agreement with Novartis includes the following non-contingent deliverables: (i) the Company's grant of an exclusive, worldwide license to develop and commercialize the Product; (ii) the Company's obligation to transfer all technical knowledge and data useful in the development and manufacture of the Product; and (iii) the Company's obligation to cooperate with Novartis' requests for transition assistance during a 90 day period. The Company determined that the option to purchase the Company's existing inventory was a contingent deliverable.

The Company determined the delivered license and obligation to transfer technical knowledge and data have standalone value from the undelivered cooperation. The Company allocated up-front consideration of $15.0 million to the delivered license and technical knowledge and recognized this amount as revenue during the year ended December 31, 2015. The relative selling price of the undelivered cooperation had de minimis value.

The Company received a cash payment of $3.5 million related to the delivery of its inventory of clinical quality drug substance to Novartis during the three months ended March 31, 2016. No milestone payments have been earned as of September 30, 2016.

Pharmstandard

In August 2015, the Company entered into a license agreement with JSC "Pharmstandard-Ufimskiy Vitamin Plant," a company registered under the laws of the Russian Federation ("Pharmstandard"). Pharmstandard is a subsidiary of Pharmstandard OJSC. Under the license agreement, the Company granted to Pharmstandard the exclusive, sublicensable right to develop, manufacture and commercialize tivozanib in the territories of Russia, Ukraine and the Commonwealth of Independent States (the "Licensed Territories") for all diseases and conditions in humans, excluding non-oncologic ocular conditions.

In June 2016, following unsuccessful efforts to renegotiate certain terms of the Pharmstandard license agreement, Pharmstandard notified the Company that due to economic and market changes in Russia it was exercising its right to terminate the license agreement effective September 9, 2016. Upon termination of the license agreement, the licenses to tivozanib granted to Pharmstandard were terminated, all product rights and regulatory documents were transferred to the Company and Pharmstandard is no longer responsible for the development and commercialization of tivozanib in the Licensed Territories. Pharmstandard filed an application for marketing authorization in Russia for tivozanib for the treatment of renal cell carcinoma that was accepted by the Ministry of Health of the Russian Federation in February 2016. This application was withdrawn following Pharmstandard's termination notice.

Activities under the agreement with Pharmstandard were evaluated under ASC 605-25 to determine whether such activities represented a multiple element revenue arrangement. The agreement with Pharmstandard includes the following non-contingent deliverables: (i) the Company's grant of an exclusive license to develop and commercialize tivozanib in the Licensed Territories, (ii) the Company's obligation to provide access, upon request, to all clinical data, regulatory filings, safety data and manufacturing data to Pharmstandard for use in the development and commercialization of tivozanib in the Licensed Territories, (iii) the Company's obligation to participate in certain development and commercialization planning meetings and (iv) the Company's obligation to provide support for certain development, regulatory or manufacturing activities if requested by Pharmstandard.

The Company determined the delivered license did not have standalone value from the undelivered items and that the arrangement should be treated as a single unit of accounting. The Company allocated the upfront payment of $1.0 million to the bundled unit of accounting and was recognizing it over the Company's performance period through April 2022, the remaining patent life of tivozanib. Upon the effective date of the termination, the remaining deferred revenue of approximately $0.9 million was recognized. The Company recognized approximately $0.9 million as revenue during each of the three months and nine months ended September 30, 2016, respectively.

Ophthotech

In November 2014 the Company entered into a research and exclusive option agreement (the “Option Agreement”), with Ophthotech Corporation (“Ophthotech”) pursuant to which the Company provided Ophthotech an exclusive option to enter into a definitive license agreement whereby the Company would grant Ophthotech the right to develop and commercialize tivozanib outside of Asia and the Middle East for the potential diagnosis, prevention and treatment of non-oncologic diseases or conditions of the eye in humans.

Pursuant to this Option Agreement, the Company granted to Ophthotech an exclusive, royalty-free license or sublicense, as applicable, under intellectual property rights controlled by the Company solely to perform the research and development activities related to the use of tivozanib for the specific purposes outlined in the agreement during the Option Period (as defined below). These activities include formulation work for ocular administration, preclinical research and the conduct of a phase 1/2a proof-of-concept clinical trial of a product containing tivozanib in patients with wet age-related macular degeneration (the “POC Study”).

Ophthotech paid the Company $0.5 million in consideration for the grant of the option. Such amount is non-refundable and not creditable against any other amounts due under the agreement.

Under the Option Agreement, the Company would receive a one-time milestone payment of $2.0 million upon acceptance of the first Investigational New Drug application filed by Ophthotech for the purpose of conducting a human clinical study of tivozanib in ocular diseases or conditions (the “IND Submission Milestone Payment”). The Company is also entitled to receive a one-time milestone payment of $6.0 million (the “Clinical Efficacy Milestone Payment”), on the earlier of (a) December 31, 2016 and (b) the later to occur of: (i) the achievement of a clinical milestone in the POC Study (the “Clinical Efficacy Milestone”) and (ii) the earlier of (A) the date twelve (12) months after our and Ophthotech’s agreement as to the form and substance of the KHK Amendment (as defined below) or (B) the date ninety (90) days after the entry into the KHK Amendment, subject to Ophthotech’s right to terminate the Option Agreement on 90 days’ written notice and certain other conditions (the date on which such payment is due, referred to as the “Clinical Efficacy Milestone Payment Trigger Date”); provided, however, that the Clinical Efficacy Milestone Payment will not be payable if Ophthotech gives AVEO a notice of termination of the Option Agreement within thirty (30) days after the Clinical Efficacy Milestone Payment Trigger Date.

Ophthotech may exercise the option at any time until the latest to occur of: (i) twelve (12) months after the achievement of the Clinical Efficacy Milestone, (ii) ninety (90) days after the Clinical Efficacy Milestone Payment Trigger Date, and (iii) thirty (30) days after the Company and Ophthotech agree as to the definitive form of license agreement (the “Option Period”).

During the Option Period, the Company will not grant a license to any third party that would preclude the Company from being able to grant to Ophthotech the rights and licenses that are contemplated by the definitive license agreement, and the Company will not engage in any research, development or commercialization of tivozanib in the field covered by the contemplated definitive license agreement, except as specified in the Option Agreement.

The terms of the Option Agreement are subject to the Company’s obligations to KHK under the KHK license agreement. A percentage of all payments received by the Company under the Option Agreement and any definitive license agreement must be paid to KHK. The Company is required to maintain the KHK license agreement in effect, and not enter into any amendment or termination thereof that would adversely affect the Company’s rights, during the Option Period.

During the Option Period, the Company and Ophthotech are obligated to negotiate in good faith the form and substance of a definitive license agreement, as well as the form and substance of an amendment to the KHK license agreement (the “KHK Amendment”) to modify certain rights and obligations of the parties and sublicensees thereunder, particularly with respect to rights to improvements that are not specifically related to tivozanib, and regulatory affairs matters.

If Ophthotech exercises the option, Ophthotech is required to pay the Company a one-time option exercise fee of $2.0 million in addition to the IND Submission Milestone Payment if such payment has not then been previously paid. If upon exercise of the option, the Clinical Efficacy Milestone Payment Trigger Date has not yet occurred, the Company shall be entitled to the Clinical Efficacy Milestone Payment at such time that the Clinical Efficacy Milestone Payment Date does occur if the license agreement remains in effect as of such date. The license agreement, if entered into upon Ophthotech’s exercise of the option, will provide for the Company to be entitled to receive (i) $10.0 million upon meeting certain efficacy and safety endpoints in phase 2 clinical trials that would enable the commencement of a phase 3 clinical trial, (ii) $20.0 million upon marketing approval in the United States, (iii) $20.0 million upon marketing approval in the UK, Germany, Spain, Italy and France and (iv) up to $45.0 million in sales-based milestone payments. Ophthotech would also be required to pay tiered, double-digit royalties, up to the mid-teens, on net sales of tivozanib or products containing tivozanib.

Activities under the agreement with Ophthotech were evaluated under ASC 605-25 to determine whether such activities represented a multiple element revenue arrangement. The agreement with Ophthotech includes the following non-contingent deliverables: (i) the Company’s obligation to grant an exclusive option to Ophthotech to enter into a license agreement to develop and commercialize products incorporating tivozanib for treatment of diseases or conditions of the eye outside of Asia and the Middle East during the Option Period (the “Option Grant Deliverable”); (ii) the Company’s obligation to enter into an amendment with KHK to modify the terms of the existing KHK license agreement to negotiate a mutually acceptable form of license agreement; and (iii) the Company’s obligation to transfer research-grade tivozanib drug substance for Ophthotech to conduct the Option Period research.

The Company determined that the delivered Option Grant Deliverable did not have standalone value from the remaining deliverables since Ophthotech could not obtain the intended benefit of the option without the remaining deliverables. Similarly, the remaining deliverables have no standalone value without the Option Grant Deliverable. The Company is accounting for the deliverables as one unit of accounting.

Under the Option Agreement, the Company received a cash payment of $0.5 million during the year ended December 31, 2014. The Company deferred the payment and is recording the deferred revenue over the Company’s period of performance, which is currently estimated to be through December 2017. The Company recorded approximately $29,000 of revenue in each of the three months ended September 30, 2016 and 2015, and approximately $87,000 of revenue in each of the nine months ended September 30, 2016 and 2015.

Biodesix

In April 2014, the Company entered into a worldwide co-development and collaboration agreement with Biodesix (the "Biodesix Agreement") to develop and commercialize ficlatuzumab, the Company's HGF inhibitory antibody. Under the Biodesix Agreement, the Company granted Biodesix perpetual, non-exclusive rights to certain intellectual property, including all clinical and biomarker data related to ficlatuzumab, to develop and commercialize VeriStrat®, Biodesix's proprietary companion diagnostic test. Biodesix granted the Company perpetual, non-exclusive rights to certain intellectual property, including diagnostic data related to Veristrat, with respect to the development and commercialization of ficlatuzumab; each license includes the right to sublicense, subject to certain exceptions. Pursuant to a joint development plan, the Company retains primary responsibility for clinical development of ficlatuzumab. In September 2016, the Company and Biodesix announced the termination of the FOCAL study, a phase 2 proof-of-concept clinical study of ficlatuzumab in which VeriStrat was used to select clinical trial subjects.

Under the Biodesix Agreement, with the exception of the costs incurred for the FOCAL study, the Company and Biodesix are each required to contribute 50% of all clinical, regulatory, manufacturing and other costs to develop ficlatuzumab. Pursuant to the Biodesix Agreement, Biodesix was obligated to fund all costs of the FOCAL study up to a cap of $15 million, following which all costs of the FOCAL study would be shared equally. In connection with the discontinuation of the FOCAL study, on October 14, 2016 the Company and Biodesix amended the Biodesix Agreement. Under the amendment, the Company agreed to share 50% of the cost of the FOCAL study from August 1, 2016 through its closeout. The Company does not anticipate that these remaining costs will be material. In return for bearing 50% of the FOCAL costs after August 1, 2016, the Company will be entitled to recover an agreed multiple of the additional costs borne by the Company out of any income received by the partnership in connection with the development or commercialization of ficlatuzumab. Following such recovery, the payment structure under the original Biodesix Agreement, which generally provides that the parties share equally in any costs and revenue, will resume without such modification.

Pending marketing approval or the sublicense of ficlatuzumab and subject to the negotiation of a commercialization agreement, each party would share equally in commercialization profits and losses, subject to the Company's right to be the lead commercialization party.

Prior to the first commercial sale of ficlatuzumab, each party has the right to elect to discontinue participating in further development or commercialization efforts with respect to ficlatuzumab, which is referred to as an "Opt-Out". If either AVEO or Biodesix elects to Opt-Out, with such party referred to as the "Opting-Out Party", then the Opting-Out Party shall not be responsible for any future costs associated with developing and commercializing ficlatuzumab other than any ongoing clinical trials. If AVEO elects to Opt-Out, it will continue to make the existing supply of ficlatuzumab available to Biodesix for the purposes of enabling Biodesix to complete the development of ficlatuzumab, and Biodesix will have the right to commercialize ficlatuzumab. After election of an Opt-Out, the non-opting out party shall have sole decision-making authority with respect to further development and commercialization of ficlatuzumab. Additionally, the Opting-Out Party shall be entitled to receive, if ficlatuzumab is successfully developed and commercialized, a royalty equal to 10% of net sales of ficlatuzumab throughout the world, if any, subject to offsets under certain circumstances.

Prior to any Opt-Out, the parties shall share equally in any payments received from a third party licensee; provided, however, after any Opt-Out, the Opting-Out Party shall be entitled to receive only a reduced portion of such third-party payments. The agreement will remain in effect until the expiration of all payment obligations between the parties related to development and commercialization of ficlatuzumab, unless earlier terminated.

Activities under the Biodesix Agreement were evaluated under ASC 605-25 to determine whether such activities represented a multiple element revenue arrangement. The Biodesix Agreement includes the following non-contingent deliverables: (i) the Company's obligation to deliver perpetual, non-exclusive rights to certain intellectual property including clinical and biomarker data related to ficlatuzumab for use in developing and commercializing Veristrat; (ii) the Company's obligation to participate in the joint steering committee; and (iii) the Company's obligation to provide its existing supply of ficlatuzumab for development purposes. [The Company concluded that any deliverables that would be delivered after the FOCAL trial is complete are contingent deliverables because these services are contingent upon the results of the FOCAL trial. As these deliverables are contingent, and are not at an incremental discount, they are not evaluated as deliverables at the inception of the arrangement. These contingent deliverables will be evaluated and accounted for separately as each related contingency is resolved. As of September 30, 2016, no contingent deliverables had been provided by the Company.

The Company determined that the perpetual, non-exclusive rights to certain intellectual property for use in developing and commercializing Veristrat did not have standalone value from the remaining deliverables since Biodesix could not obtain the intended benefit of the license without the remaining deliverables. Since the remaining deliverables will be performed over the same period of performance, there is no difference in accounting for the deliverables as one unit or multiple units of accounting, and therefore, the Company is accounting for the deliverables as one unit of accounting.

The Company records the consideration earned in connection with the FOCAL trial, which consists of reimbursements from Biodesix for expenses related to the trial, as a reduction to research and development expense during the period that reimbursable expenses are incurred. As a result of the cost sharing provisions in the Biodesix Agreement, the Company reduced research and development expenses by approximately $0.4 million and $1.9 million during the three months and nine months ended September 30, 2016, respectively, and by approximately $0.8 million and $2.7 million during the three months and nine months ended September 30, 2015, respectively. The amount due to the Company from Biodesix pursuant to the cost-sharing provision was approximately $0.9 million at September 30, 2016, which is expected to be paid in the fourth quarter of 2016. The Company received cash payments related to cost reimbursements of approximately $2.1 million and $2.7 million during the nine months ended September 30, 2016 and 2015, respectively.

St. Vincent's

In July 2012, the Company entered into a license agreement with St. Vincent's, under which the Company obtained an exclusive, worldwide license to research, develop, manufacture and commercialize products for human therapeutic, preventative and palliative applications that benefit from inhibition or decreased expression or activity of MIC-1, which is also referred to as GDF15. Under the agreement, the Company has the right to grant sublicenses subject to certain restrictions. Under the license agreement, St. Vincent's also granted the Company non-exclusive rights for certain related diagnostic products and research tools.

In order to sublicense certain necessary intellectual property rights to Novartis in August 2015, the Company and St. Vincent's amended and restated the license agreement (the "Amended St. Vincent's Agreement"). Under the Amended St. Vincent's Agreement, the Company was required to make an upfront payment to St. Vincent's of $1.5 million. St. Vincent's is also eligible to receive up to approximately $18.9 million in connection with development and regulatory milestones under the Amended St. Vincent's Agreement. Royalties for approved products resulting from the Amended St. Vincent's Agreement will also be payable to St. Vincent's, and the Company and Novartis will share that obligation equally. Under the license agreement with Novartis, the Company is required to maintain the Amended St. Vincent's Agreement in effect, and not enter into any amendment that would adversely affect Novartis' rights during the term of the license agreement with Novartis.

During the nine months ended September 30, 2016, the Company made a $0.4 million milestone payment to St. Vincent's related to the selection of a development candidate.

Astellas Pharma

In February 2011, the Company, together with its wholly-owned subsidiary AVEO Pharma Limited, entered into a collaboration and license agreement (the "Astellas Agreement") with Astellas Pharma Inc. and certain of its subsidiaries (together, "Astellas"), pursuant to which the Company and Astellas intended to develop and commercialize tivozanib for the treatment of a broad range of cancers. Astellas elected to terminate the agreement effective on August 11, 2014, at which time the tivozanib rights were returned to the Company. In accordance with the Astellas Agreement, committed development costs, including the costs of completing certain tivozanib clinical development activities, continue to be shared equally.

The Company accounted for the joint development and commercialization activities in North America and Europe as a joint risk-sharing collaboration in accordance with ASC 808, Collaborative Arrangements. Payments from Astellas with respect to Astellas' share of tivozanib development and commercialization costs incurred by the Company pursuant to the joint development plan were recorded as a reduction to research and development expense and general and administrative expense in the accompanying consolidated financial statements due to the joint risk-sharing nature of the activities in North America and Europe. As a result of the cost-sharing provisions in the Astellas Agreement, the Company decreased research and development expenses by $0 and $0.5 million during the three months ended September 30, 2016 and 2015, respectively, and by $0.2 million and $0.7 million in the nine months ended September 30, 2016 and 2015, respectively. There is no outstanding balance due from Astellas pursuant to the cost-sharing provisions at September 30, 2016.

Under the agreement, the Company received cash payments related to reimbursable payments of $0 and $0.4 million during the three months ended September 30, 2016 and 2015, respectively, and $0.3 million and $1.0 million during the nine months ended September 30, 2016 and 2015, respectively.

Biogen Idec International GmbH

In March 2009, the Company entered into an exclusive option and license agreement with Biogen regarding the development and commercialization of the Company's discovery-stage ErbB3-targeted antibodies, AV-203, for the potential treatment and diagnosis of cancer and other diseases outside of North America. Under the agreement, the Company was responsible for developing ErbB3 antibodies through completion of the first phase 2 clinical trial designed in a manner that, if successful, will generate data sufficient to support advancement to a phase 3 clinical trial.

In March 2014, the Company and Biogen amended the exclusive option and license agreement (the "Amendment"). Pursuant to the Amendment, Biogen agreed to the termination of its rights and obligations under the agreement, including Biogen's option to (i) obtain a co-exclusive (with AVEO) worldwide license to develop and manufacture ErbB3 targeted antibodies and (ii) obtain exclusive commercialization rights to ErbB3 products in countries in the world other than North America. As a result, AVEO has worldwide rights to AV-203. Pursuant to the Amendment, the Company was obligated to use reasonable efforts to seek a collaboration partner for the purpose of funding further development and commercialization of ErbB3 targeted antibodies. The Company is also obligated to pay Biogen a percentage of milestone payments received by AVEO from future partnerships after March 28, 2016 and single digit royalty payments on net sales related to the sale of ErbB3 products, if any, up to cumulative maximum amount of $50 million.

The Company concluded that the Amendment materially modified the terms of the agreement and, as a result, required the application of ASC 605-25. Based upon the terms of the Amendment, the remaining deliverables included the Company's obligation to seek a collaboration partner to fund further development of the program and the Company's obligation to continue development and commercialization of the licensed products if a collaboration partner is secured ("Development Deliverable"). The Company concluded that its obligation to use best efforts to seek a collaboration partner does not have standalone value from the Development Deliverable upon delivery and thus the deliverables should be treated as a single unit of accounting.

Upon modifying the arrangement, the Company had $14.7 million of deferred revenue remaining to be amortized. The Company is not entitled to receive any further consideration from Biogen Idec under the agreement, as amended. The Company allocated a portion of the remaining deferred revenue to the undelivered unit of accounting based upon the Company's best estimate of the selling price, as the Company determined that neither VSOE nor TPE were available. The Company determined the best estimate of selling price to be approximately $0.6 million and recognized the remaining $14.1 million as collaboration revenue in March 2014. The deferred revenue associated with the undelivered unit of accounting was recognized on a straight-line basis over the period of performance, or through March 2016, when the Company executed its agreement with CANbridge.

Under the agreement, the Company recorded revenue of $0 and $38,000 during the three months and nine months ended September 30, 2016, respectively, and $0.1 million and $0.2 million during the three months and nine months ended September 30, 2015, respectively.

In March 2016, the Company entered into a collaboration and license agreement for AV-203 with CANbridge. See "Collaborations and License Agreements—CANbridge" herein for a further description of that arrangement.

(5) Other Accrued Liabilities

Other accrued expenses consisted of the following as of September 30, 2016 and December 31, 2015:

	September 30, 2016	December 31, 2015
	(in thousands)	
Professional fees	$593	$ 573

Compensation and benefits	763	938
Restructuring	—	357
Other	169	272
Total	$ 1,525	$ 2,140

(6) Loans Payable

On May 28, 2010, the Company entered into a loan and security agreement (the “Loan Agreement”) with Hercules Technology II, L.P. and Hercules Technology III, L.P., affiliates of Hercules Technology Growth (collectively, “Hercules”). The Loan Agreement was subsequently amended in March 2012 (the “2012 Amendment”), September 2014 (the “2014 Amendment”) and May 2016 (the “2016 Amendment”). Amounts borrowed under the 2012 Amendment were repaid in full in 2015.

Pursuant to the 2014 Amendment, the Company received additional loan proceeds from Hercules in the amount of $10.0 million and was not required to commence principal payments until May 1, 2016, with the last principal payment due on January 1, 2018. An end-of-term payment of approximately $0.5 million continues to be due on January 1, 2018 or on such earlier date if the loan is prepaid. The Company incurred approximately $0.2 million in loan issuance costs paid directly to Hercules, which were offset against the loan proceeds and are accounted for as a loan discount. The 2014 Amendment was accounted for as a loan modification in accordance with ASC 470-50, Debt—Modifications and Extinguishments (“ASC 470-50”).

In connection with the 2014 Amendment, the Company issued warrants to the lenders to purchase up to 608,696 shares of the Company's common stock at an exercise price equal to $1.15 per share. The Company recorded the fair value of the warrants of approximately $0.4 million as stockholders' equity and as a discount to the related loan outstanding and is amortizing the value of the discount to interest expense over the term of the loan using the effective interest method.

Pursuant to the 2016 Amendment, the Company received additional loan proceeds from Hercules in the amount of $5.0 million, which increased the aggregate outstanding principal balance under the Loan Agreement to $15.0 million. The Company is not required to commence principal payments on the $15 million loan until July 1, 2017, at which time the Company will be required to make 30 equal monthly payments of principal and interest through December 2019. An end-of-term payment of approximately $0.2 million is due on December 1, 2019. The Company incurred approximately $0.1 million in loan issuance costs paid directly to Hercules, which were offset against the loan proceeds and are accounted for as a loan discount. The 2016 Amendment was accounted for as a loan modification in accordance with ASC 470-50. The 2016 Amendment includes a financial covenant that requires the Company to maintain an unrestricted cash position greater than or equal to $10.0 million through the date of completion of the Company's Phase 3 TIVO-3 trial.

Under the 2016 Amendment, the Company may, at its request during any time from March 1, 2017 through June 30, 2017, draw down an additional $5.0 million in funding. This funding is contingent upon the Company: (i) achieving satisfactory developmental progression on a minimum of two (2) clinical programs (other than the Phase 3 TIVO-3 trial) that are either managed directly by the Company or funded, in whole or in part, by the Company and (ii) having an unrestricted cash position greater than or equal to $25.0 million on the date of the draw down request. If the Company draws down the additional $5.0 million in funding, the commencement of principal payments on the aggregate $20.0 million loan balance will be deferred by six months from July 1, 2017 until January 1, 2018.

In connection with the 2016 Amendment, the Company issued warrants to Hercules to purchase up to 1,202,117 shares of the Company's common stock at an exercise price equal to $0.87 per share. The Company recorded the fair value of the warrants of approximately $0.7 million as a component of stockholders' equity and as a discount to the related loan outstanding and is amortizing the value of the discount to interest expense over the term of the loan using the effective interest method.

The unamortized discount to be recognized over the remainder of the loan period was approximately $1.1 million and $0.5 million as of September 30, 2016 and December 31, 2015, respectively.

The Company must make interest payments on the loan balance each month it remains outstanding. Per annum interest is payable on the principal balance of the loan each month it remains outstanding at the greater of 11.9% and an amount equal to 11.9% plus the prime rate minus 4.75% as determined daily, provided however, that the per annum interest rate shall not exceed 15.0% (11.9% as of September 30, 2016).

As part of the Loan Agreement, Hercules also received an option, subject to the Company's written consent, not to be unreasonably withheld, to purchase, either with cash or through conversion of outstanding principal under the loan, up to $2.0 million of equity of the Company sold in any sale by the Company to third parties of equity securities resulting in at least $10.0 million in net cash proceeds to the Company, subject to certain exceptions. The Company has evaluated the embedded conversion option, and has concluded that it does not need to be bifurcated and separately accounted for. No amount will be recognized for the conversion feature until such time as the conversion feature is exercised and it can be determined whether a beneficial conversion feature exists. In connection with the Company's May 2016 private placement (refer to Note 7), Hercules purchased 259,067 units for cash proceeds of $0.2 million to the Company. This purchase was separate from the $2.0 million equity purchase option under the Loan Agreement.

The loans are secured by a lien on all the Company's personal property (other than intellectual property), whether owned or acquired after the date of the Loan Agreement. The Loan Agreement defines events of default, including the occurrence of an event that results in a material adverse effect upon the Company's business operations, properties, assets or condition (financial or otherwise), its ability to perform its obligations or upon the ability of the lenders to enforce any of their rights or remedies with respect to such obligations, or upon the collateral under the Loan Agreement, the related liens or the priority thereof. As of September 30, 2016, the Company was in compliance with all loan covenants, Hercules has not asserted any events of default and the Company does not believe that there has been a material adverse change as defined in the loan agreement.

The Company has determined that the risk of subjective acceleration under the material adverse events clause is remote and therefore has classified the outstanding principal in current and long-term liabilities based on the timing of scheduled principal payments.

Future minimum payments under the loans payable outstanding as of September 30, 2016 are as follows (amounts in thousands):

Years Ending December 31:	
2016 (3 months remaining)	$451
2017	4,386
2018	7,506
2019	7,159
	19,502
Less amount representing interest	(3,812)
Less unamortized discount	(1,131)
Less deferred charges	(690)
Less loans payable current, net of discount	(766)
Loans payable, net of current portion and discount	$13,103

(7) Common Stock

Private Placement / PIPE Warrants

In May 2016, the Company entered into a securities purchase agreement with a select group of qualified institutional buyers, institutional accredited investors and accredited investors pursuant to which the Company sold 17,642,482 units, at a price of $0.965 per unit, for gross proceeds of approximately $17.0 million. Each unit consisted of one share of the Company's common stock and a warrant to purchase one share of the Company's common stock (the "PIPE Warrants"). The PIPE Warrants have an exercise price of $1.00 per share and are exercisable for a period of five years from the date of issuance. Certain of the Company's directors and executive officers purchased an aggregate of 544,039 units in this offering at the same price as the other investors. The net offering proceeds to the Company were approximately $15.4 million after deducting placement agent fees and other offering expenses payable by the

Company.

The PIPE Warrants contain a provision giving the warrant holder the option to receive cash, equal to the fair value of the remaining unexercised portion of the warrant, as cash settlement in the event that there is a fundamental transaction (contractually defined to include various merger, acquisition or stock transfer activities). Due to this provision, ASC 480, Distinguishing Liabilities from Equity requires that these warrants be classified as a liability and not as equity. Accordingly, the Company recorded a warrant liability in the amount of approximately $9.3 million upon issuance of the PIPE Warrants. The fair value of these warrants has been determined using the Black Scholes valuation model, and the changes in the fair value at the time of each reporting date are recorded in the Statements of Operations and Comprehensive Income (Loss). During the three months and nine months ended September 30, 2016, as a result of the fair value adjustment of the warrant liability, the Company recorded a decrease in the fair value of the warrant liability of approximately $1.2 million and $0.2 million, respectively, in the Statements of Operations and Comprehensive Income (Loss). As of September 30, 2016, none of the PIPE Warrants have been exercised.

The key assumptions used to value the PIPE Warrants were as follows:

	Original Issuance	June 30, 2016	September 30, 2016
Expected price volatility	76.25%	76.51%	76.60%
Expected term (in years)	5.00	4.90	4.75
Risk-free interest rates	1.22%	1.01%	1.14%
Stock price	$ 0.89	$0.96	$ 0.89
Dividend yield	—	—	—

ATM Sales Agreement

In February 2015, the Company entered into an at-the-market issuance sales agreement (the "Sales Agreement") with FBR & Co. (formerly MLV & Co. LLC) ("FBR"), pursuant to which the Company could issue and sell shares of its common stock from time to time up to an aggregate amount of $17.9 million, at the Company's option, through FBR as its sales agent. Sales of common stock through FBR may be made by any method that is deemed an "at-the-market" offering as defined in Rule 415 promulgated under the Securities Act of 1933, as amended, including by means of ordinary brokers' transactions at market prices, in block transactions or as otherwise agreed by the Company and FBR. Subject to the terms and conditions of the Sales Agreement, FBR will use commercially reasonable efforts to sell the common stock based upon the Company's instructions (including any price, time or size limits or other customary parameters or conditions the Company may impose). The Company is not obligated to make any sales of its common stock under the Sales Agreement. Any shares sold will be sold pursuant to an effective shelf registration statement on Form S-3. The Company will pay FBR a commission of up to 3% of the gross proceeds. The Sales Agreement may be terminated by the Company at any time.

On May 7, 2015, the Company filed a shelf registration statement on Form S-3 with the SEC, which covers the offering, issuance and sale by the Company of up to $100.0 million of its common stock, preferred stock, debt securities, warrants and/or units (the "2015 Shelf"). The 2015 Shelf was filed to replace the Company's existing $250.0 million shelf registration statement (the "2012 Shelf"). On May 7, 2015, the Company also amended its Sales Agreement with FBR to provide for the offering, issuance and sale by the Company of up to $15.0 million of its common stock under the 2015 Shelf, which replaced the Company's existing $17.9 million offering that expired along with the expired 2012 Shelf. As of September 30, 2016, the Company has sold approximately 5.9 million shares pursuant to the Sales Agreement, as amended, resulting in proceeds of approximately $10.2 million, net of commissions and issuance costs. No shares have been sold during the three and nine months ended September 30, 2016.

Approximately $9.1 million remains available for sale under the Sales Agreement.

(8) Stock-based Compensation

Stock Plans

The following table summarizes stock option activity during the nine months ended September 30, 2016.

	Options	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term	Aggregate Intrinsic Value
Outstanding at December 31, 2015	4,796,005	$ 3.78		
Granted	1,705,134	$ 1.03		
Exercised	(38,749)	$ 0.84		
Forfeited	(651,407)	$ 1.96		
Outstanding at September 30, 2016	5,810,983	$ 3.20	7.08	$ 51
Vested or expected to vest at September 30, 2016	3,771,566	$ 4.32	6.16	$ 30
Exercisable at September 30, 2016	2,977,166	$ 5.17	5.47	$ 21

Stock options to purchase 197,650 shares of common stock contain market conditions which were not deemed probable of vesting at September 30, 2016.

The fair value of stock options subject only to service or performance conditions that are granted to employees is estimated on the date of grant using the Black-Scholes option-pricing model using the assumptions noted in the following table:

	Three Months Ended September 30,	
	2016	2015
Volatility factor	73.60% - 73.94%	74.53% - 74.54%
Expected term (in years)	6.25	6.25
Risk-free interest rates	1.07% - 1.22%	1.56%
Dividend yield	—	—

	Nine Months Ended September 30,	
	2016	2015
Volatility factor	73.26% - 74.47%	73.04% - 78.7%
Expected term (in years)	5.50 - 6.25	5.50 - 6.25
Risk-free interest rates	0.94% - 1.38%	1.54% - 1.85%
Dividend yield	—	—

The risk-free interest rate is determined based upon the United States Treasury's rates for U.S. Treasury zero-coupon bonds with maturities similar to those of the expected term of the options being valued. The Company does not expect to pay dividends in the foreseeable future.

The Company calculates volatility and expected term using its historical data. Based upon these assumptions, the weighted-average grant date fair value of stock options granted to employees during the nine months ended September 30, 2016 and 2015 was $0.67 per share and $0.75 per share, respectively.

The Company is required to include an estimate of the value of the awards that will be forfeited in calculating compensation costs, which the Company estimates based upon actual historical forfeitures. The forfeiture estimates are recognized over the requisite service period of the awards on a straight-line basis. The Company estimated its forfeiture rate to be approximately 76% and 70% as of September 30, 2016 and 2015, respectively.

As of September 30, 2016, there was $0.8 million of total unrecognized stock-based compensation expense related to stock options granted to employees under the Company's 2002 Stock Incentive Plan and 2010 Stock Incentive Plan (collectively, the "Plans"). The expense is expected to be recognized over a weighted-average period of 2.6 years. The intrinsic value of options exercised during the nine months ended September 30, 2016 and 2015 was $35,000 and $57,000, respectively.

The restricted stock activity for the nine months ended September 30, 2016 is as follows:

	Number of Shares	Weighted-Average Fair-Value
Unvested at December 31, 2015	42,750	$ 1.61
Granted	—	—
Vested/Released	(42,750)	1.61
Unvested at September 30, 2016	—	—

As of September 30, 2016, there was no unrecognized stock-based compensation expense related to restricted stock awards granted under the Plan.

(9) Strategic Restructuring

On January 6, 2015, the Board of the Company approved a strategic restructuring of the Company that eliminated the Company's internal research function and aligned the Company's resources with the Company's future strategic plans. As part of this restructuring, the Company eliminated approximately two-thirds of the Company's workforce, or 40 positions across the organization. The Company substantially completed the restructuring during the quarter-ended March 31, 2015.

The following table summarizes the components of the Company's restructuring activity recorded in operating expenses and in accrued expenses in the accompanying consolidated balance sheet:

	Restructuring amounts accrued at December 31, 2015	Restructuring expense incurred during the nine months ended September 30, 2016	Restructuring amounts paid during the nine months ended September 30, 2016	Restructuring amounts accrued at September 30, 2016
	(in thousands)			
Employee severance, benefits and related costs.	$357	—	$ (357)	—

(10) Facility Lease Exit

In September 2014, the Company entered into the Lease Termination Agreement pursuant to which the Company immediately surrendered leased space at 650 East Kendall Street in Cambridge, Massachusetts that it had previously ceased using earlier in 2014. In connection with the Lease Termination Agreement, the Company agreed to pay the landlord a termination fee totaling $15.6 million. The Company also agreed to surrender its remaining leased space upon 90 days written notice prior to September 24, 2015.

In February 2015, the Company provided notice that it would surrender the remaining space on May 29, 2015. Accordingly, the Company revised the estimated useful life of its leasehold improvements related to this office space and amortized such assets through May 2015, resulting in an additional $2.9 million of depreciation expense during the six months ended June 30, 2015. Similarly, the Company accelerated the amortization of its deferred rent and leasehold improvement allowance associated with this office space through May 2015, resulting in an additional $3.5 million of amortization during the six months ended June 30, 2015. Upon the surrender of the remaining space, the Company had no further rights or obligations with respect to the lease. The Company secured office space appropriate for its current needs under a cancellable arrangement that began in May 2015.

(11) Legal Proceedings

Two class action lawsuits have been filed against the Company and certain of its former officers and members of its board of directors (Tuan Ha-Ngoc, David N. Johnston, William Slichenmyer and Ronald DePinho) in the United States District Court for the District of Massachusetts, one captioned Paul Sanders v. Aveo Pharmaceuticals, Inc., et al., No. 1:13-cv-11157-JLT, filed on May 9, 2013, and the other captioned Christine Krause v. AVEO Pharmaceuticals, Inc., et al., No. 1:13-cv-11320-JLT, filed on May 31, 2013. On December 4, 2013, the District Court consolidated the complaints as In re AVEO Pharmaceuticals, Inc. Securities Litigation et al., No. 1:13-cv-11157-DJC, and an amended complaint was filed on February 3, 2014. The amended complaint purported to be brought on behalf of shareholders who purchased the Company's common stock between January 3, 2012 and May 1, 2013. The amended complaint generally alleged that the Company and certain of its present and former officers and directors violated Sections 10(b) and/or 20(a) of the Securities Exchange Act of 1934 and Rule 10b-5 promulgated thereunder by making allegedly false and/or misleading statements concerning the phase 3 trial design and results for the Company's TIVO-1 study in an effort to lead investors to believe that the drug would receive approval from the FDA. The lawsuit seeks unspecified damages, interest, attorneys' fees, and other costs. The consolidated amended complaint was dismissed without prejudice on March 20, 2015, and the lead plaintiffs then filed a second amended complaint bringing similar allegations. The Company moved to dismiss again, and after a second round of briefing and oral argument, the court ruled in the Company's favor and dismissed the second amended complaint with prejudice on November 18, 2015. The lead plaintiffs have appealed the court's decision to the United States Court of Appeals for the First Circuit. They have also filed a motion to vacate and reconsider the district court's judgment, which the Company has opposed. The Company denies any allegations of wrongdoing and intends to continue to vigorously defend against this lawsuit. However, there is no assurance that the Company will be successful in its defense or that insurance will be available or adequate to fund any settlement or judgment or the litigation costs of the action. Moreover, the Company is unable to predict the outcome or reasonably estimate a range of possible loss at this time.

On April 4, 2014, Karen J. van Ingen, a purported purchaser of AVEO stock, filed a derivative complaint allegedly on behalf of AVEO in the United States District Court for the District of Massachusetts (the "Court"), Civil Action No. 1:14-cv-11672-DJC, naming AVEO, as a nominal defendant and also naming as defendants present and former members of the Company's board of directors, including Tuan Ha-Ngoc, Henri A. Termeer, Kenneth M. Bate, Anthony B. Evnin, Robert Epstein, Raju Kucherlapati, Robert C. Young, and Kenneth E. Weg. The complaint alleged breach of fiduciary duty and abuse of control between January 2012 and May 2013 with respect to allegedly misleading statements and omissions regarding tivozanib. The lawsuit seeks, among other relief, unspecified damages, costs and expenses, including attorneys' fees, an order requiring us to implement certain corporate governance reforms, restitution from the defendants and such other relief as the court might find just and proper. The Company filed a motion to dismiss the derivative complaint, and after briefing and oral argument, on March 18, 2015 the Court ruled in the Company's favor and dismissed the case with prejudice. The plaintiff then filed a motion seeking to vacate the Court's order of dismissal and permit filing of an amended complaint, which the Company opposed, and which the Court denied on June 30, 2015. The plaintiff has appealed the Court's decision to the United States Court of Appeals for the First Circuit. The parties have reached an agreement in principle to settle this matter. The settlement involves certain corporate governance changes and other non-monetary relief. The plaintiffs are seeking an award of attorney's fees, costs, and expenses in the amount of $822,116, as well as an incentive award of $2,500. The Company reserved the right to contest the award of attorney's fees, costs and expenses and expect both the fees, costs and expenses and incentive award to be paid by insurance in the amounts ordered by the Court. On September 16, 2016, the Court granted preliminary approval to the proposed settlement, but the settlement remains subject to final Court approval. The Court set a hearing on December 19, 2016 to determine whether: (i) the terms of the Proposed Settlement are fair, reasonable, and adequate, (ii) whether, and, if so, in what amount, attorneys' fees and expenses should be awarded to plaintiff's counsel; and (iii) whether any incentive award to plaintiff should be approved. There can be no assurance that the settlement will be approved by the Court.

On July 3, 2013, the staff (the "SEC Staff") of the United States Securities and Exchange Commission (the "Commission") served a subpoena on the Company for documents and information concerning tivozanib, including related communications with the FDA, investors and others. In September 2015, the SEC Staff invited the Company to discuss the settlement of potential claims asserting that the Company violated federal securities laws by omitting to disclose to investors the recommendation made to the Company by the staff of the FDA on May 11, 2012, that the Company conduct an additional clinical trial with respect to tivozanib. On March 29, 2016, the Commission filed a complaint against the Company and three of its former officers in the U.S. District Court for the District of Massachusetts (the "Court") alleging that the Company misled investors about its efforts to obtain FDA approval for tivozanib. Without admitting or denying the allegations in the Commission's complaint, the Company consented to the entry of a final judgment pursuant to which the Company paid the Commission a $4.0 million civil penalty to settle the Commission's claims against the Company. On March 31, 2016, the Court entered a final judgment which (i) approved the settlement; (ii) permanently enjoined the Company from violating Section 17(a) of the Securities Act of 1933, as amended, Sections 10(b) and 13(a) of the Securities Exchange Act of 1934, as amended, and rules 10b-5, 12b-20, 13a-1, 13a-11 and 13a-13 promulgated thereunder; and (iii) ordered the Company to pay the agreed-to civil penalty. The Commission's action against the Company's three former officers is still pending. The Company is not a party to any litigation or discussions between the SEC Staff and the former officers, and the Company can make no assurance regarding the outcome of that action or the Commission's claims against those individuals.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Forward-Looking Information

This report contains forward-looking statements regarding, among other things, our future development efforts, our collaborations, our future operating results and financial position, our business strategy, our prospects and other objectives for our operations. You can identify these forward-looking statements by their use of words such as "anticipate," "believe," "estimate," "expect," "forecast," "goals," "intend," "may," "might," "plan," "project," "target," "will," "should" and other words and terms of similar meaning, although not all forward-looking statements contain such identifying words. You also can identify them by the fact that they do not relate strictly to historical or current facts. There are a number of important risks and uncertainties that could cause our actual results to differ materially from those indicated by forward-looking statements. These risks and uncertainties include those inherent in pharmaceutical research and development, such as adverse results in our clinical development activities, our ability to obtain any necessary financing to conduct our planned activities, decisions made by the U.S. Food and Drug Administration and other regulatory authorities with respect to the development and commercialization of our drug candidates, our ability to obtain, maintain and enforce intellectual property rights for our drug candidates, our dependence on our existing and future strategic partners, and other risk factors. Please refer to the section entitled "Risk Factors" in Item 1A of Part II and elsewhere in this report for a description of these risks and uncertainties. Unless required by law, we do not undertake any obligation to publicly update any forward-looking statements.

Company Overview

We are a biopharmaceutical company dedicated to advancing a broad portfolio of targeted therapeutics for oncology and other areas of unmet medical need. Our proprietary platform has delivered unique insights into cancer and related diseases. Our strategy is to leverage these biomarker insights and partner resources to advance the development of our clinical pipeline. We are focused on developing our lead candidate tivozanib in North America as a treatment for renal cell carcinoma, or RCC. We have entered into partnerships to fund the further development of our clinical stage assets, including AV-380, ficlatuzumab, AV-203, and tivozanib in non-oncologic indications worldwide and oncology indications outside North America. We are currently seeking a partner to develop AV-353, a preclinical asset, worldwide for the potential treatment of pulmonary arterial hypertension, or PAH.

Tivozanib

Tivozanib is a potent, selective, long half-life vascular endothelial growth factor, or VEGF, tyrosine kinase inhibitor, or TKI of VEGF receptors 1, 2 and 3.

Clinical and Regulatory Development in RCC

RCC First Line Phase 3 Trial (TIVO-1): We conducted a global phase 3 clinical trial comparing the efficacy and safety of tivozanib with Nexavar® (sorafenib), an approved therapy, for first-line treatment of RCC, which we refer to as the TIVO-1 trial. The trial met its primary endpoint for progression-free survival, or PFS, but showed a non-statistically significant trend favoring the sorafenib arm in overall survival, or OS. In June 2013, the U.S. Food and Drug Administration, or FDA, issued a complete response letter informing us that it would not approve tivozanib for the first-line treatment of advanced RCC based on the study data from this trial, and recommended that we perform an additional study adequately sized to assure the FDA that there is no adverse effect on OS.

In January 2015, we announced our receipt of confirmation from the European Medicines Agency, or EMA, that tivozanib is eligible for submission of an application for a European Union Marketing Authorization under the EMA's centralized procedure for the treatment of RCC. Confirmation of eligibility for submission is not predictive of the EMA's approval of a Marketing Authorization Application, or MAA. Tivozanib has previously been granted orphan drug designation in Europe for the treatment of RCC. Our partner, EUSA Pharma (UK) Limited, or EUSA, submitted a MAA for tivozanib for the treatment of RCC with the EMA in February 2016 based on our existing dataset, which includes the results from the TIVO-1 study of tivozanib in the first-line treatment of RCC. In March 2016, the EMA validated the MAA, confirming that the submission was complete and that it would initiate its review process. EUSA received the Day 120 List of Questions from the EMA on July 21, 2016, and has received a standard extension of time to respond. EUSA expects to submit its 120-day responses before the end of 2016 and to receive a decision on the MAA from the EMA in the first half of 2017.

In December 2015, our former partner JSC "Pharmstandard-Ufimskiy Vitamin Plant", a subsidiary of Pharmstandard OJSC, or Pharmstandard, submitted an application for marketing authorization for tivozanib in Russia. This application was withdrawn when this partnership was terminated, as further discussed below under "-Strategic Partnerships -Pharmstandard Group".

TIVO-1 Extension Study - One-way crossover from sorafenib to tivozanib (Study 902): We completed a TIVO-1 extension study in which patients with advanced RCC received tivozanib as second-line treatment subsequent to disease progression on the sorafenib arm in the TIVO-1 first-line RCC trial. We presented the final results at the 2015 American Society of Clinical Oncology (ASCO) Annual Meeting on June 1, 2015. The final results showed a median PFS of 11.0 months and a median OS of 21.6 months, demonstrating the clinically meaningful efficacy of tivozanib in a VEGF treatment refractory population. We believe that the long OS

29

derived from tivozanib following sorafenib in Study 902 contributed to the discordance in the results in the TIVO-1 trial between the PFS benefit, which significantly favored tivozanib, and the OS, which trended in favor of sorafenib. The FDA did not accept this explanation, finding that the OS results were confounded by the one-way crossover, and recommended that we perform a second phase 3 trial.

RCC Third Line Phase 3 Trial (TIVO-3): In May 2016, we initiated enrollment and treatment of patients in our new phase 3 trial of tivozanib in the third-line treatment of patients with refractory RCC. The TIVO-3 trial was designed to address the OS concerns from the TIVO-1 trial presented in the June 2013 complete response letter from the FDA and to support a request for regulatory approval of tivozanib in the United States as a third-line treatment and as a first-line treatment. Our study design, which we reviewed with the FDA, provides for a randomized, controlled, multi-center, open-label phase 3 study of approximately 322 subjects randomized 1:1 to receive either tivozanib or sorafenib. Subjects enrolled in the study may include those who have received prior immunotherapy, including immune checkpoint (PD-1) inhibitors, reflecting a potentially evolving treatment landscape. The primary objective of the study is to show improved PFS, and secondary endpoints include OS and objective response rate, or ORR, as well as safety and pharmacokinetic endpoints. The study's sites are located in North America and the European Union. The study does not include a crossover. Following the initiation of enrollment, we continue to expect to report top line data from the study in the first quarter of 2018.

RCC PD-1 Combination Trial with Opdivo (TiNivo): We have also initiated a phase 1/2 study of tivozanib in combination with Opdivo (nivolumab), an immune checkpoint (PD-1) inhibitor, for the treatment of RCC, which we refer to as the TiNivo study. Bristol-Myers Squibb is supplying Opdivo for the TiNivo trial, which is expected to begin enrolling patients in the fourth quarter of 2016 or the first quarter of 2017. In recent studies, TKIs and PD-1 inhibitors have shown promising efficacy in treating RCC in combination. However, several TKI/PD-1 combinations have encountered toxicity levels that are likely to prohibit such TKIs from safely combining with PD-1 inhibitors for RCC treatment. In our clinical trials, tivozanib has demonstrated a superior tolerability profile relative to certain other TKIs, including lower rates of key potential overlapping toxicities with PD-1 inhibitors. We believe that tivozanib's tolerability profile has the potential to allow tivozanib to combine with PD-1 inhibitors more safely than other TKIs. We expect to report safety data from the phase 1 portion of the TiNivo study in the first half of 2017.

Tivozanib Partnerships

In-License from KHK. In 2006, we acquired the exclusive rights to develop and commercialize tivozanib in all countries outside of Asia and the Middle East under a license from Kyowa Hakko Kirin Co., Ltd. (formerly Kirin Brewery Co. Ltd.), or KHK. KHK has recently filed a patent application with the Japan Patent Office (Filing Date: September 13, 2016) related to a new invention corresponding to a formulation for tivozanib with ophthalmologic applications. Pursuant to the KHK license agreement, we have exclusive, sub-licensable rights to this new invention and the corresponding know-how outside of Asia and the Middle East.

Ophthotech Option for Ocular Conditions: In November 2014, we entered into a research and exclusive option agreement, or Option Agreement, with Ophthotech Corporation, or Ophthotech, under which we granted Ophthotech a limited research license and an option for a license to develop and commercialize tivozanib outside of Asia and the Middle East for the diagnosis, prevention and treatment of non-oncologic diseases or conditions of the eye in humans.

EUSA License Agreement: In December 2015, we entered into a license agreement with EUSA Pharma (UK) Limited, or EUSA, under which we granted EUSA the right to develop and commercialize tivozanib for all diseases and conditions in humans, excluding non-oncologic diseases or conditions of the eye, in Europe (excluding Russia, Ukraine and the Commonwealth of Independent States), Latin America (excluding Mexico), Africa, Australasia and New Zealand.

Pharmstandard License Agreement: In August 2015, we licensed the rights to tivozanib in Russia, Ukraine and the Commonwealth of Independent States to Pharmstandard. Citing economic and market changes in Russia, Pharmstandard terminated the license agreement effective September 9, 2016 following unsuccessful efforts to renegotiate certain terms of the agreement. We plan to seek a new partner for the development and commercialization of tivozanib in these territories.

Colorectal Cancer Development

CRC Phase 2 Results: In March 2015, we announced results from a predefined biomarker analysis of our BATON-CRC study, as recently published in Clinical Cancer Research (Benson et. al., Clin. Ca. Res., 10.1158/1078-0432.CCR-15-3117 Published 2 September 2016). The BATON-CRC study was a randomized phase 2 clinical trial of modified FOLFOX6, a commonly used chemotherapy, combined with tivozanib or Avastin® (bevacizumab), which both target angiogenesis signaling pathways, in first-line treatment of metastatic colorectal cancer, or CRC. In this study, among prospectively defined biomarkers, patients with low (below the median, representing 50% of the population) serum neuropilin-1, or NRP-1, demonstrated longer PFS when treated with tivozanib compared to bevacizumab, which suggests that first-line colorectal cancer patients with low NRP-1 levels may benefit from treatment with tivozanib over bevacizumab, a standard of care in this disease. However, the assay used to measure serum NRP-1 is not suitable for development as a companion diagnostic. We do not plan to conduct further clinical studies unless an assay is identified.

Ficlatuzumab

Ficlatuzumab is a potent Hepatocyte Growth Factor, or HGF, inhibitory antibody. HGF is the sole known ligand of the c-Met receptor, which is believed to trigger many activities that are involved in cancer development and metastasis. In April 2014, we and Biodesix, Inc., or Biodesix, entered into a worldwide Co-Development and Collaboration Agreement, or the Biodesix Agreement, to develop and commercialize ficlatuzumab.

We have completed two phase 1 clinical studies of ficlatuzumab administered as a single agent and in combination with erlotinib, an EGFR TKI. We also performed a phase 2 clinical study evaluating ficlatuzumab in combination with gefitinib, an EGFR TKI, in first-line non-small cell lung cancer, or NSC`LC. The phase 2 trial failed to demonstrate a statistically significant benefit in the intent-to-treat, or ITT, population. However, a retrospective exploratory subgroup analysis utilizing Biodesix's companion diagnostic, Veristrat, identified a sub-population of patients who experienced a progression free survival and overall survival benefit from the addition of ficlatuzumab to gefitinib. In December 2014, we and Biodesix initiated the FOCAL study, a phase 2 confirmatory study of ficlatuzumab in combination with erlotinib in the subset of patients with first-line advanced NSCLC previously identified.

After experiencing lower rates of positivity for the two markers and slower than expected enrollment, a blinded look at the FOCAL study data from enrolled patients found that the patients, who were known to be selected for poor prognosis, experienced materially higher discontinuation rates than observed in both the general ITT population and the retrospective exploratory subgroup population of the prior phase 2 clinical trial. This observation significantly compromised the commercial opportunity as well as the feasibility of the FOCAL trial. Based on the findings from the interim analysis and the slow enrollment, we and Biodesix agreed in September 2016 to discontinue the FOCAL study.

We and Biodesix are also funding an investigator-sponsored trial of ficlatuzumab in combination with ERBITUX® (cetuximab) in squamous cell carcinoma of the head and neck. We anticipate that we will present preliminary clinical observations from this phase 1 study at an upcoming scientific conference. We and Biodesix are also funding an investigator-sponsored trial of ficlatuzumab in acute myeloid leukemia. We are evaluating several additional opportunities for the development of ficlatuzumab.

AV-203

AV-203 is a potent anti-ErbB3 (also known as HER3) specific monoclonal antibody with high ErbB3 affinity. We have observed potent anti-tumor activity in mouse models. AV-203 selectively inhibits the activity of the ErbB3 receptor, and our preclinical studies suggest that neuregulin-1, or NRG1 (also known as heregulin), levels predict AV-203 anti-tumor activity. We have completed a phase 1 dose escalation study of AV-203, which established a recommended phase 2 dose, demonstrated good tolerability and promising early signs of activity, and reached the maximum planned dose of AV-203 monotherapy. In 2014, for business reasons, the expansion cohort of this study was discontinued.

In March 2016, we entered into a collaboration and license agreement with CANbridge Life Sciences Ltd., or CANbridge, under which we granted CANbridge the exclusive right to develop, manufacture and commercialize AV-203 in all countries other than the United States, Canada and Mexico.

AV-380

AV-380 is a potent humanized IgG1 inhibitory monoclonal antibody targeting growth differentiating factor-15, or GDF15, a divergent member of the TGF-ß family, for the potential treatment or prevention of cachexia. Cachexia is defined as a multi-factorial syndrome of involuntary weight loss characterized by an ongoing loss of skeletal muscle mass (with or without loss of fat mass) that cannot be fully reversed by conventional nutritional support and leads to progressive functional impairment. Cachexia is associated with various cancers as well as chronic kidney disease, congestive heart failure, and chronic obstructive pulmonary disease, or COPD. We believe that AV-380 represents a unique approach to treating cachexia because it addresses key underlying mechanisms of the syndrome. AV-380 focuses on a significant area of patient need. It is estimated that approximately 30% of all cancer patients die due to cachexia and over half of cancer patients who die do so with cachexia present (J Cachexia Sarcopenia Muscle 2010). In the United States alone, the estimated prevalence of cancer cachexia is over 400,000 patients, and the prevalence of cachexia due to cancer, COPD, congestive heart failure, frailty and end stage renal disease combined is estimated to total more than 5 million patients (Am J Clin Nutr 2006).

We have demonstrated preclinical proof-of-concept for AV-380 in multiple cancer cachexia models and have completed cell line development. In September 2014, we presented the results from four preclinical studies of AV-380 in various in vivo cachexia models and in vitro assays at the 2nd Cancer Cachexia Conference in Montreal Canada. Our research was also selected for presentation in an oral session at the conference. In April 2015, we also presented the results from a preclinical study of AV-380 in a cachectic human tumor xenograft model at the Annual Meeting of the American Association of Cancer Research. We have established preclinical proof-of-concept for GDF15 as a key driver of cachexia by demonstrating, in animal models, that the administration of GDF15 induces cachexia, and that inhibition of GDF15 reverses cachexia and provides a potential indication of an overall survival benefit.

In August 2015, we entered into a license agreement under which we granted Novartis International Pharmaceutical Ltd., or Novartis, the exclusive right to develop and commercialize AV-380 and our related antibodies. Under this agreement, Novartis is responsible for all activities and costs associated with the further development, regulatory filing and commercialization of AV-380 worldwide. In connection with the AV-380 program, we have in-licensed certain patents and patent applications from St. Vincent's Hospital in Sydney, Australia.

AV-353

AV-353 is a potent inhibitory antibody specific to Notch 3. The Notch 3 pathway is important in cell-to-cell communication involving gene regulation mechanisms that control multiple cell differentiation processes during the entire life cycle. Scientific literature has implicated the Notch 3 receptor pathway in multiple diseases, including cancer, cardiovascular diseases and neurodegenerative conditions. Publications, including Nature Medicine (2009), have implicated the Notch 3 pathway in PAH, a rare and life-threatening disorder that affects approximately 250,000 people worldwide and is caused by enlargement of the arterial walls in small arteries between the heart and the lungs, resulting in restricted blood flow. Currently, no known cure for PAH exists. Existing treatments in PAH have focused on controlling symptoms by avoiding vasoconstriction and increasing vasodilation of blood vessels but have not reversed the underlying cause of the disease. In contrast, with the results of a recently concluded research study supported by the Company, AV-353 has generated a growing body of preclinical data that supports AV-353's ability to potentially reverse the disease phenotype, which would represent a potential disease-modifying approach to treatment. A manuscript of the results is being prepared for submission to a peer-reviewed journal.

We own worldwide rights to AV-353, which was developed utilizing our research and development platform and for which we have filed three composition of matter patent applications. We are currently seeking a partner to develop AV-353 worldwide for the potential treatment of PAH.

Strategic Partnerships

CANbridge

On March 16, 2016, which we refer to as the Effective Date, we entered into a collaboration and license agreement with CANbridge, or the CANbridge Agreement, under which we granted CANbridge the exclusive right to develop, manufacture and commercialize AV-203, our proprietary ErbB3 (HER3) inhibitory antibody, for the diagnosis, treatment and prevention of disease in humans and animals in all countries other than the United States, Canada and Mexico. Under the terms of the CANbridge Agreement, if we determine to grant a license to any ErbB3 inhibitory antibody in the United States, Canada or Mexico, we are obligated to first negotiate with CANbridge for the grant to CANbridge of a license to such rights. The parties have both agreed not to directly or indirectly develop or commercialize any other ErbB3 inhibitory antibody product during the term of the CANbridge Agreement other than pursuant to the CANbridge Agreement.

CANbridge has responsibility for all activities and costs associated with the further development, manufacture, regulatory filings and commercialization of AV-203 throughout the licensed territory. CANbridge is obligated to use commercially reasonable efforts to develop and obtain regulatory approval for AV-203 in each of China, Japan, the United Kingdom, France, Italy, Spain, and Germany. CANbridge will bear all costs for development of AV-203 through proof-of-concept in Esophageal Squamous Cell Carcinoma, after which we would expect to contribute to certain worldwide development costs.

Pursuant to the CANbridge Agreement, CANbridge paid us an upfront fee of \$1.0 million in April 2016. CANbridge also agreed to reimburse us \$1.0 million for certain manufacturing costs and expenses that we previously incurred, \$0.5 million of which will be due on the earlier of (i) the date of validation by CANbridge of certain manufacturing development activities we conducted and (ii) twelve months from the Effective Date, and the remaining \$0.5 million of which will be due on the earlier of (i) the date of validation by CANbridge of such manufacturing development activities or (ii) eighteen months from the Effective Date. We are also eligible to receive up to $42.0 million in potential development and regulatory milestone payments and up to $90.0 million in potential sales based milestone payments based on annual net sales of licensed products. Upon commercialization, we are eligible to receive a tiered royalty, with a percentage range in the low double-digits, on net sales of approved licensed products. CANbridge's obligation to pay royalties for each licensed product expires on a country-by-country basis on the later of the expiration of patent rights covering such licensed product in such country, the expiration of regulatory data exclusivity in such country and ten years after the first commercial sale of such licensed product in such country. A percentage of any milestone and royalty payments received by us, excluding upfront and reimbursement payments, are due to Biogen Idec International GMBH, or Biogen Idec, as a sublicensing fee under our option and license agreement with Biogen dated March 18, 2009, as amended.

EUSA

In December 2015, we entered into a license agreement with EUSA under which we granted to EUSA the exclusive, sublicensable right to develop, manufacture and commercialize tivozanib in the territories of Europe (excluding Russia, Ukraine and the Commonwealth of Independent States), Latin America (excluding Mexico), Africa, Australasia and New Zealand for all diseases and conditions in humans, excluding non-oncologic diseases or conditions of the eye. EUSA filed an application with the EMA in February 2016, which was validated by the EMA in March 2016, for approval of marketing authorization for tivozanib in the treatment of RCC.

EUSA is obligated to use commercially reasonable efforts to develop and commercialize tivozanib throughout the licensed territories. With the exception of certain support to be provided by us in connection with the application for marketing approval by the EMA, EUSA has responsibility for all activities and costs associated with the further development, manufacture, regulatory filings and commercialization of tivozanib in the licensed territories.

Under the license agreement, EUSA made a research and development funding payment to us of $2.5 million in 2015. EUSA is required to make a further research and development funding payment of $4.0 million upon the grant by the EMA of marketing approval for tivozanib for treatment of RCC. We are eligible to receive additional research funding from EUSA, including up to $20.0 million for the Company’s phase 3 study in third-line RCC if EUSA elects to utilize data generated by the study, and up to $2.0 million for a potential phase 1 combination study with a checkpoint inhibitor if EUSA elects to utilize data generated by the study. We will be entitled to receive milestone payments of $2.0 million per country upon reimbursement approval for RCC in each of France, Germany, Italy, Spain and the United Kingdom, and an additional $2.0 million for the grant of marketing approval in three of the following five countries: Argentina, Australia, Brazil, South Africa and Venezuela. We are also eligible to receive a payment of $2.0 million in connection with EUSA’s filing with the EMA for marketing approval for tivozanib for the treatment of each of up to three additional indications and $5.0 million per indication in connection with the EMA’s grant of marketing approval for each of up to three additional indications, as well as up to $335.0 million upon EUSA’s achievement of certain sales thresholds. We are also eligible to receive tiered double digit royalties on net sales, if any, of licensed products in the licensed territories ranging from a low double digit up to mid-twenty percent depending on the level of annual net sales. A percentage of any milestone and royalty payments we receive is due to KHK as a sublicensing fee under our license agreement with KHK. The research and development funding payments under the EUSA license agreement are not subject to sublicensing payment to KHK.

Novartis

In August 2015, we entered into a license agreement with Novartis, under which we granted Novartis the exclusive right to develop and commercialize AV-380 and our related antibodies that bind to GDF15 worldwide. Under this agreement, Novartis is responsible for all activities and costs associated with the further development, regulatory filing and commercialization of AV-380 worldwide.

Novartis made an upfront payment to us of $15.0 million in September 2015. We are also eligible to receive (a) up to $53 million in potential clinical milestone payments and up to $105 million in potential regulatory milestone payments tied to the commencement of clinical trials and to regulatory approvals of products developed under the license agreement in the United States, the European Union and Japan; and (b) up to $150 million in potential sales based milestone payments based on annual net sales of such products. Upon commercialization, we are eligible to receive tiered royalties on net sales of approved products ranging from the high single digits to the low double-digits. Novartis has responsibility under the license agreement for the development, manufacture and commercialization of the licensed antibodies and any resulting approved therapeutic products. In December 2015, Novartis also exercised its right under the license agreement to acquire our inventory of clinical quality drug substance, reimbursing us approximately $3.5 million for such existing inventory.

Certain milestones achieved by Novartis would trigger milestone payment obligations from us to St. Vincent's Hospital Sydney Limited, which we refer to as St. Vincent's, under our amended and restated license agreement with St. Vincent's. In addition, royalties on approved products will be payable to St. Vincent's, and we and Novartis will share that obligation equally.

Ophthotech

In November 2014 we entered into the Option Agreement with Ophthotech. Pursuant to the Option Agreement, we granted to Ophthotech a license to perform certain research and development activities during the option period. These activities include formulation work for ocular administration, preclinical research and the conduct of a Phase 1/2a, proof-of-concept clinical trial of a product containing tivozanib in patients with wet age-related macular degeneration. We also granted Ophthotech an exclusive option to license tivozanib outside of Asia and the Middle East for the diagnosis, prevention and treatment of non-oncologic diseases or conditions of the eye in humans. Ophthotech may exercise the option at any time during an Option Period ending on the latest to occur of: (i) twelve (12) months after the achievement of the Clinical Efficacy Milestone (as defined below) (ii) ninety (90) days after the Clinical Efficacy Milestone Payment Trigger Date (as defined below) and (iii) thirty (30) days after the Company and Ophthotech agree as to the definitive form of license agreement.

Ophthotech paid us $0.5 million in consideration for the grant of the option. Such amount is non-refundable and not creditable against any other amounts due under the Option Agreement.

Under the Option Agreement, we would receive a one-time milestone payment of $2.0 million upon acceptance of the first Investigational New Drug application filed by Ophthotech for the purpose of conducting a human clinical study of tivozanib in ocular diseases or conditions, which we refer to as the IND Submission Milestone Payment. We are also entitled to receive a one-time milestone payment of $6.0 million, which we refer to as the Clinical Efficacy Milestone Payment, on the Clinical Efficacy Milestone Payment Trigger Date, which is the earlier of (a) December 31, 2016 and (b) the later to occur of: (i) the achievement of a clinical milestone in the proof-of-concept study, which we refer to as the Clinical Efficacy Milestone, and (ii) the earlier of (A) the date twelve (12) months after our and Ophthotech's agreement as to the form and substance of the KHK Amendment (as defined below) or (B) the date ninety (90) days after the entry into the KHK Amendment, subject to Ophthotech's right to terminate the Option Agreement on 90 days' written notice and certain other conditions; provided, however, that the Clinical Efficacy Milestone Payment will not be payable if Ophthotech gives us a notice of termination of the Option Agreement within thirty (30) days after the Clinical Efficacy Milestone Payment Trigger Date.

During the Option Period, we may not grant a license to any third party that would preclude us from being able to grant to Ophthotech the rights and licenses that are contemplated by the definitive license agreement, and we may not engage in any research, development or commercialization of tivozanib in the field covered by the contemplated definitive license agreement, except as specified in the Option Agreement.

The terms of the Option Agreement are subject to our obligations to KHK under the KHK license agreement. A percentage of all payments we receive under the Option Agreement and any definitive license agreement must be paid to KHK. We are required to maintain the KHK license in effect, and not enter into any amendment that would adversely affect our rights, during the Option Period.

During the Option Period, we and Ophthotech are obligated to negotiate in good faith the form and substance of a definitive license agreement, as well as the form and substance of an amendment to the KHK license agreement, which we refer to as the KHK Amendment, to modify certain rights and obligations of the parties and sublicensees thereunder, particularly with respect to rights to improvements that are not specifically related to tivozanib, and regulatory affairs matters.

If Ophthotech exercises the option, Ophthotech is required to pay us a one-time option exercise fee of $2.0 million in addition to the IND Submission Milestone Payment if such payment has not then been previously paid. If upon exercise of the option, the Clinical Efficacy Milestone Payment Trigger Date has not yet occurred, we will be entitled to the Clinical Efficacy Milestone Payment at such time that the Clinical Efficacy Milestone Payment Date does occur if the license agreement remains in effect as of such date. The license agreement, if entered into upon Ophthotech's exercise of the option, will provide that we are entitled to receive (i) $10.0 million upon meeting certain efficacy and safety endpoints in phase 2 clinical trials that would enable the commencement of a phase 3 clinical trial, (ii) $20.0 million upon marketing approval in the United States, (iii) $20.0 million upon marketing approval in the UK, Germany, Spain, Italy and France and (iv) up to $45.0 million in sales-based milestone payments. Ophthotech would also be required to pay tiered, double digit royalties, up to the mid-teens, on net sales of tivozanib or products containing tivozanib.

Biodesix

In April 2014, we and Biodesix entered into the Biodesix Agreement to develop and commercialize ficlatuzumab. Under the Biodesix Agreement, with the exception of the costs incurred for the FOCAL study, we and

Biodesix are each required to contribute 50% of all clinical, regulatory, manufacturing and other costs to develop ficlatuzumab. Pursuant to the Biodesix Agreement, Biodesix was obligated to fund all costs of the FOCAL study up to a cap of $15 million, following which all costs of the FOCAL study would be shared equally. In connection with the discontinuation of the FOCAL study, on October 14, 2016 we and Biodesix amended the Biodesix Agreement. Under the amendment, we agreed to share 50% of the cost of the FOCAL study from August 1, 2016 through its closeout. We do not anticipate that these remaining costs will be material. In return for bearing 50% of the FOCAL costs after August 1, 2016, we will be entitled to recover an agreed multiple of the additional costs borne by us out of any income received by the partnership in connection with the development or commercialization of ficlatuzumab. Following such recovery, the payment structure under the original Biodesix Agreement, which generally provides that the parties share equally in any costs and revenue, will resume without such modification.

Under the Biodesix Agreement, subject to regulatory approval, we would lead worldwide development and commercialization of ficlatuzumab.

St. Vincent's Hospital

In July 2012, we entered into a license agreement with St. Vincent's, under which we obtained an exclusive, worldwide license to research, develop, manufacture and commercialize products for therapeutic applications that benefit from inhibition or decreased expression or activity of MIC-1, which is also known as GDF15. We believe GDF15 is a novel target for cachexia, and we are exploiting this license in our AV-380 program for cachexia. Under the agreement, we have the right to grant sublicenses subject to certain restrictions. We have a right of first negotiation to obtain an exclusive license to certain improvements that St. Vincent's or third parties may make to licensed therapeutic products. Under the license agreement, St. Vincent's also granted us non-exclusive rights for certain related diagnostic products and research tools.

In August 2015, in connection with the execution of our license agreement with Novartis, we entered into an amended and restated agreement with St. Vincent's, pursuant to which we made an upfront payment to St. Vincent's of $1.5 million. St. Vincent's is also eligible to receive up to approximately $18.9 million in connection with development and regulatory milestones. We made a $0.4 million milestone payment to St. Vincent's during the nine months ended September 30, 2016 related to the selection of a development candidate. Royalties for approved products resulting from the license agreement will also be payable to St. Vincent's, and we and Novartis will share that obligation equally.

Astellas Pharma

In February 2011, we entered into a collaboration and license agreement with Astellas Pharma Inc., or Astellas, to develop and commercialize tivozanib for the treatment of a broad range of cancers. On February 12, 2014, Astellas exercised its right to terminate the agreement. The termination of the agreement became effective August 11, 2014, at which time tivozanib rights returned to us. In accordance with the collaboration and license agreement, we and Astellas agreed to equally share committed development costs, including the costs of completing certain tivozanib clinical development activities that had been initiated as part of our partnership with Astellas.

Biogen Idec

In March 2009, we entered into an exclusive option and license agreement with Biogen Idec regarding the development and commercialization of our discovery-stage ErbB3-targeted antibodies for the potential treatment and diagnosis of cancer and other diseases in humans outside of North America. Under the agreement, we were responsible for developing ErbB3 antibodies through completion of the first phase 2 clinical trial designed in a manner that, if successful, will generate data sufficient to support advancement to a phase 3 clinical trial. In March 2014, we amended our agreement with Biogen Idec, whereby Biogen Idec agreed to the termination of its rights and obligations under the agreement, including Biogen Idec's option to (i) obtain a co-exclusive (with us) license to develop and manufacture ErbB3 targeted antibodies and (ii) obtain exclusive commercialization rights to ErbB3 products in countries in the world other than North America. As a result, we retain worldwide rights to AV-203, a clinical stage ErbB3-targeted antibody. Pursuant to the amendment, we were obligated to in good faith use reasonable efforts to seek a collaboration partner to fund further development and commercialization of ErbB3-targeted antibodies. We satisfied this obligation in March 2016 upon entering into our license agreement with CANbridge. We are obligated to pay Biogen Idec a percentage of milestone payments we receive under the CANbridge agreement and single-digit royalty payments on net sales related to the sale of AV-203, up to cumulative maximum amount of $50.0 million.

Kyowa Hakko Kirin

On December 21, 2006, we entered into a license agreement with KHK under which we obtained an exclusive license, with the right to grant sublicenses subject to certain restrictions, to research, develop, manufacture and commercialize tivozanib, pharmaceutical compositions thereof and associated biomarkers. Our exclusive license covers all territories in the world except for Asia and the Middle East, where KHK has retained the rights to tivozanib. Under the license agreement, we obtained exclusive rights in our territory under certain KHK patents, patent applications and know-how related to tivozanib, to research, develop, make, have made, use, import, offer for sale, and sell tivozanib for the diagnosis, prevention and treatment of any and all human diseases and conditions. We and KHK each have access to and can benefit from the other party’s clinical data and regulatory filings with respect to tivozanib and biomarkers identified in the conduct of activities under the license agreement.

Under the license agreement, we are obligated to use commercially reasonable efforts to develop and commercialize tivozanib in our territory, including meeting certain specified diligence goals. Prior to the first anniversary of the first post-marketing approval sale of tivozanib in our territory, neither we nor any of our subsidiaries has the right to conduct certain clinical trials of, seek marketing approval for or commercialize any other cancer product that also works by inhibiting the activity of a VEGF receptor.

Upon entering into the license agreement with KHK, we made a one-time cash payment in the amount of $5.0 million. In March 2010, we made a $10.0 million milestone payment to KHK in connection with the dosing of the first patient in our phase 3 clinical trial of tivozanib. We made a $22.5 million payment to KHK during the year ended December 31, 2011 related to the up-front license payment received under Astellas agreement. In December 2012, we made a $12.0 million milestone payment to KHK in connection with the acceptance by the FDA of our NDA filing for tivozanib. The total remaining payments for clinical and regulatory milestones under our license agreement with KHK are up to $38.0 million, in the aggregate, provided that the associated clinical and regulatory milestones specific to licensed territories will be replaced by a specified percentage of any non-research and development amounts we receive from any third party in the event we sublicense our rights under the agreement.

We are required to pay to KHK 30% of certain amounts we receive from sublicensees, including up-front license fees, milestone payments and royalties, other than amounts we receive in respect of research and development funding or equity investments, subject to certain limitations.

Financial Overview

We have devoted substantially all of our resources to our drug development efforts, including research and development, conducting clinical trials for our product candidates, manufacturing, protecting our intellectual property and the general and administrative functions relating to these operations. We have generated no revenue from product sales through September 30, 2016, and through such date have principally funded our operations through the proceeds from our strategic partnerships, sales of stock to investors and loan agreements with Hercules Capital, Inc. (formerly known as Hercules Technology Growth Capital, Inc.) and certain of its affiliates, which we sometimes refer to collectively as Hercules.

We do not have a history of being profitable and, as of September 30, 2016, we had an accumulated deficit of $516.3 million. We anticipate that we will continue to incur significant operating costs over the next several years as we continue our planned development activities for our preclinical and clinical products. We will need additional funding to support our operating activities, and the timing and nature of activities contemplated for 2017 and thereafter will be conducted subject to the availability of sufficient financial resources.

Revenue

To date, we have not generated any revenue from product sales. All of our revenue to date has been derived from license fees, milestone payments, premium over the fair value of convertible preferred shares sold to our strategic partners, and research and development payments received from our strategic partners.

In the future, we may generate revenue from a combination of product sales, license fees, milestone payments and research and development payments in connection with strategic partnerships, and royalties resulting from the sales of products developed under licenses of our intellectual property. We expect that any revenue we generate will fluctuate from quarter to quarter as a result of the timing and amount of license fees, research and development reimbursements, milestone and other payments received under our strategic partnerships, and the payments that we receive upon the sale of our products, to the extent any are successfully commercialized. We do not expect to generate revenue from product sales in the near term. If we or our strategic partners fail to complete the development of our drug candidates in a timely manner or obtain regulatory approval for them, our ability to generate future revenue, and our results of operations and financial position, would be materially adversely affected.

Research and Development Expenses

Research and development expenses have historically consisted of expenses incurred in connection with the discovery and development of our product candidates. These expenses consist primarily of:

- employee-related expenses, which include salaries, benefits and stock-based compensation expense;
- expenses incurred under agreements with contract research organizations, investigative sites and consultants that conduct our clinical trials and a substantial portion of our preclinical studies;
- the cost of acquiring and manufacturing drug development related materials;
- the cost of completing certain tivozanib clinical development activities that were initiated as part of our prior partnership with Astellas;
- facilities, depreciation and other allocated expenses, which include direct and allocated expenses for rent and maintenance of facilities and equipment, and depreciation of fixed assets;

- license fees for, and milestone payments related to, in-licensed products and technology; and
- costs associated with outsourced development activities, regulatory approvals and medical affairs.

We expense research and development costs as incurred. Nonrefundable advance payments for goods and services that will be used in future research and development activities are expensed when the activity has been performed or when the goods have been received rather than when the payment is made.

Research and development expenses are net of amounts reimbursed under our agreements with Astellas and Biodesix for Astellas' and Biodesix' respective shares of development costs incurred by us under our joint development plans with each respective partner.

Except for our anticipated purchase of sorafenib in the fourth quarter of 2016 to support the TIVO-3 trial, we expect that research and development expenses for the remainder of 2016 and in 2017 will remain at current levels as we advance and complete enrollment in the TIVO-3 trial and initiate enrollment in the phase 1/2 study of tivozanib combined with a PD-1 inhibitor for the treatment of patients with RCC.

We track external development expenses and personnel expense on a program-by-program basis and allocate common expenses, such as scientific consultants and laboratory supplies, to each program based on the personnel resources allocated to such program. Facilities, depreciation, stock-based compensation, research and development management and research and development support services are not allocated among programs and are considered overhead. Below is a summary of our research and development expenses for the three months and nine months ended September 30, 2016 and 2015:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
	(in thousands)		(in thousands)	
Tivozanib	$4,024	$2,612	$14,126	$5,050
AV-380 Program in Cachexia	—	1,573	464	2,330
Ficlatuzumab	210	—	714	—
AV-203	—	89	76	455
Other pipeline programs	—	—	—	11
Other research and development	—	—	—	10
Overhead	210	192	640	1,146
Total research and development expenses	$4,444	$4,466	$16,020	$9,002

Tivozanib

We have pursued partnering options to fund further tivozanib development in appropriate clinical settings outside of our strategic focus. In February 2016, our strategic partner EUSA submitted an application for marketing authorization for tivozanib for the treatment of RCC to the EMA, which the EMA validated in March 2016. EUSA is responsible for all activities and costs associated with the further development and commercialization of tivozanib within its licensed territories. We continue to share the costs of development activities to which we and Astellas were committed at the time the Astellas partnership was terminated.

In May 2016, we initiated TIVO-3, an additional phase 3 trial of tivozanib vs. sorafenib. TIVO-3, which is expected to enroll approximately 322 patients in the refractory RCC setting, will use PFS as the primary endpoint and OS as a secondary endpoint, and is designed to address the OS concerns presented in the June 2013 complete response letter from the FDA and to support a request for approval of tivozanib as a third-line treatment and as a first-line treatment. We expect the total estimated remaining costs of this trial, including drug supply and distribution, to be approximately $27.0 - $30.0 million through completion. We also initiated a phase 1/2 trial of tivozanib in combination with a PD-1 inhibitor for the treatment of RCC, for which the costs, including drug supply distribution, could be in the range of $2.0 - $2.5 million.

AV-380 Program in Cachexia

In August 2015, we entered into a license agreement with Novartis, under which we granted Novartis the exclusive right to develop and commercialize AV-380 and related AVEO antibodies that bind to GDF15 worldwide. Under this agreement, Novartis is responsible for all activities and costs associated with the further development, regulatory filing and commercialization of AV-380 worldwide. We do not expect to incur any significant costs related to AV-380 in future periods beyond any milestone fees and royalties payable to St.

Vincent's pursuant to our in-licensing agreement, which comprises substantially all of the costs incurred during the nine months ended September 30, 2016.

AV-203

In March 2014, we regained our worldwide rights from Biogen Idec to develop, manufacture and commercialize AV-203. In March 2016, we entered into a collaboration and license agreement with CANbridge, under which we granted CANbridge the exclusive right to develop and commercialize AV-203 in all countries other than the United States, Canada and Mexico. CANbridge is responsible for all costs of developing and commercializing AV-203 within its licensed territory. For a period of time following the completion of certain proof-of-concept clinical studies by CANbridge involving the use of AV-203 for the treatment of squamous cell esophagus cancer, we agreed to negotiate exclusively with CANbridge for (a) the right to co-develop ErbB3 inhibitory antibody products for the treatment of squamous cell esophagus cancer or (b) the right to include the United States, Canada and Mexico as part of the licensed territories. We do not expect to incur any significant costs related to AV-203 prior to CANbridge's completion of a proof-of-concept clinical study.

Ficlatuzumab

In April 2014, we entered into the Biodesix Agreement to develop and commercialize ficlatuzumab, our potent HGF inhibitory antibody. Pursuant to the agreement, Biodesix was to provide up to $15.0 million for the phase 2 FOCAL study of ficlatuzumab in combination with erlotinib in first-line advanced NSCLC patients selected using Biodesix's proprietary companion diagnostic Veristrat. In connection with the discontinuation of the FOCAL study, on October 14, 2016 we and Biodesix amended the Biodesix Agreement. Under the amendment, we agreed to fund 50% of the shutdown costs of the FOCAL Study after August 1, 2016, which we do not expect will be material. In return, we would be entitled to reimbursement at a multiple of such shutdown expenses out of any future revenues from ficlatuzumab. All manufacturing and all non-FOCAL development, regulatory or commercial expenses for ficlatuzumab will continue to be equally shared, as provided in the original Biodesix Agreement. Due to the unpredictable nature of clinical development, we are unable to estimate with any certainty the costs we will incur in the future development of ficlatuzumab.

Uncertainties of Estimates Related to Research and Development Expenses

The process of conducting preclinical studies and clinical trials necessary to obtain FDA approval for each of our product candidates is costly and time-consuming. The probability of success for each product candidate and clinical trial may be affected by a variety of factors, including, among others, the quality of the product candidate's early clinical data, investment in the program, competition, manufacturing capabilities and commercial viability.

At this time, we cannot reasonably estimate or know the nature, specific timing and estimated costs of the efforts that will be necessary to complete the development of our product candidates, or the period, if any, in which material net cash inflows may commence from sales of any approved products. This uncertainty is due to the numerous risks and uncertainties associated with developing drugs, including the uncertainty of:

- our ability to establish and maintain strategic partnerships, the terms of those strategic partnerships and the success of those strategic partnerships, if any, including the timing and amount of payments that we might receive from strategic partners;
- the scope, progress, results and costs of preclinical development, laboratory testing and clinical trials for any product candidate;
- the progress and results of our clinical trials;
- the costs, timing and outcome of regulatory review of our product candidates;
- the emergence of competing technologies and products and other adverse market developments; and
-

the costs of preparing, filing and prosecuting patent applications and maintaining, enforcing and defending intellectual property-related claims.

As a result of the uncertainties associated with developing drugs, including those discussed above, we are unable to determine the duration and completion costs of current or future clinical stages of our product candidates, or when, or to what extent, we will generate revenues from the commercialization and sale of any of our product candidates. Development timelines, probability of success and development costs vary widely. We anticipate that we will make determinations as to which additional programs to pursue and how much funding to direct to each program on an ongoing basis in response to the scientific and clinical success, if any, of each product candidate, as well as ongoing assessment of each product candidate’s commercial potential. We will need to raise substantial additional capital in the future in order to fund the development of our preclinical and clinical product candidates.

General and Administrative Expenses

General and administrative expenses consist principally of salaries and related costs for personnel in executive, finance, corporate development, information technology, legal and human resource functions. Other general and administrative expenses include facility costs not otherwise included in research and development expenses, patent filing, prosecution and defense costs and professional fees for legal, consulting, pre-commercialization activities, auditing and tax services. We anticipate that our general and administrative expenses for the remainder of 2016 and in 2017 will remain at current levels.

Warrants Issued in Connection with Private Placement

We account for warrant instruments that either conditionally or unconditionally obligate the issuer to transfer assets as liabilities regardless of the timing of the redemption feature or price, even though the underlying shares may be classified as permanent or temporary equity. These warrants are subject to revaluation at each balance sheet date, and any changes in fair value are recorded as a non-cash component of other expense, until the earlier of their exercise or expiration or upon the completion of a liquidation event.

Interest Expense, Net

Interest income consists of interest earned on our cash, cash equivalents and marketable securities. The primary objective of our investment policy is capital preservation. Interest expense consists of interest, amortization of debt discount, and amortization of deferred financing costs associated with our loans payable.

Income Taxes

We calculate our provision for income taxes on ordinary income based on our projected annual tax rate for the year. As of September 30, 2016, we are forecasting a net loss for the year ended December 31, 2016, and since we maintain a full valuation allowance on all of our deferred tax assets, we have recorded no income tax benefit in the current quarter. For the nine months ended September 30, 2016, we recorded a $0.1 million provision for income taxes related to withholding taxes incurred in a foreign jurisdiction.

Critical Accounting Policies and Significant Judgments and Estimates

Our discussion and analysis of our financial condition and results of operations are based on our condensed consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses and the disclosure of contingent assets and liabilities in our financial statements. On an ongoing basis, we evaluate our estimates and judgments, including those related to revenue recognition, accrued clinical expenses, and stock-based compensation. We base our estimates on historical experience, known trends and events and various other factors that we and our management believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

Our significant accounting policies are described in the notes to our condensed consolidated financial statements appearing elsewhere in this report. There have been no material changes to our critical accounting policies during the nine-month period ended September 30, 2016. Please refer to Part II, Item 7, “Management’s Discussion and Analysis of Financial Condition and Results of Operations”, of our annual report on Form 10-K for the fiscal year ended December 31, 2015 for further discussion of our critical accounting policies and significant judgments and estimates.

39

Results of Operations

Comparison of Three Months Ended September 30, 2016 and 2015

The following table summarizes the results of our operations for each of the three months ended September 30, 2016 and 2015, together with the changes in those items in dollars and as a percentage:

	Three Months Ended September 30, 2016	2015	Increase/ (decrease)	%
	(in thousands)			
Revenue	$992	$15,158	$(14,166)	(93)%
Operating expenses:				
Research and development	4,444	4,466	(22)	—
General and administrative	2,141	2,225	(84)	(4)%
Restructuring and lease exit	—	—	—	—
Total operating expenses	6,585	6,691	(106)	(2)%
(Loss) income from operations	(5,593)	8,467	(14,060)	(166)%
Interest expense, net	(551)	(531)	(20)	4 %
Change in fair value of warrant liability	1,178	—	1,178	—
Other expense	—	(22)	22	(100)%
Net (loss) income before income taxes	(4,966)	7,914	(12,880)	(163)%
Income tax provision	—	—	—	—
Net (loss) income	$(4,966)	$7,914	$(12,880)	(163)%

The following table sets forth revenue for the three months ended September 30, 2016 and 2015:

Revenue	Three Months Ended June 30, 2016	2015	Increase/ (decrease)	%
	(in thousands)			
Strategic Partner:				
Novartis	$—	$15,000	$(15,000)	100
CANbridge	—	—	—	—
EUSA	99	—	99	—
Biogen Idec	—	77	(77)	(100)%
Pharmstandard	864	23	841	3,657%
Ophthotech	29	58	(29)	(50)%
	$992	$15,158	$(14,166)	(93)%

Revenue. Revenue for the three months ended September 30, 2016 was $1.0 million compared to $15.2 million for the three months ended September 30, 2015, a decrease of approximately $14.2 million. The decrease was principally due to the $15.0 million upfront payment received in connection with our licensing agreement with Novartis entered into in August 2015, partially offset by $0.8 million in the acceleration of deferred revenue that was recognized upon the effective termination of our licensing agreement with Pharmstandard in September 2016.

Research and development. Research and development, or R&D, expenses for the three months ended September 30, 2016 were $4.4 million compared to $4.5 million for the three months ended September 30, 2015, a decrease of $0.1 million. The decrease was primarily attributable to a $1.4 million increase in tivozanib, principally related to the advancement in the TIVO-3 trial that commenced patient enrollment and treatment in May 2016, offset by $1.6 million in costs incurred in the third quarter of 2015 in connection with the AV-380 program that were not incurred during the third quarter in 2016, principally related to sub-licensing payments to KHK and St. Vincent’s resulting from the license agreements signed in August 2015 with Novartis and Pharmstandard .Except for our anticipated purchase of sorafenib in the fourth quarter of 2016 to support the TIVO-3 trial, we expect that research and development expenses for the remainder of 2016 and in 2017 will remain at current levels as we advance and complete enrollment in the TIVO-3 trial and initiate enrollment in the phase 1/2 study of tivozanib combined with a PD-1 inhibitor for the treatment of patients with RCC.

General and administrative. General and administrative expenses for the three months ended September 30, 2016 were $2.1 million compared to $2.2 million for the three months ended September 30, 2015, a decrease of $0.1 million. For the remainder of 2016 and in 2017, we anticipate that general and administrative expenses will remain at current levels.

Change in fair value of warrant liability. The $1.2 million change in the fair value of our warrant liability resulted principally from a decrease in our stock price as of September 30, 2016. In May 2016, we issued warrants in connection with a private placement financing and recorded the warrants as a liability. The changes in the fair value at the end of each reporting date are recorded in the Statements of Operations and Comprehensive Income (Loss).

Interest expense, net. Interest expense, net was $0.5 million in each of the three months ended September 30, 2016 and 2015. For the remainder of 2016 and in 2017, we anticipate that interest expense will remain at current levels.

Comparison of Nine Months Ended September 30, 2016 and 2015

The following table summarizes the results of our operations for each of the nine months ended September 30, 2016 and 2015, together with the changes in those items in dollars and as a percentage:

	Nine Months Ended September 30,			
	2016	2015	Increase/ (decrease)	%
	(in thousands)			
Revenue	$2,388	$15,426	$(13,038)	(85)%
Operating expenses:				
Research and development	16,020	9,002	7,018	78 %
General and administrative	6,344	8,367	(2,023)	(24)%
Restructuring and lease exit	—	4,358	(4,358)	(100)%
Total operating expenses	22,364	21,727	637	3 %
Loss from operations	(19,976)	(6,301)	(13,675)	217 %
Interest expense, net	(1,388)	(1,866)	478	(26)%
Change in fair value of warrant liability	182	—	182	—
Other expense	—	(245)	245	(100)%
Loss before income taxes	(21,182)	(8,412)	(12,770)	152 %
Income tax provision	(100)	—	(100)	—
Net loss	$(21,282)	$(8,412)	$(12,870)	153 %

The following table sets forth revenue for the nine months ended September 30, 2016 and 2015:

Revenue	Nine Months Ended September 30, 2016	2015	Increase/ (decrease)	%
	(in thousands)			
Strategic Partner:				
Novartis	$—	$15,000	$(15,000)	(100)%
CANbridge	1,028	—	1,028	—

EUSA	296	—	296	—
Biogen Idec	38	230	(192)	(83)%
Pharmstandard	939	23	916	3,983%
Ophthotech	87	173	(86)	(50)%
	$2,388	$15,426	$(13,038)	(85)%

Revenue. Revenue for the nine months ended September 30, 2016 was $2.4 million compared to $15.4 million for the nine months ended September 30, 2015, a decrease of $13.0 million. The decrease was principally due to the $15.0 million upfront payment received in connection with our licensing agreement with Novartis entered into in August 2015, partially offset by the $1.0 million upfront payment received in connection with our collaboration and license agreement with CANbridge entered into in March 2016 and $0.8 million in the acceleration of deferred revenue that was recognized upon the effective termination of our licensing agreement with Pharmstandard in September 2016.

Research and development. Research and development, or R&D, expenses for the nine months ended September 30, 2016 were $16.0 million compared to $9.0 million for the nine months ended September 30, 2015, an increase of $7.0 million. The increase was primarily attributable to a $9.1 million increase in tivozanib, principally related to the advancement of the TIVO-3 trial that commenced patient enrollment and treatment in May 2016, partially offset by a decrease of $1.9 million in the AV-380 program, principally related to sub-licensing payments to KHK and St. Vincent's resulting from the license agreements signed in August 2015 with Novartis and Pharmstandard. Except for our anticipated purchase of sorafenib in the fourth quarter of 2016 to support the TIVO-3 trial, we expect that research and development expenses for the remainder of 2016 and in 2017 will remain at current levels as we advance and complete enrollment in the TIVO-3 trial and initiate enrollment in the phase 1/2 study of tivozanib combined with a PD-1 inhibitor for the treatment of patients with RCC.

General and administrative. General and administrative expenses for the nine months ended September 30, 2016 were $6.3 million compared to $8.3 million for the nine months ended September 30, 2015, a decrease of $2.0 million. The decrease was principally the result of a $0.7 million decrease in external legal costs associated with various ongoing legal matters, a $0.8 million decrease in employee compensation following our decreased headcount and the reduction of our utilized facility space following our 2015 restructuring. For the remainder of 2016 and in 2017, we anticipate that general and administrative expenses will remain at current levels.

Restructuring and lease exit. Restructuring and lease exit expenses for the nine months ended September 30, 2016 and 2015 were $0 and $4.4 million, respectively. The expenses incurred during the nine months ended September 30, 2015 related to the January 2015 restructuring, which was substantially completed in March 2015. As part of this restructuring, we eliminated our internal research function, reducing our headcount by approximately 40 positions.

Change in fair value of warrant liability. The change in the fair value of our warrant liability from the time of inception for the nine months ended September 30, 2016 was $0.2 million, principally resulting from a decrease in our stock price as of the September 30, 2016 reporting date. In May 2016, we issued warrants in connection with a private placement financing and recorded the warrants as a liability. The changes in the fair value at the end of each reporting date are recorded as a non-cash gain or loss in the Statements of Operations and Comprehensive Income (Loss).

Interest expense, net. Interest expense, net for the nine months ended September 30, 2016 was $1.4 million compared to $1.9 million for the nine months ended September 30, 2015, a decrease of $0.5 million. The decrease was principally attributable to the decrease in the outstanding balance on our loan with Hercules. For the remainder of 2016 and in 2017, we anticipate that interest expense will remain at current levels.

Income Tax Provision. Income tax provision for the nine months ended September 30, 2016 was $0.1 million compared to $0 for the nine months ended September 30, 2015. The increase in the income tax provision relates to withholding taxes incurred in a foreign jurisdiction related income earned from our licensing agreement with CANbridge.

Liquidity and Capital Resources

We have funded our operations principally through the sale of equity securities sold in private placements and underwritten public offerings, revenue and expense reimbursements from strategic partnerships, debt financing and interest income. In May 2016, we raised approximately $20.3 million in net cash proceeds, including $15.4 million in net proceeds from a private placement of 17,642,842 units, each including one share of our common stock and a warrant to purchase one share of our common stock, and $4.9 million in net proceeds from additional borrowings under our Hercules loan agreement. As of September 30, 2016, we had cash, cash equivalents and marketable securities of approximately $30.8 million. Currently, our funds are invested in money market funds, U.S. government agency securities, and corporate debt securities, including commercial paper. The following table sets forth the primary sources and uses of cash for each of the periods set forth below:

	Nine Months Ended September 30,	
	2016	2015
	(in thousands)	
Net cash (used in) operating activities	$(23,613)	$(18,241)
Net cash (used in) investing activities	(10,942)	(1,304)
Net cash provided by financing activities	20,291	1,978
Net decrease in cash and cash equivalents	$(14,264)	$(17,567)

Our operating activities used cash of $23.6 million and $18.2 million in the nine months ended September 30, 2016 and 2015, respectively. Cash used by operations was due primarily to our net loss adjusted for non-cash items and changes in working capital.

Our investing activities used cash of $10.9 million and $1.3 million in the nine months ended September 30, 2016 and 2015, respectively. Cash used by investing activities in each of the nine months ended September 30, 2016 and 2015 was primarily the net result of the purchase of marketable securities, partially offset by the maturities of marketable securities in each period and proceeds from the sale of equipment in the nine months ended September 30, 2015.

Our financing activities provided cash of $20.2 million and $2.0 million in the nine months ended September 30, 2016 and 2015, respectively. In May 2016, we raised approximately $20.3 million in net cash proceeds, including $15.4 million in net proceeds from a private placement of 17,642,842 units, each including one share of our common stock and a warrant to purchase one share of our common stock, or the PIPE Warrants, and $4.9 million in net proceeds from additional borrowings under our Hercules loan agreement. In the nine months ended September 30, 2015, we raised approximately $10.5 million in net proceeds from the sale of our common stock, including $10.2 million under our ATM facility with FBR and $0.3 million from the exercise of common stock options, offset by $8.5 million in principal payments under our Hercules loan agreement.

Private Placement / PIPE Warrants

In May 2016, we entered into a securities purchase agreement with a select group of qualified institutional buyers, institutional accredited investors and accredited investors pursuant to which we sold 17,642,482 units, at a price of $0.965 per unit, for gross proceeds of approximately $17.0 million. Each unit consisted of one share of our common stock and a PIPE Warrant. The PIPE Warrants have an exercise price of $1.00 per share and are exercisable in any manner at any time for a period of five years from the date of issuance. Certain of our directors and executive officers purchased an aggregate of 544,039 units in this offering at the same price as the other investors. The net offering proceeds to us were approximately $15.4 million after deducting placement agent fees and other offering expenses payable by us.

The PIPE Warrants contain a provision giving the warrant holder the option to receive cash, equal to the fair value of the remaining unexercised portion of the warrant, as cash settlement in the event that there is a fundamental transaction (contractually defined to include various merger, acquisition or stock transfer activities). Due to this provision, ASC 480, Distinguishing Liabilities from Equity requires that these warrants be classified as a liability and not as equity. Accordingly, we recorded a warrant liability in the amount of approximately $9.3 million. The fair value of these warrants has been determined using the Black Scholes valuation model, and the changes in the fair value at the time of each reporting date are recorded in the Statements of Operations and Comprehensive Income (Loss). During the three months ended September 30, 2016, as a result of the fair value adjustment of the warrant liability, we recorded a decrease in the fair value of the warrant liability of approximately $1.2 million in the Statements of Operations and Comprehensive Income (Loss). As of September 30, 2016, none of the PIPE Warrants have been exercised.

At-The-Market Issuance Sales Agreement with FBR

In February 2015, we entered into an at-the-market issuance sales agreement, which we refer to as the Sales Agreement, with FBR & Co., or FBR, (formerly MLV & Co. LLC), pursuant to which we could issue and sell shares of our common stock from time to time up to an aggregate amount of $17.9 million, at our option, through FBR as our sales agent. Sales of common stock through FBR may be made by any method that is deemed an “at-the-market” offering as defined in Rule 415 promulgated under the Securities Act of 1933, as amended, including by means of ordinary brokers’ transactions at market prices, in block transactions or as otherwise agreed by the Company and FBR. Subject to the terms and conditions of the Sales Agreement, FBR will use commercially reasonable efforts to sell our common stock based upon our instructions (including any price, time or size limits or other customary parameters or conditions we may impose). We are not obligated to make any sales of common stock under the Sales Agreement. Any shares sold will be sold pursuant to an effective shelf registration statement on Form S-3. We are required to pay

FBR a commission of up to 3% of the gross proceeds. The Sales Agreement may be terminated by us at any time.

On May 7, 2015, we filed a shelf registration statement on Form S-3 with the SEC, which we refer to as the 2015 Shelf. The 2015 Shelf covers the offering, issuance and sale of up to $100 million of our common stock, preferred stock, debt securities, warrants and/or units. The 2015 Shelf was filed to replace our existing $250 million shelf registration statement, which expired at the end of May 2015, and which we refer to as the 2012 Shelf. On May 7, 2015, we also amended the Sales Agreement to provide for the offering, issuance and sale of up to $15 million of our common stock under the 2015 Shelf. The prior at-the-market offering initiated under the original Sales Agreement expired along with the 2012 Shelf. As of September 30, 2016, we have sold approximately 5.9 million shares pursuant to the Sales Agreement, as amended, resulting in proceeds of approximately $10.2 million, net of commissions and issuance costs. No shares have been sold during the three and nine months ended September 30, 2016.

Approximately $9.1 million remains available for sale under the Sales Agreement.

Credit Facilities.

On May 28, 2010, we entered into a loan and security agreement, or the Loan Agreement, with Hercules Technology II, L.P. and Hercules Technology III, L.P., affiliates of Hercules Technology Growth, which we collectively refer to as Hercules. The Loan Agreement was subsequently amended in March 2012, or the 2012 Amendment; September 2014, or the 2014 Amendment; and May 2016, or the 2016 Amendment. Amounts borrowed under the 2012 Amendment were repaid in full in 2015.

Pursuant to the 2014 Amendment, we received additional loan proceeds from Hercules in the amount of $10.0 million and were not required to commence principal payments until May 1, 2016. An end-of-term payment of approximately $0.5 million continues to be due on January 1, 2018 or on such earlier date if the loan is prepaid.

Pursuant to the 2016 Amendment, we received additional loan proceeds from Hercules in the amount of $5.0 million, which increased the aggregate outstanding principal balance under the Loan Agreement to $15.0 million. We are not required to commence principal payments on the $15 million loan until July 1, 2017, at which time we will be required to make 30 equal monthly payments of principal and interest through December 2019. An end-of-term payment of approximately $0.2 million is due on December 1, 2019. The 2016 Amendment includes a financial covenant that requires us to maintain an unrestricted cash position greater than or equal to $10.0 million through the date of completion of our Phase 3 TIVO-3 trial.

Under the 2016 Amendment, we may, at our request during any time from March 1, 2017 through June 30, 2017, draw down an additional $5.0 million in funding. This funding is contingent upon us: (i) achieving satisfactory developmental progression on a minimum of two (2) clinical programs (other than the Phase 3 TIVO-3 trial) that are either managed directly by us or funded, in whole or in part, by us and (ii) having an unrestricted cash position greater than or equal to $25.0 million on the date of the draw down request. If we draw down the additional $5.0 million in funding, the commencement of principal payments on the aggregate $20.0 million loan balance will be deferred by six months from July 1, 2017 until January 1, 2018.

We must make interest payments on the principal balance of the loan each month it remains outstanding. Per annum interest is payable on the loan balance at the greater of 11.9% and an amount equal to 11.9% plus the prime rate minus 4.75%, as determined daily, provided however, that the per annum interest rate shall not exceed 15.0%. Our annual interest rate as of September 30, 2016 was 11.9%.

We have determined that the risk of subjective acceleration under the material adverse events clause included in this loan and security agreement is remote and, therefore, have classified the outstanding principal amount in current and long-term liabilities based on the timing of scheduled principal payments. As of September 30, 2016, we are in compliance with all of the financial covenants and through the date of this filing, the lenders have not asserted any events of default under the loan. We do not believe that there has been a material adverse change as defined in the loan agreement.

The loans are secured by a lien on all of our personal property (other than intellectual property), whether owned as of, or acquired after, the date of the Loan Agreement.

Operating Capital Requirements.

We anticipate that we will continue to incur significant operating losses for the next several years as we incur expenses to continue to execute on our clinical development strategy to advance our clinical stage assets. We will require substantial funds to continue our development programs and to fulfill our planned operating goals. In particular, our currently planned operating and capital requirements include the need for substantial working capital to support our development activities for tivozanib. For example, we estimate that the remaining costs for the TIVO-3 trial for RCC, including drug supply and distribution, could be in the range of $27-30 million in the aggregate through 2018. We also initiated a phase 1/2 study of tivozanib combined with a PD-1 inhibitor for the treatment of patients with RCC for which the costs, including drug distribution, could be in the range of $2.0-$2.5 million through 2018.

Moreover, we have future payment obligations and cost-sharing arrangements under certain of our collaboration and license agreements. For example, under our agreements with KHK and St. Vincent's, we are required to make certain clinical and regulatory milestone payments, have royalty obligations with respect to product sales and are required to pay a specified percentage of sublicense revenue in certain instances. In connection with the discontinuation of the FOCAL study, on October 14, 2016 we and Biodesix amended the Biodesix Agreement. Under the amendment, we agreed to fund 50% of the costs of the FOCAL study after August 1, 2016, which consist primarily of costs to shut down the study. We do not anticipate these remaining costs to be material. Accordingly, we will need substantial additional funding in connection with our planned operations. If we are unable to raise capital when needed or on attractive terms, or if we are unable to procure partnership arrangements to advance our programs, we would be forced to delay, reduce or eliminate our research and development programs and any future commercialization efforts.

We believe that our approximate $30.8 million in cash, cash equivalents and marketable securities at September 30, 2016 could allow us to fund our planned operations into the fourth quarter of 2017. This estimate assumes no receipt of milestone payments from our partners or related payment of potential licensing milestones to third parties, no additional funding from new partnership agreements, no equity financings, no debt financings, no accelerated repayment of our term loan and no further sales of equity under our Sales Agreement with FBR.

In addition to our approximate $30.8 million in existing cash resources at September 30, 2016, we have potential milestone payments that could be received from four of our business partnerships through 2017, an option to receive an additional $5 million in loan proceeds under our Loan Agreement with Hercules and a corresponding six-month deferral of principal payments, in each case subject to the terms of the Loan Agreement, and access to up to $9.1 million in gross proceeds from potential sales of our common stock under our Sales Agreement with FBR. If we are unable to obtain sufficient cash resources from one or more of these or other sources, we may not be able to maintain compliance with the financial covenant under our Loan Agreement with Hercules requiring a minimum of a $10 million cash balance (refer to Note 6 in the condensed consolidated financial statements). Moreover, there can be no assurance that we will receive cash proceeds from any of these potential resources. Accordingly, the timing and nature of activities contemplated for 2017 and thereafter will be conducted subject to the availability of sufficient financial resources.

There are numerous risks and uncertainties associated with research, development and commercialization of pharmaceutical products. Our future funding requirements will depend on many factors, including, but not limited to:

- our ability to establish and maintain strategic partnerships, licensing or other arrangements and the financial terms of such agreements;
- the number and characteristics of the product candidates we pursue;
- the scope, progress, results and costs of researching and developing our product candidates, and conducting preclinical and clinical trials;
- the timing of, and the costs involved in, obtaining regulatory approvals for our product candidates;
- the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing patent claims, including litigation costs and the outcome of such litigation;
- the absence of any breach, acceleration event or event of default under our loan agreement with Hercules or under any other agreements with third parties;
- the outcome of legal actions against us, including the current lawsuits described under “Part II, Item 1—Legal Proceedings”;
- the cost of commercialization activities if any of our product candidates are approved for sale, including marketing, sales and distribution costs;
- the cost of manufacturing our product candidates and any products we successfully commercialize; and
- the timing, receipt and amount of sales of, or royalties on, our future products, if any.

We will require additional capital to fund our planned operations beyond the fourth quarter of 2017 and maintain compliance with our financial covenant under our Loan Agreement with Hercules. When our available cash and cash equivalents are insufficient to satisfy our liquidity requirements, or if we identify additional opportunities to do so, we may seek to sell additional equity or debt securities or obtain additional credit facilities. The sale of additional equity or convertible debt securities may result in additional dilution to our stockholders. If we raise additional funds through the issuance of debt securities or preferred stock or through additional credit facilities, these securities and/or the loans under credit facilities could provide for rights senior to those of our common stock and could contain covenants that would restrict our operations. Additional funds may not be available when we need them, on terms that are acceptable to us, or at all. If adequate funds are not available to us on a timely basis, we may be required to:

- delay, limit, reduce or terminate our clinical trials or other development activities for one or more of our product candidates; and/or
- delay, limit, reduce or terminate our establishment of sales and marketing capabilities or other activities that may be necessary to commercialize our product candidates, if approved.

Contractual Obligations and Commitments

In May 2016, we amended our Loan Agreement with Hercules and received $5.0 million in additional loan proceeds, which increased the aggregate outstanding principal balance under the Loan Agreement to $15.0 million (refer to Note 6 in the condensed consolidated financial statements).

There have been no additional material changes to our contractual obligations and commitments outside the ordinary course of business from those disclosed in our Annual Report on Form 10-K for the year ended December 31, 2015 filed with the SEC on March 15, 2016.

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 under applicable SEC rules.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

We are exposed to market risk related to changes in interest rates. As of September 30, 2016, we had cash, cash equivalents and marketable securities of $30.8 million, consisting of cash on deposit with banks, money market funds, U.S. government agency securities, and corporate debt, including commercial paper. We do not hold any of these instruments for trading or speculative purposes. Our primary exposure to market risk is interest rate sensitivity, which is affected by changes in the general level of U.S. interest rates, particularly because our investments are in short-term cash equivalents. Our cash equivalents and marketable securities are subject to interest rate risk and could fall in value if market interest rates increase. Due to the short-term duration of our investment portfolio and the low risk profile of our investments, an immediate 10% change in interest rates would not have a material effect on the fair market value of our portfolio. We have the ability to hold our cash equivalents until maturity, and therefore we would not expect our operating results or cash flows to be affected to any significant degree by the effect of a change in market interest rates on our investments. We do not currently have any auction rate securities.

Our loans payable are subject to interest rate risk. Per annum interest is payable on the principal balance of the loan each month it remains outstanding at the greater of 11.9% and an amount equal to 11.9% plus the prime rate minus 4.75% as determined daily, provided however, that the per annum interest rate shall not exceed 15.0% (11.9% as of September 30, 2016).

We are also exposed to market risk related to change in foreign currency exchange rates. We contract with contract research organizations and investigational sites that are located around the world. We are subject to fluctuations in foreign currency rates in connection with these agreements. We do not currently hedge our foreign currency exchange rate risk.

Item 4. Controls and Procedures.

Our management, with the participation of our President and Chief Executive Officer (our principal executive officer) and our Chief Financial Officer (our principal financial officer), evaluated the effectiveness of our disclosure controls and procedures as of September 30, 2016. In designing and evaluating our disclosure controls and procedures, management recognized that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and our management necessarily applied its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on this evaluation, our President and Chief Executive Officer (our principal executive officer) and our Chief Financial Officer (our principal financial officer) concluded that as of September 30, 2016, our disclosure controls and procedures were (1) designed to ensure that material information relating to us is made known to our management including our principal executive officer and principal financial officer by others, particularly during the period in which this report was prepared and (2) effective, in that they provide reasonable assurance that information required to be disclosed by us in the reports we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC’s rules and forms.

There were no changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) that occurred during the quarter ended September 30, 2016 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

Two class action lawsuits have been filed against us and certain of our former officers and members of our board of directors, (Tuan Ha-Ngoc, David N. Johnston, William Slichenmyer and Ronald DePinho), in the United States District Court for the District of Massachusetts, one captioned Paul Sanders v. Aveo Pharmaceuticals, Inc., et al., No. 1:13-cv-11157-JLT, filed on May 9, 2013, and the other captioned Christine Krause v. AVEO Pharmaceuticals, Inc., et al., No. 1:13-cv-11320-JLT, filed on May 31, 2013. On December 4, 2013, the District Court consolidated the complaints as In re AVEO Pharmaceuticals, Inc. Securities Litigation et al., No. 1:13-cv-11157-DJC, and an amended complaint was filed on February 3, 2014. The amended complaint purported to be brought on behalf of shareholders who purchased our common stock between January 3, 2012 and May 1, 2013. The amended complaint generally alleged that we and certain of our present and former officers and directors violated Sections 10(b) and/or 20(a) of the Securities Exchange Act of 1934 and Rule 10b-5 promulgated thereunder by making allegedly false and/or misleading statements concerning the phase 3 trial design and results for our TIVO-1 study in an effort to lead investors to believe that the drug would receive approval from the FDA. The lawsuit seeks unspecified damages, interest, attorneys' fees, and other costs. The consolidated amended complaint was dismissed without prejudice on March 20, 2015, and the lead plaintiffs then filed a second amended complaint bringing similar allegations. We moved to dismiss again, and after a second round of briefing and oral argument, the court ruled in our favor and dismissed the second amended complaint with prejudice on November 18, 2015. The lead plaintiffs have appealed the court's decision to the United States Court of Appeals for the First Circuit. They have also filed a motion to vacate and reconsider the district court's judgment, which we have opposed. We deny any allegations of wrongdoing and intend to continue to vigorously defend against this lawsuit. However, there is no assurance that we will be successful in our defense or that insurance will be available or adequate to fund any settlement or judgment or the litigation costs of the action. Moreover, we are unable to predict the outcome or reasonably estimate a range of possible loss at this time.

On April 4, 2014, Karen J. van Ingen, a purported purchaser of AVEO stock, filed a derivative complaint allegedly on behalf of AVEO in the United States District Court for the District of Massachusetts, or the Court, Civil Action No. 1:14-cv-11672-DJC, naming AVEO, as a nominal defendant and also naming as defendants present and former members of our board of directors, including Tuan Ha-Ngoc, Henri A. Termeer, Kenneth M. Bate, Anthony B. Evnin, Robert Epstein, Raju Kucherlapati, Robert C. Young, and Kenneth E. Weg. The complaint alleged breach of fiduciary duty and abuse of control between January 2012 and May 2013 with respect to allegedly misleading statements and omissions regarding tivozanib. The lawsuit seeks, among other relief, unspecified damages, costs and expenses, including attorneys' fees, an order requiring us to implement certain corporate governance reforms, restitution from the defendants and such other relief as the court might find just and proper. We filed a motion to dismiss the derivative complaint, and after briefing and oral argument, on March 18, 2015 the Court ruled in our favor and dismissed the case with prejudice. The plaintiff then filed a motion seeking to vacate the Court's order of dismissal and permit filing of an amended complaint, which we opposed, and which the Court denied on June 30, 2015. The plaintiff has appealed the Court's decision to the United States Court of Appeals for the First Circuit. The parties have reached an agreement in principle to settle this matter. The settlement involves certain corporate governance changes and other non-monetary relief. The plaintiffs are seeking an award of attorney's fees, costs, and expenses in the amount of $822,116, as well as an incentive award of $2,500. We reserved the right to contest the award of attorney's fees, costs and expenses and expect both the fees, costs and expenses and incentive award to be paid by insurance in the amounts ordered by the Court. On September 16, 2016, the Court granted preliminary approval to the proposed settlement, but the settlement remains subject to final court approval. The Court set a hearing on December 19, 2016 to determine whether: (i) the terms of the proposed settlement are fair, reasonable, and adequate, (ii) whether, and, if so, in what amount, attorneys' fees and expenses should be awarded to plaintiff's counsel; and (iii) whether any incentive award to plaintiff should be approved. There can be no assurance that the settlement will be approved by the Court.

On July 3, 2013, the staff, or SEC Staff, of the United States Securities and Exchange Commission, or the Commission, served a subpoena on us for documents and information concerning tivozanib, including related communications with the FDA, investors and others. In September 2015, the SEC Staff invited us to discuss the settlement of potential claims asserting that we violated federal securities laws by omitting to disclose to investors the recommendation by the staff of the FDA on May 11, 2012, that we conduct an additional clinical trial with respect to tivozanib. On March 29, 2016, the Commission filed a complaint against us and three of our former officers in the U.S. District Court for the District of Massachusetts alleging that we misled investors about our efforts to obtain FDA approval for tivozanib. Without admitting or denying the allegations in the Commission's complaint, we consented to the entry of a final judgment pursuant to which we paid the Commission a $4.0 million civil penalty to settle the Commission's claims against us. On March 31, 2016, the District Court entered a final judgment which (i) approved the settlement; (ii) permanently enjoined us from violating Section 17(a) of the Securities Act of 1933, as amended, Sections 10(b) and 13(a) of the Securities Exchange Act of 1934, as amended, and rules 10b-5, 12b-20, 13a-1, 13a-11 and 13a-13 promulgated thereunder; and (iii) ordered us to pay the agreed-to civil penalty. The Commission's action against our three former officers is still pending. We are not a party to any litigation or discussions between the SEC Staff and the former officers, and we can make no assurance regarding the outcome of that action or the Commission's claims against those individuals.

Refer to Footnote 11 in the Notes to Condensed Consolidated Financial Statements for further discussion.

Item 1A. Risk Factors

Our business is subject to numerous risks. We caution you that the following important factors, among others, could cause our actual results to differ materially from those expressed in forward-looking statements made by us or on our behalf in this Quarterly Report on Form 10-Q and other filings with the SEC, press releases, communications with investors and oral statements. Any or all of our forward-looking statements in this Quarterly Report on Form 10-Q and in any other public statements we make may turn out to be wrong. They can be affected by inaccurate assumptions we might make or by known or unknown risks and uncertainties. Many factors mentioned in the discussion below will be important in determining future results. Consequently, no forward-looking statement can be guaranteed. Actual future results may differ materially from those anticipated in our forward-looking statements. We undertake no obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise. You are advised, however, to consult any further disclosure we make in our reports filed with the SEC.

Risks Related to Our Financial Position and Need for Additional Capital

We anticipate that we will continue to incur significant operating losses for the foreseeable future. It is uncertain if we will ever attain profitability, which would depress the market price of our common stock.

We have incurred a net loss of $21.3 million for the nine months ended September 30, 2016 and, as of September 30, 2016, had an accumulated deficit of $516.3 million. To date, we have not commercialized any products or generated any revenues from the sale of products, and absent the realization of sufficient revenues from product sales, we may never attain profitability. Our losses have resulted principally from costs incurred in our discovery and development activities. We anticipate that we will continue to incur significant operating costs over the next several years as we seek to develop our product candidates.

If we do not successfully develop and obtain regulatory approval for our existing and future pipeline of product candidates and effectively manufacture, market and sell any product candidates that are approved, we may never generate product sales. Even if we do generate product sales, we may never achieve or sustain profitability on a quarterly or annual basis. Our failure to become and remain profitable would depress the market price of our common stock and could impair our ability to raise capital, expand our business, diversify our product offerings or continue our operations.

Our business is in early stage of development, which may make it difficult for you to evaluate the success of our business to date and to assess our future viability.

All of our product candidates are in early stages of development. We have not yet demonstrated our ability to obtain marketing approvals, manufacture a commercial scale medicine, or arrange for a third party to do so on our behalf, or conduct sales and marketing activities necessary for successful commercialization. Typically, it takes about 10 to 15 years to develop one new medicine from the time it is discovered to when it is available for treating patients. Preclinical studies and clinical trials may involve highly uncertain results and a high risk of failure. Moreover, positive data from preclinical studies and clinical trials of our product candidates may not be predictive of results in ongoing or subsequent preclinical studies and clinical trials. Consequently, any predictions you make about our future success or viability may not be as accurate as they could be if we had a longer operating history.

In addition, as an early stage business, we may encounter unforeseen expenses, difficulties, complications, delays and other known and unknown factors. To be profitable, we will need to transition from a company with a research and development focus to a company capable of supporting commercial activities. We may not be successful in such a transition.

We will require substantial additional funding, and a failure to obtain this necessary capital when needed would force us to delay, limit, reduce or terminate our research, product development or commercialization efforts.

We will require substantial funds to continue our development programs and to fulfill our planned operating goals. In particular, our currently planned operating and capital requirements include the need for substantial working capital to support our development activities for tivozanib. For example, we estimate that the remaining costs for the TIVO-3 trial for RCC, including drug supply and distribution, could be in the range of $27-30 million in the aggregate through 2018. We also initiated a phase 1/2 study of tivozanib combined with a PD-1 inhibitor for the treatment of patients with RCC for which the costs, including drug supply and distribution, could be in the range of $2.0-$2.5 million through 2018. Moreover, we have future payment obligations and cost-sharing arrangements under certain of our collaboration and license agreements. For example, under our agreements with KHK and St. Vincent’s, we are required to make certain clinical and regulatory milestone payments, have royalty obligations with respect to product sales and are required to pay a specified percentage of sublicense revenue in certain instances.

Accordingly, we will need substantial additional funding in connection with our planned operations. If we are unable to raise capital when needed or on attractive terms, or if we are unable to procure partnership arrangements to advance our programs, we would be forced to delay, reduce or eliminate our research and development programs and any future commercialization efforts.

We believe that our approximate $30.8 million in cash, cash equivalents and marketable securities at September 30, 2016 could allow us to fund our planned operations into the fourth quarter of 2017. This estimate assumes no receipt of milestone payments from our partners or related payment of potential licensing milestones to third parties, no additional funding from new partnership agreements, no equity financings, no debt financings, no accelerated repayment of our term loan and no further sales of equity under our Sales Agreement with FBR. If we are unable to obtain sufficient cash resources from one or more of these or other sources, we may not be able to maintain compliance with the financial covenant under our Loan Agreement with Hercules requiring a minimum of a $10 million cash balance (refer to Note 6 in the condensed consolidated financial statements). Accordingly, the timing and nature of activities contemplated for 2017 and thereafter will be conducted subject to the availability of sufficient financial resources.

There are numerous risks and uncertainties associated with the development and commercialization of pharmaceutical products. Our future capital requirements depend on many factors, including:

- our ability to establish and maintain strategic partnerships, licensing or other arrangements and the financial terms of such agreements;
- the number and characteristics of the product candidates we pursue;
- the scope, progress, results and costs of developing our product candidates, and conducting preclinical and clinical trials;
- the timing of, and the costs involved in, obtaining regulatory approvals for our product candidates;
- the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing patent claims, including litigation costs and the outcome of such litigation;
- the absence of any breach, acceleration event or event of default under our loan agreement with Hercules or under any other agreements with third parties;
- the outcome of legal actions against us, including the current lawsuits described under “Part II, Item 1—Legal Proceedings”;
- the cost of commercialization activities if any of our product candidates are approved for sale, including marketing, sales and distribution costs;
- the cost of manufacturing our product candidates and any products we successfully commercialize; and
- the timing, receipt and amount of sales of, or royalties on, our future products, if any.

Raising additional capital may cause dilution to our stockholders, restrict our operations or require us to relinquish rights to our technologies or drug candidates.

When our available cash and cash equivalents are insufficient to satisfy our liquidity requirements, or if we identify additional opportunities to do so, we may seek to sell additional equity or debt securities or obtain additional credit facilities. The sale of additional equity or convertible debt securities may result in additional dilution to our stockholders. If we raise additional funds through the issuance of debt securities or preferred stock or through additional credit facilities, these securities and/or the loans under credit facilities could provide for rights senior to those of our common stock and could contain covenants that would restrict our operations. Additional funds may not be available when we need them, on terms that are acceptable to us, or at all.

We also expect to seek additional funds through arrangements with collaborators, licensees or other third parties. These arrangements would generally require us to relinquish or encumber rights to some of our technologies or drug candidates, and we may not be able to enter into such arrangements on acceptable terms, if at all.

We will require additional capital to fund our planned operations beyond the fourth quarter of 2017 and maintain compliance with our financial covenant under our Loan Agreement with Hercules. If we are unable to obtain such additional funding on a timely basis, whether through payments under existing or future collaborations or license agreement or sales of debt or equity, we may be required to delay, limit, reduce or terminate our clinical trials or development activities for one or more of our product candidates.

We may not be successful in establishing and maintaining strategic partnerships to further the development of each of our therapeutic programs. A failure to obtain such partnerships in the near future will have a material adverse effect on our operations and business.

Our success will depend in significant part on our ability to attract and maintain strategic partners and strategic relationships with major biotechnology or pharmaceutical companies to support the development and commercialization of our product candidates. In these partnerships, we would expect our strategic partner to provide substantial funding, as well as significant capabilities in research, development, marketing and sales

We face significant competition in seeking appropriate strategic partners and the negotiation process is time-consuming and complex. Moreover, we may not be successful in our efforts to establish a strategic partnership or other alternative arrangements for any product candidates and programs because our development pipeline may be deemed insufficient, our product candidates and programs may be deemed to be at too early of a stage of development for collaborative effort or third parties may not view our product candidates and programs as having the requisite potential to demonstrate safety and efficacy.

Even if we are successful in our efforts to establish new strategic partnerships, the terms that we agree upon may not be favorable to us and we may not be able to maintain such strategic partnerships if, for example, development or approval of a product candidate is delayed or sales of an approved product are disappointing. Any delay in entering into new strategic partnership agreements related to our product candidates could have an adverse effect on our business or our operating plan, including delaying the development and commercialization of our product candidates.

Moreover, if we fail to establish and maintain additional strategic partnerships related to our product candidates:

- we will have limited resources with which to continue to operate our business and we may not be able to successfully complete any other strategic transactions;
- the development of certain of our product candidates may be terminated or delayed; and
- our cash expenditures related to development of our product candidates would increase significantly and we do not have the cash resources to develop our product candidates on our own.

Risks Related to our Litigation

We and certain of our former officers and present and former directors have been named as defendants in multiple lawsuits that could result in substantial costs and divert management’s attention.

We, and certain of our former officers and directors, were named as defendants in a consolidated class action lawsuit initiated in 2013 that generally alleges that we and those individuals violated federal securities laws by making allegedly false and/or misleading statements concerning the development of our drug tivozanib and its prospects for FDA approval. The lawsuit seeks unspecified damages, interest, attorneys’ fees, and other costs. The consolidated amended complaint was dismissed without prejudice on March 20, 2015, and the lead plaintiffs then filed a second amended complaint bringing similar allegations. This second amended complaint was dismissed with prejudice on November 18, 2015. The lead plaintiffs have appealed the court’s decision to the United States Court of Appeals for the First Circuit and have also filed a motion to vacate and reconsider the district court’s judgment, which we have opposed. Another plaintiff has also filed a derivative complaint, allegedly on our behalf, naming us as a nominal defendant and also naming as defendants present and former members of our board of directors, alleging breach of fiduciary duty and abuse of control on the part of those directors with respect to the same statements at issue in the securities litigation. The derivative complaint seeks, among other relief, unspecified damages, costs and expenses, including attorneys’ fees, an order requiring us to implement certain corporate governance reforms, restitution from the defendants and such other relief as the court might find just and proper. The derivative complaint was dismissed with prejudice on March 18, 2015. The plaintiff has appealed the court’s decision to the United States Court of Appeals for the First Circuit. The parties have reached an agreement in principle to settle this matter. The settlement involves certain corporate governance changes and other non-monetary relief. The plaintiffs are seeking an award of attorney’s fees, costs, and expenses in the amount of $822,116, as well as an incentive award of $2,500, which we expect will be paid by insurance. On September 16, 2016, the Court granted preliminary approval to the proposed settlement, but the settlement remains subject to final court approval. The Court set a hearing on December 19, 2016 to determine whether: (i) the terms of the proposed settlement are fair, reasonable, and adequate, (ii) whether, and, if so, in what amount, attorneys' fees and expenses should be awarded to plaintiff's counsel; and (iii) whether any incentive award to plaintiff should be approved. There can be no assurance that the settlement will be approved by the court.

We intend to continue to deny the allegations in the class action case and to engage in a vigorous defense of such lawsuit. We intend to resolve the derivative lawsuit in accordance with the proposed settlement. However, we are unable to predict the outcome of these matters at this time. Moreover, any conclusion of these matters in a manner adverse to us could have a material adverse effect on our financial condition and business. For example, we could incur substantial costs not covered by our liability insurance, suffer a significant adverse impact on our reputation and divert management's attention and resources from other priorities, including the execution of business plans and strategies that are important to our ability to grow our business, any of which could have a material adverse effect on our business. In addition, any of these matters could require payments that are not covered by, or exceed the limits of, our available liability insurance, which could have a material adverse effect on our operating results or financial condition.

We have concluded a settlement with the SEC, but the SEC is still pursuing an action against our former officers.

We paid $4.0 million to settle a lawsuit filed by the SEC in federal court alleging that we violated federal securities laws by omitting to disclose the recommendation of the staff of the U.S. Food and Drug Administration, on May 11, 2012, that we conduct an additional clinical trial with respect to tivozanib. See "Part II, Item 1 – Legal Proceedings" for a further discussion of these claims. The SEC also named three of our former officers as defendants in the same lawsuit, and those claims are still pending. We are not a party to, nor are we involved in, any litigation or discussions between the SEC and the former officers. However, those individuals may seek advancement of legal expenses or indemnification for any losses, either of which could be material to the extent not covered by our director and officer liability insurance.

Risks Related to Development and Commercialization of Our Drug Candidates

In the near term, we are dependent on the success of tivozanib. If we are unable to initiate or complete the clinical development of, obtain marketing approval for or successfully commercialize tivozanib, either alone or with our collaborators, or if we experience significant delays in doing so, our business could be substantially harmed.

We currently have no products approved for sale and are investing a significant portion of our efforts and financial resources in the development of tivozanib. Our prospects are substantially dependent on our ability, or that of our collaborators, to develop, obtain marketing approval for and successfully commercialize tivozanib in one or more disease indications.

The success of tivozanib will depend on several factors, including the following:

- our ability to secure the substantial additional working capital required to initiate and conduct our planned clinical trials of tivozanib, including the TIVO-3 trial and the phase 1/2 PD-1 combination trial in RCC;
- initiation and successful enrollment and completion of clinical trials;
- a safety, tolerability and efficacy profile that is satisfactory to the U.S. Food and Drug Administration, or FDA, or any comparable foreign regulatory authority for marketing approval;
- timely receipt of marketing approvals from applicable regulatory authorities;
- the performance of our collaborators;
- the extent of any required post marketing approval commitments to applicable regulatory authorities;
- establishment of supply arrangements with third party raw materials suppliers and manufacturers including with respect to the supply of active pharmaceutical ingredient for tivozanib;
- establishment of arrangements with third party manufacturers to obtain finished drug product that is appropriately packaged for sale;
- adequate ongoing availability of raw materials and drug product for clinical development and any commercial sales;
- obtaining and maintaining patent, trade secret protection and regulatory exclusivity, both in the United States and internationally, including our ability to maintain our license agreement with Kyowa Hakko Kirin Co., Ltd.;
- protection of our rights in our intellectual property portfolio;
- successful launch of commercial sales following any marketing approval;
- a continued acceptable safety profile following any marketing approval;

- commercial acceptance by patients, the medical community and third party payors;
- successful identification of biomarkers for patient selection; and
- our ability to compete with other therapies.

Many of these factors are beyond our control, including clinical development, the regulatory submission process, potential threats to our intellectual property rights and the manufacturing, marketing and sales efforts of our collaborators. If we are unable to develop, receive marketing approval for and successfully commercialize tivozanib on our own or with our collaborators, or experience delays as a result of any of these factors or otherwise, our business could be substantially harmed.

If clinical trials of any product candidates that we, or any collaborators, may develop fail to satisfactorily demonstrate safety and efficacy to the FDA and other regulators, we, or any collaborators, may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of these product candidates.

We, and any collaborators, are not permitted to commercialize, market, promote or sell any product candidate in the United States without obtaining marketing approval from the FDA. Foreign regulatory authorities, such as the European Medicines Agency, or the EMA, impose similar requirements. We, and any collaborators, must complete extensive preclinical development and clinical trials to demonstrate the safety and efficacy of our product candidates in humans before we will be able to obtain these approvals.

Clinical testing is expensive, is difficult to design and implement, can take many years to complete and is inherently uncertain as to outcome. We cannot guarantee that any clinical trials will be conducted as planned or completed on schedule, if at all. The clinical development of our product candidates is susceptible to the risk of failure inherent at any stage of product development, including failure to demonstrate efficacy in a clinical trial or across a broad population of patients, the occurrence of adverse events that are severe or medically or commercially unacceptable, failure to comply with protocols or applicable regulatory requirements and determination by the FDA or any comparable foreign regulatory authority that a product candidate may not continue development or is not approvable. It is possible that even if one or more of our product candidates has a beneficial effect, that effect will not be detected during clinical evaluation as a result of one or more of a variety of factors, including the size, duration, design, measurements, conduct or analysis of our clinical trials. Conversely, as a result of the same factors, our clinical trials may indicate an apparent positive effect of a product candidate that is greater than the actual positive effect, if any. Similarly, in our clinical trials we may fail to detect toxicity of or intolerability caused by our product candidates, or mistakenly believe that our product candidates are toxic or not well tolerated when that is not in fact the case.

Any inability to successfully complete preclinical and clinical development could result in additional costs to us, or any collaborators, and impair our ability to generate revenues from product sales, regulatory and commercialization milestones and royalties. Moreover, if we, or any collaborators, are required to conduct additional clinical trials or other testing of our product candidates beyond the trials and testing that we or they contemplate, if we, or they, are unable to successfully complete clinical trials of our product candidates or other testing, or the results of these trials or tests are unfavorable, uncertain or are only modestly favorable, or if there are unacceptable safety concerns associated with our product candidates, we, or any collaborators, may:

- incur additional unplanned costs;
- be delayed in obtaining marketing approval for our product candidates;
- not obtain marketing approval at all;
- 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 significant safety warnings, including boxed warnings;
- be subject to additional post marketing testing or other requirements; or
- be required to remove the product from the market after obtaining marketing approval.

Our failure to successfully initiate and complete clinical trials of our product candidates and to demonstrate the efficacy and safety necessary to obtain regulatory approval to market any of our product candidates would significantly harm our business.

Adverse events or undesirable side effects caused by, or other unexpected properties of, tivozanib or any future product candidates that we develop may be identified during development and could delay or prevent their marketing approval or limit their use.

Adverse events or undesirable side effects caused by, or other unexpected properties of, tivozanib or any future product candidates that we may develop could cause us, any collaborators, an institutional review board or regulatory authorities to interrupt, delay or halt clinical trials of one or more of our product candidates and could result in a more restrictive label or the delay or denial of marketing approval by the FDA or comparable foreign regulatory authorities. If any of our product candidates is associated with adverse events or undesirable side effects or has properties that are unexpected, we, or any collaborators, may need to abandon development or limit development of that product candidate to certain 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. Many compounds that initially showed promise in clinical or earlier stage testing have later been found to cause undesirable or unexpected side effects that prevented further development of the compound.

If we, or any collaborators, experience any of a number of possible unforeseen events in connection with clinical trials of our current or any future product candidates that we, or any collaborators, may develop, potential clinical development, marketing approval or commercialization of our product candidates could be delayed or prevented.

We, or any collaborators, may experience numerous unforeseen events during, or as a result of, clinical trials that could delay or prevent clinical development, marketing approval or commercialization of our current product candidates or any future product candidates that we, or any collaborators, may develop, including:

- regulators or institutional review boards may not authorize us, any collaborators or our or their investigators to commence a clinical trial or conduct a clinical trial at a prospective trial site;
- we, or any collaborators, may have delays in reaching or fail to reach agreement on acceptable clinical trial contracts or clinical trial protocols with prospective trial sites;
- clinical trials of our product candidates may produce unfavorable or inconclusive results;
- we, or any collaborators, may decide, or regulators may require us or them, to conduct additional clinical trials or abandon product development programs;
- the number of patients required for clinical trials of our product candidates may be larger than we, or any collaborators, anticipate, patient enrollment in these clinical trials may be slower than we, or any collaborators, anticipate or participants may drop out of these clinical trials at a higher rate than we, or any collaborators, anticipate;
- the cost of planned clinical trials of our product candidates may be greater than we anticipate;
- our third party contractors or those of any collaborators, including those manufacturing our product candidates or components or ingredients thereof or conducting clinical trials on our behalf or on behalf of any collaborators, may fail to comply with regulatory requirements or meet their contractual obligations to us or any collaborators in a timely manner or at all;
- patients that enroll in a clinical trial may misrepresent their eligibility to do so or may otherwise not comply with the clinical trial protocol, resulting in the need to drop the patients from the clinical trial, increase the needed enrollment size for the clinical trial or extend the clinical trial’s duration;
- we, or any collaborators, may have to delay, suspend or terminate clinical trials of our product candidates for various reasons, including a finding that the participants are being exposed to unacceptable health risks, undesirable side effects or other unexpected characteristics of the product candidate;
- regulators or institutional review boards may require that we, or any collaborators, or our or their investigators suspend or terminate clinical research for various reasons, including noncompliance with regulatory requirements or their standards of conduct, a finding that the participants are being exposed to unacceptable health risks, undesirable side effects or other unexpected characteristics of the product candidate or findings of undesirable effects caused by a chemically or mechanistically similar product or product candidate;
- the FDA or comparable foreign regulatory authorities may disagree with our, or any collaborators’, clinical trial designs or our or their interpretation of data from preclinical studies and clinical trials;
- the FDA or comparable foreign regulatory authorities may fail to approve or subsequently find fault with the manufacturing processes or facilities of third party manufacturers with which we, or any collaborators, enter into agreements for clinical and commercial supplies;
- the supply or quality of raw materials or manufactured product candidates or other materials necessary to conduct clinical trials of our product candidates may be insufficient, inadequate or not available at an acceptable cost, or we may experience interruptions in supply; and
- the approval policies or regulations of the FDA or comparable foreign regulatory authorities may significantly change in a manner rendering our clinical data insufficient to obtain marketing approval.

Product development costs for us, or any collaborators, will increase if we, or they, experience delays in testing or pursuing marketing approvals and we, or they, may be required to obtain additional funds to complete clinical trials and prepare for possible commercialization. We do not know whether any trials will begin as planned, will need to be restructured, or will be completed on schedule or at all. Significant clinical trial delays also could shorten any periods during which we, or any collaborators, may have the exclusive right to commercialize our product candidates or allow our competitors, or the competitors of any collaborators, to bring products to market before we, or any collaborators, do and impair our ability, or the ability of any collaborators, to successfully commercialize our product candidates and may harm our business and results of operations. In addition, many of the factors that lead to clinical trial delays may ultimately lead to the denial of marketing approval of any of our product candidates.

If we, or any collaborators, experience delays or difficulties in the enrollment of patients in clinical trials, our or their receipt of necessary regulatory approvals could be delayed or prevented.

We, or any collaborators, may not be able to initiate or continue clinical trials for our current product candidates or any future product candidates that we, or any collaborators, may develop if we, or they, are unable to locate and enroll a sufficient number of eligible patients to participate in clinical trials. Patient enrollment is a significant factor in the timing of clinical trials, and is affected by many factors, including:

- the size and nature of the patient population;
- the severity of the disease under investigation;
- the availability of approved therapeutics for the relevant disease;
- the proximity of patients to clinical sites;
- the eligibility criteria for the trial;
- the design of the clinical trial;
- efforts to facilitate timely enrollment;
- competing clinical trials; and
- clinicians' and patients' perceptions as to the potential advantages and risks of the drug being studied in relation to other available therapies, including any new drugs that may be approved for the indications we are investigating.

Our inability, or the inability of any collaborators, to enroll a sufficient number of patients for our, or their, clinical trials could result in significant delays or may require us or them to abandon one or more clinical trials altogether. Enrollment delays in our, or their, clinical trials may result in increased development costs for our product candidates, delay or halt the development of and approval processes for our product candidates and jeopardize our, or any collaborators', ability to commence sales of and generate revenues from our product candidates, which could cause the value of our company to decline and limit our ability to obtain additional financing, if needed.

Results of early clinical trials may not be predictive of results of future late stage clinical trials.

The outcome of early clinical trials may not be predictive of the success of later clinical trials, and interim results of clinical trials do not necessarily predict success in future clinical trials. Many companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in late stage clinical trials after achieving positive results in earlier development, and we have and could, in the future, face similar setbacks. For example, in June 2013, the FDA issued a response letter informing us that it would not approve tivozanib for the treatment of first-line advanced renal cell carcinoma based on the study data from our initial Phase 3 trial, and recommended that we perform an additional study that is adequately sized to assure the FDA that there is no adverse effect on overall survival.

The design of a clinical trial can determine whether its results will support approval of a product and flaws in the design of a clinical trial may not become apparent until the clinical trial is well advanced. We have limited experience in designing clinical trials and may be unable to design and execute a clinical trial to support marketing approval. In addition, preclinical and clinical data are often susceptible to varying interpretations and analyses. Many companies that believed their product candidates performed satisfactorily in preclinical studies and clinical trials have nonetheless failed to obtain marketing approval for the product candidates. Even if we, or any collaborators, believe that the results of clinical trials for our product candidates warrant marketing approval, the FDA or comparable foreign regulatory authorities may disagree and may not grant marketing approval of our product candidates.

In some instances, there can be significant variability in safety or efficacy results between different clinical trials of the same product candidate due to numerous factors, including changes in trial procedures set forth in protocols, differences in the size and type of the patient populations, changes in and adherence to the dosing regimen and other clinical trial protocols and the rate of dropout among clinical trial participants. If we fail to receive positive results in clinical trials of our product candidates, the development timeline and regulatory approval and commercialization prospects for our most advanced product candidates, and, correspondingly, our business and financial prospects would be negatively impacted.

We have never obtained marketing approval for a product candidate, and we may be unable to obtain, or may be delayed in obtaining, marketing approval for our current product candidates or any future product candidates that we, or any collaborators, may develop.

We have never obtained marketing approval for a product candidate. It is possible that the FDA may refuse to accept for substantive review any new drug applications, or NDAs, that we submit for our product candidates or may conclude after review of our data that our application is insufficient to obtain marketing approval of our product candidate. If the FDA does not accept or approve NDAs for any of our product candidates, it may require that we conduct additional clinical trials, preclinical studies or manufacturing validation studies and submit that data before it will reconsider our applications. Depending on the extent of these or any other FDA required trials or studies, approval of any NDA or application that we submit may be delayed by several years, or may require us to expend more resources than we have available. It is also possible that additional trials or studies, if performed and completed, may not be considered sufficient by the FDA to approve our NDAs. Any delay in obtaining, or an inability to obtain, marketing approvals would prevent us from commercializing our product candidates or any companion diagnostics, generating revenues and achieving and sustaining profitability. If any of these outcomes occurs, we may be forced to abandon our development efforts for our product candidates, which could significantly harm our business.

Even if any product candidates that we, or any collaborators, may develop receive marketing approval, we or others may later discover that the product is less effective than previously believed or causes undesirable side effects that were not previously identified, which could compromise our ability, or that of any collaborators, to market the product.

Clinical trials of any product candidates that we, or any collaborators, may develop will be conducted in carefully defined subsets of patients who have agreed to enter into clinical trials. Consequently, it is possible that our clinical trials, or those of any collaborator, may indicate an apparent positive effect of a product candidate that is greater than the actual positive effect, if any, or alternatively fail to identify undesirable side effects. If, following approval of a product candidate, we, or others, discover that the product is less effective than previously believed or causes undesirable side effects that were not previously identified, any of the following adverse events could occur:

- regulatory authorities may withdraw their approval of the product or seize the product;
- we, or any collaborators, may be required to recall the product, change the way the product is administered or conduct additional clinical trials;
- additional restrictions may be imposed on the marketing of, or the manufacturing processes for, the particular product;
- we may be subject to fines, injunctions or the imposition of civil or criminal penalties;
- regulatory authorities may require the addition of labeling statements, such as a “black box” warning or a contraindication;
- we, or any collaborators, may be required to create a Medication Guide outlining the risks of the previously unidentified side effects for distribution to patients;
- we, or any collaborators, could be sued and held liable for harm caused to patients;
- the product may become less competitive; and
- our reputation may suffer.

Any of these events could harm our business and operations, and could negatively impact our stock price.

Even if our current product candidates, or any future product candidates that we, or any collaborators, may develop receives marketing approval, they may fail to achieve the degree of market acceptance by physicians, patients, third party payors and others in the medical community necessary for commercial success, in which case we may not generate significant revenues or become profitable.

We have never commercialized a product, and even if one of our product candidates is approved by the appropriate regulatory authorities for marketing and sale, it may nonetheless fail to gain sufficient market acceptance by physicians, patients, third party payors and others in the medical community. Physicians are often reluctant to switch their patients from existing therapies even when new and potentially more effective or convenient treatments enter the market. Further, patients often acclimate to the therapy that they are currently taking and do not want to switch unless their physicians recommend switching products or they are required to switch therapies due to lack of reimbursement for existing therapies.

Efforts to educate the medical community and third party payors on the benefits of our product candidates may require significant resources and may not be successful. If any of our product candidates is approved but does not achieve an adequate level of market acceptance, we may not generate significant revenues and we may not become profitable. The degree of market acceptance of our product candidates, if approved for commercial sale, will depend on a number of factors, including:

- the efficacy and safety of the product;
- the potential advantages of the product compared to competitive therapies;
- the prevalence and severity of any side effects;
- whether the product is designated under physician treatment guidelines as a first , second or third line therapy;
- our ability, or the ability of any collaborators, to offer the product for sale at competitive prices;
- the product's convenience and ease of administration compared to alternative treatments;
- the willingness of the target patient population to try, and of physicians to prescribe, the product;
- limitations or warnings, including distribution or use restrictions, contained in the product's approved labeling;
- the strength of sales, marketing and distribution support;
- changes in the standard of care for the targeted indications for the product; and
- availability and amount of coverage and reimbursement from government payors, managed care plans and other third party payors.

If we are unable to establish sales, marketing and distribution capabilities or enter into sales, marketing and distribution arrangements with third parties, we may not be successful in commercializing any product candidates if approved.

We do not have a sales, marketing or distribution infrastructure and have no experience in the sale, marketing or distribution of pharmaceutical products. To achieve commercial success for any approved product, we must either develop a sales and marketing organization or outsource these functions to third parties. We plan to build focused capabilities to commercialize development programs for certain indications where we believe that the medical specialists for the indications are sufficiently concentrated to allow us to effectively promote the product with a targeted sales team. The development of sales, marketing and distribution capabilities will require substantial resources, will be time consuming and could delay any product launch. If the commercial launch of a product candidate for which we recruit a sales force and establish marketing and distribution capabilities is delayed or does not occur for any reason, we could have prematurely or unnecessarily incurred these commercialization costs. This may be costly, and our investment could be lost if we cannot retain or reposition our sales and marketing personnel. In addition, we may not be able to hire or retain a sales force in the United States that is sufficient in size or has adequate expertise in the medical markets that we plan to target. If we are unable to establish or retain a sales force and marketing and distribution capabilities, our operating results may be adversely affected. If a potential partner has development or commercialization expertise that we believe is particularly relevant to one of our products, then we may seek to collaborate with that potential partner even if we believe we could otherwise develop and commercialize the product independently.

In certain indications, we seek to enter into collaborations that we believe may contribute to our ability to advance development and ultimately commercialize our product candidates. We also seek to enter into collaborations where we believe that realizing the full commercial value of our development programs will require access to broader geographic markets or the pursuit of broader patient populations or indications. As a result of entering into arrangements with third parties to perform sales, marketing and distribution services, our product revenues or the profitability of these product revenues may be lower, perhaps substantially lower, than if we were to directly market and sell products in those markets. Furthermore, we may be unsuccessful in entering into the necessary arrangements with third parties or may be unable to do so on terms that are favorable to us. In addition, we may have little or no control over such third parties, and any of them may fail to devote the necessary resources and attention to sell and market our products effectively.

If we do not establish sales, marketing and distribution capabilities, either on our own or in collaboration with third parties, we will not be successful in commercializing any of our product candidates that receive marketing approval.

If we are unable to successfully develop companion diagnostics for certain of our therapeutic product candidates, or experience significant delays in doing so, we may not realize the full commercial potential of these therapeutics.

A component of our business strategy may be to develop, in collaboration with a third party, companion diagnostics for some of our therapeutic product candidates. There has been limited success to date industry-wide in developing companion diagnostics. To be successful, our collaborator will need to address a number of scientific, technical, regulatory and logistical challenges. We have limited experience in the development of diagnostics and may not be successful in developing appropriate diagnostics to pair with any of our therapeutic product candidates. The FDA and similar regulatory authorities outside the United States are generally expected to regulate companion diagnostics as medical devices. In each case, companion diagnostics require separate regulatory approval prior to commercialization. For example, we require a commercializable companion diagnostic assay to identify patients with low NRP-1 in order to proceed with the development of tivozanib in CRC. We expect to rely in part on third parties for the design, development and manufacture of any companion diagnostic. If we, or any third parties that we engage to assist us, are unable to successfully develop companion diagnostics for our therapeutic product candidates, or experience delays in doing so, the development of our therapeutic product candidates may be adversely affected, our therapeutic product candidates may not receive marketing approval and we may not realize the full commercial potential of any therapeutics that receive marketing approval. As a result, our business would be harmed, possibly materially.

We face substantial competition from existing approved products. Our competitors may also discover, develop or commercialize new competing products before, or more successfully, than we do.

The biotechnology and pharmaceutical industries are highly competitive. Our future success depends on our ability to demonstrate and maintain a competitive advantage with respect to the design, development and commercialization of product candidates. Our objective is to design, develop and commercialize new products with superior efficacy, convenience, tolerability and safety. We expect any product candidate that we commercialize with our strategic partners will compete with existing, market-leading products.

There are many pharmaceutical companies, biotechnology companies, public and private universities and research organizations actively engaged in the research and development of products that may be similar to our products. A number of multinational pharmaceutical companies, as well as large biotechnology companies, including, but not limited to, Roche Laboratories, Inc., Pfizer Inc., Bayer HealthCare AG, Amgen, Inc., Eli Lilly and Company, GlaxoSmithKline plc, GTx, Inc., Helsinn and XBiotech, Novartis, Bristol-Myers Squibb, Merck, Merrimack Pharmaceuticals, Inc., Arqule, Inc., Exelixis, Inc., Eisai Co., Ltd., AstraZeneca, Gilead Sciences, Inc., Actelion Pharmaceuticals Ltd., Incyte Corporation, OncoMed Pharmaceuticals, Inc. and United Therapeutics Corporation are pursuing the development or are currently marketing pharmaceuticals that target VEGF, HGF, ErbB3, Notch 3 or other pathways on which we may focus, as well as cachexia. It is probable that the number of companies seeking to develop competing products and therapies will increase.

Many of our competitors, either alone or with their strategic partners, have greater financial, technical and human resources than we do and greater experience in the discovery and development of product candidates, obtaining FDA and other regulatory approvals of products, and the commercialization of those products. Many are already marketing products to treat the same indications, and having the same biological targets, as the product candidates we are developing, including with respect to renal cell carcinoma. In addition, many of these competitors have significantly greater commercial infrastructures than we have. We will not be able to compete successfully unless we effectively:

- design and develop products that are superior to other products in the market in terms of, among other things, both safety and efficacy;
- obtain patent and/or other proprietary protection for our processes and product candidates;
- obtain required regulatory approvals;
- obtain favorable reimbursement, formulary and guideline status; and
- collaborate with others in the design, development and commercialization of new products.

Established competitors may invest heavily to quickly discover and develop novel compounds that could make our product candidates obsolete. In addition, any new product that competes with an approved product must demonstrate compelling advantages in efficacy, convenience, tolerability and safety in order to obtain approval, to overcome price competition and to be commercially successful. If we are not able to compete effectively against our current and future competitors, our business will not grow and our financial condition and operations will suffer.

There are currently 11 FDA-approved drugs in oncology which, like tivozanib, target the VEGF pathway as a part or all of their inhibitory mechanism. Eight of the FDA-approved VEGF pathway inhibitors are oral small molecule receptor tyrosine kinase inhibitors, or TKIs. Many of the approved VEGF pathway inhibitors are in ongoing development in additional cancer indications including RCC. Additionally, we are aware of a number of companies that have ongoing programs to develop both small molecules and biologics that target the VEGF pathway. In addition, the emergence of PD1/PDL1 inhibitor and other immune system-targeted therapies present additional competition for tivozanib in advanced RCC. Additional clinical trials for mono and combination therapies of PD1/PDL1 with VEGF TKIs are in the pipeline targeting RCC.

We believe the products that are considered competitive with ficlatuzumab include those agents targeting the HGF/c-Met pathway. We believe the most direct competitors to our AV-203 program are monoclonal antibodies that specifically target the ErbB3 receptor. There are also other agents that target ErbB3 as a part or all of their inhibitory mechanism. Only a limited number of agents have been approved for the treatment or prevention of cachexia caused by any disease. However, a number of agents with different mechanisms of action have completed or are currently being studied in phase 2 trials in cachexia or muscle wasting. There are no currently approved Notch 3 inhibitors, although there is at least one Notch 3 inhibitor currently in clinical trials. There are multiple treatments approved for pulmonary arterial hypertension through various mechanisms.

Even if we, or any collaborators, are able to commercialize any product candidate that we, or they, develop, the product may become subject to unfavorable pricing regulations, third party payor reimbursement practices or healthcare reform initiatives, any of which could harm our business.

The commercial success of our product candidates will depend substantially, both domestically and abroad, on the extent to which the costs of our product candidates will be paid by third party payors, including government health care programs and private health insurers. If coverage is not available, or reimbursement is limited, we, or any collaborators, 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, or any collaborators, to establish or maintain pricing sufficient to realize a sufficient return on our or their investments. In the United States, no uniform policy of coverage and reimbursement for products exists among third party payors and coverage and reimbursement levels for products can differ significantly from payor to payor. As a result, the coverage determination process is often a time consuming and costly process that may 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.

There is significant uncertainty related to third party payor coverage and reimbursement of newly approved drugs. Marketing approvals, pricing and reimbursement for new drug products vary widely from country to country. Some countries require approval of the sale price of a drug before it can be marketed. In many countries, the pricing review period begins after marketing or product licensing approval is granted. In some foreign markets, prescription pharmaceutical pricing remains subject to continuing governmental control even after initial approval is granted. As a result, we, or any collaborators, might obtain marketing approval for a product in a particular country, but then be subject to price regulations that delay commercial launch of the product, possibly for lengthy time periods, which may negatively impact the revenues we are able to generate from the sale of the product in that country. Adverse pricing limitations may hinder our ability or the ability of any collaborators to recoup our or their investment in one or more product candidates, even if our product candidates obtain marketing approval.

Patients who are provided medical treatment for their conditions generally rely on third party payors to reimburse all or part of the costs associated with their treatment. Therefore, our ability, and the ability of any collaborators, to commercialize successfully any of our product candidates will depend in part on the extent to which coverage and adequate reimbursement for these products and related treatments will be available from third party payors. Third party payors decide which medications they will cover and establish reimbursement levels. The healthcare industry is acutely focused on cost containment, both in the United States and elsewhere. Government authorities and other third party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular medications, which could affect our ability or that of any collaborators to sell our product candidates profitably. These payors may not view our products, if any, as cost effective, and coverage and reimbursement may not be available to our customers, or those of any collaborators, or may not be sufficient to allow our products, if any, to be marketed on a competitive basis. Cost control initiatives could cause us, or any collaborators, to decrease the price we, or they, might establish for products, which could result in lower than anticipated product revenues. If the prices for our products, if any, decrease or if governmental and other third party payors do not provide coverage or adequate reimbursement, our prospects for revenue and profitability will suffer.

There may also be delays in obtaining coverage and reimbursement for newly approved drugs, and coverage may be more limited than the indications for which the drug is approved by the FDA or comparable foreign regulatory authorities. Moreover, eligibility for reimbursement does not imply that any drug will be paid for in all cases or at a rate that covers our costs, including research, development, manufacture, sale and distribution. Reimbursement rates may vary, by way of example, according to the use of the product and the clinical setting in which it is used. Reimbursement rates may also be based on reimbursement levels already set for lower cost drugs or may be incorporated into existing payments for other services.

In addition, increasingly, third party payors are requiring higher levels of evidence of the benefits and clinical outcomes of new technologies and are challenging the prices charged. Further, the net reimbursement for drug products may be subject to additional reductions if there are changes to laws that presently restrict imports of drugs from countries where they may be sold at lower prices than in the United States. An inability to promptly obtain coverage and adequate payment rates from both government funded and private payors for any of our product candidates for which we, or any collaborator, obtain marketing approval could significantly harm our operating results, our ability to raise capital needed to commercialize products and our overall financial condition.

If product liability lawsuits are brought against us, we may incur substantial liabilities and may be required to limit commercialization of our product candidates.

We face an inherent risk of product liability as a result of the clinical testing of our product candidates and will face an even greater risk if we commercialize any products. For example, we may be sued if any product we develop allegedly causes injury or is found to be otherwise unsuitable during product testing, manufacturing, marketing or sale. Any such product liability claims may include allegations of defects in manufacturing, defects in design, a failure to warn of dangers inherent in the product, negligence, strict liability, and a breach of warranties. Claims could also be asserted under state consumer protection acts. If we cannot successfully defend ourselves against product liability claims, we may incur substantial liabilities or be required to limit commercialization of our product candidates. Even successful defense could require significant financial and management resources. Regardless of the merits or eventual outcome, product liability claims may result in:

- decreased demand for our product candidates or products that we may develop;
- injury to our reputation;
- withdrawal of clinical trial participants;
- costs to defend the related litigation;
- diversion of management's time and our resources;
- substantial monetary awards to trial participants or patients;
- product recalls, withdrawals or labeling, marketing or promotional restrictions;
- loss of revenue;
- the inability to commercialize our product candidates; and
- a decline in our stock price.

Our inability to obtain and retain sufficient product liability insurance at an acceptable cost to protect against potential product liability claims could prevent or inhibit the commercialization of products we develop. We currently carry product liability insurance covering our clinical studies in the amount of $20 million in the aggregate. Although we maintain such insurance, any claim that may be brought against us could result in a court judgment or settlement in an amount that is not covered, in whole or in part, by our insurance or that is in excess of the limits of our insurance coverage. Our insurance policies also have various exclusions, and we may be subject to a product liability claim for which we have no coverage. We will have to pay any amounts awarded by a court or negotiated in a settlement that exceed our coverage limitations or that are not covered by our insurance, and we may not have, or be able to obtain, sufficient capital to pay such amounts.

Risks Related to Our Dependence on Third Parties

We rely on third parties, such as contract research organizations, or CROs, to conduct clinical trials for our product candidates, and if they do not properly and successfully perform their obligations to us, we may not be able to obtain regulatory approvals for our product candidates.

We, in consultation with our collaborators, where applicable, design the clinical trials for our product candidates, but we have relied, and will rely, on contract research organizations and other third parties to assist us in managing, monitoring and otherwise carrying out many of these trials. We compete with larger companies for the resources of these third parties.

Although we plan to continue to rely on these third parties to conduct our ongoing any future clinical trials, we are responsible for ensuring that each of our clinical trials is conducted in accordance with its general investigational plan and protocol. Moreover, the FDA and foreign regulatory agencies require us to comply with regulations and standards, commonly referred to as good clinical practices, for designing, conducting, monitoring, recording, analyzing, and reporting the results of clinical trials to assure that the data and results are credible and accurate and that the rights, integrity and confidentiality of trial participants are protected. Our reliance on third parties that we do not control does not relieve us of these responsibilities and requirements.

The third parties on whom we rely generally may terminate their engagements with us at any time. If we are required to enter into alternative arrangements because of any such termination, the introduction of our product candidates to market could be delayed.

If these third parties do not successfully carry out their duties under their agreements with us, if the quality or accuracy of the data they obtain is compromised due to their failure to adhere to our clinical trial protocols or regulatory requirements, or if they otherwise fail to comply with clinical trial protocols or meet expected deadlines, our clinical trials may not meet regulatory requirements. If our clinical trials do not meet regulatory requirements or if these third parties need to be replaced, our preclinical development activities or clinical trials may be extended, delayed, suspended or terminated. If any of these events occur, we may not be able to obtain regulatory approval of our product candidates and our reputation could be harmed.

We rely on third-party manufacturers to produce our preclinical and clinical product candidate supplies and we intend to rely on third parties to produce commercial supplies of any approved product candidates. Any failure by a third-party manufacturer to produce supplies for us may delay or impair our ability to complete our clinical trials or commercialize our product candidates.

We do not possess all of the capabilities to fully commercialize any of our product candidates on our own. We have relied upon third-party manufacturers for the manufacture of our product candidates for preclinical and clinical testing purposes and intend to continue to do so in the future. If we are unable to arrange for third-party manufacturing sources, or to do so on commercially reasonable terms, we may not be able to complete development of such other product candidates or market them.

Reliance on third-party manufacturers entails risks to which we would not be subject if we manufactured product candidates ourselves, including reliance on the third party for regulatory compliance and quality assurance, the possibility of breach of the manufacturing agreement by the third party because of factors beyond our control (including a failure to synthesize and manufacture our product candidates in accordance with our product specifications), failure of the third party to accept orders for supply of drug substance or drug product and the possibility of termination or nonrenewal of the agreement by the third party, based on its own business priorities, at a time that is costly or damaging to us. In addition, the FDA and other regulatory authorities require that our product candidates be manufactured according to cGMP and similar foreign standards. Any failure by our third-party manufacturers to comply with cGMP or failure to scale-up manufacturing processes as needed, including any failure to deliver sufficient quantities of product candidates in a timely manner, could lead to a delay in, or failure to obtain, regulatory approval of any of our product candidates. In addition, such failure could be the basis for action by the FDA to withdraw approvals for product candidates previously granted to us and for other regulatory action, including recall or seizure, fines, imposition of operating restrictions, total or partial suspension of production or injunctions.

We rely on our manufacturers to purchase from third-party suppliers the materials necessary to produce our product candidates for our clinical studies. There are a small number of suppliers for certain capital equipment and raw materials that we use to manufacture our product candidates. Such suppliers may not sell this capital equipment or these raw materials to our manufacturers at the times we need them or on commercially reasonable terms. We do not have any control over the process or timing of the acquisition of this capital equipment or these raw materials by our manufacturers. Moreover, we currently do not have any agreements for the commercial production of these raw materials. Any significant delay in the supply of a product candidate or the raw material components thereof for an ongoing clinical trial due to the need to replace a third-party manufacturer could considerably delay completion of our clinical studies, product testing and potential regulatory approval of our product candidates. If our manufacturers or we are unable to purchase these raw materials after regulatory approval has been obtained for our product candidates, the commercial launch of our product candidates would be delayed or there would be a shortage in supply, which would impair our ability to generate revenues from the sale of our product candidates.

Because of the complex nature of many of our early stage compounds and product candidates, our manufacturers may not be able to manufacture such compounds and product candidates at a cost or in quantities or in a timely manner necessary to develop and commercialize related products. If we successfully commercialize any of our drugs, we may be required to establish or access large-scale commercial manufacturing capabilities. In addition, as our drug development pipeline increases and matures, we will have a greater need for clinical trial and commercial manufacturing capacity. We do not own or operate manufacturing facilities for the production of clinical or commercial quantities of our product candidates and we currently have no plans to build our own clinical or commercial scale manufacturing capabilities. To meet our projected needs for commercial manufacturing in the event that one or more of our product candidates gains marketing approval, third parties with whom we currently work will need to increase their scale of production or we will need to secure alternate suppliers.

If any of our current or future strategic partners fails to perform its obligations or terminates its agreement with us, the development and commercialization of the product candidates under such agreement could be delayed or terminated and our business could be substantially harmed.

As part of our business strategy, we have entered into strategic partnerships for each of our development programs, and we plan to enter into additional strategic partnerships in the future. If any current or future strategic partners do not devote sufficient time and resources to its arrangements with us, we may not realize the potential commercial benefits of the arrangement, and our results of operations may be adversely affected. In addition, if any strategic partner were to breach or terminate its arrangements with us, the development and commercialization of the affected product candidate could be delayed, curtailed or terminated because we may not have sufficient financial resources or capabilities to continue development and commercialization of the product candidate on its own, and we may find it difficult to attract a new alliance partner for such product candidate. For example, Biodesix can opt-out of its agreement with us after the completion of the proof-of-concept trial prior to the first commercial sale of ficlatuzumab, at which point

Biodesix would not be responsible for any future costs associated with developing and commercializing ficlatuzumab other than any ongoing clinical studies.

Much of the potential revenue from any of our strategic partnerships will likely consist of contingent payments, such as royalties payable on sales of any successfully developed drugs. Any such contingent revenue will depend upon our, and our strategic partners', ability to successfully develop, introduce, market and sell new drugs. In some cases, we are not involved in these processes, and we depend entirely on our strategic partners. Any of our strategic partners may fail to develop or effectively commercialize these drugs because it:

- decides not to devote the necessary resources because of internal constraints, such as limited personnel with the requisite scientific expertise, limited cash resources or specialized equipment limitations, or the belief that other product candidates may have a higher likelihood of obtaining regulatory approval or may potentially generate a greater return on investment;
- does not have sufficient resources necessary to carry the product candidate through clinical development, regulatory approval and commercialization; or
- cannot obtain the necessary regulatory approvals.

If one or more of our strategic partners fails to develop or effectively commercialize product candidates for any of the foregoing reasons, we may not be able to replace the strategic partner with another partner to develop and commercialize a product candidate under the terms of the strategic partnership. We may also be unable to obtain, on terms acceptable to us, a license from such strategic partner to any of its intellectual property that may be necessary or useful for us to continue to develop and commercialize a product candidate. Any of these events could have a material adverse effect on our business, results of operations and our ability to achieve future profitability, and could cause our stock price to decline.

Risks Related to Our Intellectual Property Rights

We could be unsuccessful in obtaining adequate patent protection for one or more of our product candidates, which could result in competition and a decrease in the potential market share for our product candidates.

We cannot be certain that patents will be issued or granted with respect to applications that are currently pending, or that issued or granted patents will not later be found to be invalid and/or unenforceable. The patent position of biotechnology and pharmaceutical companies is generally uncertain because it involves complex legal and factual considerations. The standards applied by the United States Patent and Trademark Office, or USPTO, and foreign patent offices in granting patents are not always applied uniformly or predictably. For example, there is no uniform worldwide policy regarding patentable subject matter or the scope of claims allowable in biotechnology and pharmaceutical patents. Consequently, patents may not issue from our pending patent applications. As such, we do not know the degree of future protection that we will have on our proprietary products and technology. The scope of patent protection that the USPTO will grant with respect to the antibodies in our antibody product pipeline is uncertain. It is possible that the USPTO will not allow broad antibody claims that cover closely related antibodies as well as the specific antibody. Upon receipt of FDA approval, competitors would be free to market antibodies almost identical to ours, including biosimilar antibodies, thereby decreasing our market share.

Issued patents covering one or more of our products could be found invalid or unenforceable if challenged in patent office proceedings, or in court.

If we or one of our corporate partners were to initiate legal proceedings against a third-party to enforce a patent covering one of our products, the defendant could counterclaim that our patent is invalid and/or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity and/or unenforceability are commonplace. Grounds for a validity challenge could be an alleged failure to meet one or more statutory requirements for patentability, including, for example, lack of novelty, obviousness, lack of written description or non-enablement. In addition, patent validity challenges may, under certain circumstances, be based upon non-statutory obviousness-type double patenting, which, if successful, could result in a finding that the claims are invalid for obviousness-type double patenting or the loss of patent term, including a patent term adjustment granted by the United States Patent and Trademark Officer, if a terminal disclaimer is filed to obviate a finding of obviousness-type double patenting. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant information from the USPTO, or made a misleading statement, during prosecution. Additionally, third parties are able to challenge the validity of issued patents through administrative proceedings in the patent offices of certain countries, including the USPTO and the European Patent Office. Although we have conducted due diligence on patents we have exclusively in-licensed, and we believe that we have conducted our patent prosecution in accordance with the duty of candor and in good faith, the outcome following legal assertions of invalidity and unenforceability during patent litigation is unpredictable. With respect to the validity question, for example, we cannot be certain that there is no invalidating prior art, of which we and the patent examiner were unaware during prosecution. If a defendant were to prevail on a legal assertion of invalidity and/or unenforceability, we would lose at least part, and perhaps all, of the patent protection on one of our products. Such a loss of patent protection could have a material adverse impact on our business.

Claims that our platform technologies, our products or the sale or use of our products infringe the patent rights of third parties could result in costly litigation or could require substantial time and money to resolve, even if litigation is avoided.

We cannot guarantee that our platform technologies, our products, or the use of our products, do not infringe third-party patents. Third parties might allege that we are infringing their patent rights or that we have misappropriated their trade secrets. Such third parties might resort to litigation against us. The basis of such litigation could be existing patents or patents that issue in the future.

It is also possible that we failed to identify relevant third-party patents or applications. For example, applications filed before November 29, 2000 and certain applications filed after that date that will not be filed outside the United States remain confidential until patents issue. Patent applications in the United States and elsewhere are published approximately 18 months after the earliest filing, which is referred to as the priority date. Therefore, patent applications covering our products or platform technology could have been filed by others without our knowledge. Additionally, pending patent applications which have been published can, subject to certain limitations, be later amended in a manner that could cover our platform technologies, our products or the use of our products.

With regard to tivozanib, we are aware of a third-party United States patent, and corresponding foreign counterparts, that contain broad claims related to use of an organic compound, that, among other things, inhibits the tyrosine phosphorylation of a VEGF receptor caused by VEGF binding to such VEGF receptor. We are also aware of third-party United States patents that contain broad claims related to the use of a tyrosine kinase inhibitor in combination with a DNA damaging agent such as chemotherapy or radiation, and we have received written notice from the owners of such patents indicating that they believe we may need a license from them in order to avoid infringing their patents. With regard to ficlatuzumab, we are aware of two separate families of United States patents, United States patent applications and foreign counterparts, with each of the two families being owned by a different third party, that contain broad claims related to anti-HGF antibodies having certain binding properties and their use. With regard to AV-203, we are aware of a third-party United States patent that contains broad claims relating to anti-ErbB3 antibodies. Additionally, we are aware of a United States patent application and foreign counterparts that contains claims to the use of a companion diagnostic in conjunction with AV-203. Based on our analyses, if any of the above third-party patents were asserted against us, we do not believe our proposed products or activities would be found to infringe any valid claim of these patents. If we were to challenge the validity of any issued United States patent in court, we would need to overcome a statutory presumption of validity that attaches to every United States patent. This means that in order to prevail, we would have to present clear and convincing evidence as to the invalidity of the patent’s claims. There is no assurance that a court would find in our favor on questions of infringement or validity.

In order to avoid or settle potential claims with respect to any of the patent rights described above or any other patent rights of third parties, we may choose or be required to seek a license from a third-party and be required to pay license fees or royalties or both. These licenses may not be available on acceptable terms, or at all. Even if we or our strategic partners were able to obtain a license, the rights may be non-exclusive, which could result in our competitors gaining access to the same intellectual property. Ultimately, we could be prevented from commercializing a product, or be forced to cease some aspect of our business operations, if, as a result of actual or threatened patent infringement claims, we are unable to enter into licenses on acceptable terms. This could harm our business significantly.

Defending against claims of patent infringement or misappropriation of trade secrets could be costly and time-consuming, regardless of the outcome. Thus, even if we were to ultimately prevail, or to settle at an early stage, such litigation could burden us with substantial unanticipated costs. In addition, litigation or threatened litigation could result in significant demands on the time and attention of our management team, distracting them from the pursuit of other company business.

Unfavorable outcomes in an intellectual property litigation could limit our research and development activities and/or our ability to commercialize certain products.

If third parties successfully assert intellectual property rights against us, we might be barred from using aspects of our technology platform, or barred from developing and commercializing related products. Prohibitions against using specified technologies, or prohibitions against commercializing specified products, could be imposed by a court or by a settlement agreement between us and a plaintiff. In addition, if we are unsuccessful in defending against allegations of patent infringement or misappropriation of trade secrets, we may be forced to pay substantial damage awards to the plaintiff. There is inevitable uncertainty in any litigation, including intellectual property litigation. There can be no assurance that we would prevail in any intellectual property litigation, even if the case against us is weak or flawed. If litigation leads to an outcome unfavorable to us, we may be required to obtain a license from the patent owner in order to continue our research and development programs or our partnerships or to market our product(s). It is possible that the necessary license will not be available to us on commercially acceptable terms, or at all. This could limit our research and development activities, our ability to commercialize specified products, or both.

Most of our competitors are larger than we are and have substantially greater resources. They are, therefore, likely to be able to sustain the costs of complex patent litigation longer than we could. In addition, the uncertainties associated with litigation could have a material adverse effect on our ability to raise the funds necessary to continue our clinical trials, continue our internal research programs, in-license needed technology, or enter into strategic partnerships that would help us bring our product candidates to market.

In addition, any future patent litigation, interference or other administrative proceedings will result in additional expense and distraction of our personnel. An adverse outcome in such litigation or proceedings may expose us or our strategic partners to loss of our proprietary position, expose us to significant liabilities, or require us to seek licenses that may not be available on commercially acceptable terms, if at all.

An intellectual property litigation could lead to unfavorable publicity that could harm our reputation and cause the market price of our common stock to decline.

During the course of any patent litigation, there could be public announcements of the results of hearings, rulings on motions, and other interim proceedings in the litigation. If securities analysts or investors regard these announcements as negative, the perceived value of our products, programs, or intellectual property could be diminished. In such event, the market price of our common stock may decline.

AV-380 and tivozanib are protected by patents exclusively licensed from other companies or institutions. If the licensors terminate the licenses or fail to maintain or enforce the underlying patents, our competitive position would be harmed and our partnerships could be terminated.

Certain of our product candidates and out-licensing arrangements depend on patents and/or patent applications owned by other companies or institutions with which we have entered into intellectual property licenses. In particular, we hold exclusive licenses from St. Vincent’s for therapeutic applications that benefit from inhibition or decreased expression or activity of MIC-1, which we refer to as GDF15 and which we used in our AV-380 program, and from KHK for tivozanib. We may enter into additional license agreements as part of the development of our business in the future. Our licensors may not successfully prosecute certain patent applications under which we are licensed and on which our business depends. Even if patents issue from these applications, our licensors may fail to maintain these patents, may decide not to pursue litigation against third-party infringers, may fail to prove infringement, or may fail to defend against counterclaims of patent invalidity or unenforceability. In addition, in spite of our best efforts, a licensor could claim that we have materially breached a license agreement and terminate the license, thereby removing our or our licensees’ ability to obtain regulatory approval for and to market any product covered by such license. If these in-licenses are terminated, or if the underlying patents fail to provide the intended market exclusivity, competitors would have the freedom to seek regulatory approval of, and to market, identical products. In addition, the partners to which we have sublicensed certain rights under these licenses, including Novartis and EUSA, would likely have grounds for terminating our partnerships if these licenses are terminated or the underlying patents are not maintained or enforced. This could have a material adverse effect on our results of operations, our competitive business position and our business prospects.

Confidentiality agreements with employees and third parties may not prevent unauthorized disclosure of trade secrets and other proprietary information.

In addition to patents, we rely on trade secrets, technical know-how, and proprietary information concerning our business strategy in order to protect our competitive position in the field of oncology. In the course of our research, development and business activities, we often rely on confidentiality agreements to protect our proprietary information. Such confidentiality agreements are used, for example, when we talk to vendors of laboratory or clinical development services or potential strategic partners. In addition, each of our employees is required to sign a confidentiality agreement upon joining our company. We take steps to protect our proprietary information, and we seek to carefully draft our confidentiality agreements to protect our proprietary interests. Nevertheless, there can be no guarantee that an employee or an outside party will not make an unauthorized disclosure of our proprietary confidential information. This might happen intentionally or inadvertently. It is possible that a competitor will make use of such information, and that our competitive position will be compromised, in spite of any legal action we might take against persons making such unauthorized disclosures.

Trade secrets are difficult to protect. Although we use reasonable efforts to protect our trade secrets, our employees, consultants, contractors, or outside scientific collaborators might intentionally or inadvertently disclose our trade secret information to competitors. Enforcing a claim that a third-party illegally obtained and is using any of our trade secrets is expensive and time-consuming, and the outcome is unpredictable. In addition, courts outside the United States sometimes are less willing than U.S. courts to protect trade secrets. Moreover, our competitors may independently develop equivalent knowledge, methods and know-how.

Our research and development strategic partners may have rights to publish data and other information to which we have rights. In addition, we sometimes engage individuals or entities to conduct research relevant to our business. The ability of these individuals or entities to publish or otherwise publicly disclose data and other information generated during the course of their research is subject to certain contractual limitations. These contractual provisions may be insufficient or inadequate to protect our confidential information. If we do not apply for patent protection prior to such publication, or if we cannot otherwise maintain the confidentiality of our proprietary technology and other confidential information, then our ability to obtain patent protection or to protect our trade secret information may be jeopardized.

Intellectual property rights do not necessarily address all potential threats to our competitive advantage.

The degree of future protection afforded by our intellectual property rights is uncertain because intellectual property rights have limitations, and may not adequately protect our business, or permit us to maintain our competitive advantage. The following examples are illustrative:

- Others may be able to make compounds that are similar to our product candidates but that are not covered by the claims of the patents that we own or have exclusively licensed.
- We or our licensors or strategic partners might not have been the first to make the inventions covered by the issued patent or pending patent application that we own or have exclusively licensed.
- We or our licensors or strategic partners might not have been the first to file patent applications covering certain of our inventions.
- Others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing our intellectual property rights.
- It is possible that our pending patent applications will not lead to issued patents.
- Issued patents that we own or have exclusively licensed may not provide us with a competitive advantage; for example, our issued patents may not be broad enough to prevent the commercialization of competitive antibodies that are biosimilar to one or more of our antibody products, or may be held invalid or unenforceable, as a result of legal challenges by our competitors.
- Our competitors might conduct research and development activities in countries where we do not have patent rights and then use the information learned from such activities to develop competitive products for sale in our major commercial markets.
- We may not develop additional proprietary technologies that are patentable.
- The patents of others may have an adverse effect on our business.

Changes in U.S. patent law could diminish the value of patents in general, thereby impairing our ability to protect our products.

As is the case with other biopharmaceutical companies, our success is heavily dependent on intellectual property, particularly patents. Obtaining and enforcing patents in the biopharmaceutical industry involve both technological complexity and legal complexity. Therefore, obtaining and enforcing biopharmaceutical patents is costly, time-consuming and inherently uncertain. In addition, several recent events have increased uncertainty with regard to our ability to obtain patents in the future and the value of patents once obtained. Among these, in September 2011, patent reform legislation passed by Congress was signed into law. The new patent law introduces changes including a first-to-file system for determining which inventors may be entitled to receive patents, and a new post-grant review process that allows third parties to challenge newly issued patents. It remains to be seen how the biopharmaceutical industry will be affected by such changes in the patent system. In addition, the Supreme Court has ruled on several patent cases in recent years, either narrowing the scope of patent protection available in specified circumstances or weakening the rights of patent owners in specified situations. Depending on decisions by the U.S. Congress, the federal courts, and the USPTO, the laws and regulations governing patents cou