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

FORM 10-Q

(Mark One)

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

For the quarterly period ended June 30, 2018

OR

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

For the transition period from _____ to _____

Commission file number: 001-36294

uniQure N.V.
(Exact name of Registrant as specified in its charter)

The Netherlands	**Not applicable**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

Paasheuvelweg 25a,
1105 BP Amsterdam, The Netherlands
(Address of principal executive offices) (Zip Code)

+31-20-240-6000
(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, smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer" "accelerated filer" and "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☐	Accelerated filer ☒
Non-accelerated filer (do not check if smaller reporting company) ☐	Smaller reporting company ☐
Emerging growth company ☒	

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13 (a) of the Exchange Act Yes ☒ No ☐

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

As of August 6, 2018, the registrant had 37,140,478 ordinary shares, par value €0.05, outstanding.

TABLE OF CONTENTS

SPECIAL CAUTIONARY NOTICE REGARDING FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q contains “forward-looking statements” as defined under federal securities laws. Forward-looking statements are based on our current expectations of future event and many of these statements can be identified using terminology such as “believes,” “expects,” “anticipates,” “plans,” “may,” “will,” “projects,” “continues,” “estimates,” “potential,” “opportunity” and similar expressions. These forward-looking statements may be found in Part II, Item 1A “Risk Factors,” Part I, Item 2 “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and other sections of this Quarterly Report on Form 10-Q.

Forward-looking statements involve risks and uncertainties that could cause actual results to differ materially from those projected or implied. The most significant factors known to us that could materially adversely affect our business, operations, industry, financial position or future financial performance include those discussed in Part II, Item 1A “Risk Factors,” as well as those discussed in Part I, Item 2 “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and elsewhere in this report, as well as other factors which may be identified from time to time in our other filings with the Securities and Exchange Commission (“SEC”), including our most recent Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 14, 2018, or in the documents where such forward-looking statements appear. You should carefully consider that information before you make an investment decision.

You should not place undue reliance on these statements, which speak only as of the date that they were made. Our actual results or experience could differ significantly from those anticipated in the forward-looking statements and from historical results, due to the risks and uncertainties described in this Quarterly Report on Form 10-Q for the quarter ended June 30, 2018, and in our Annual Report on Form 10-K for the year ended December 31, 2017, including in “Part I, Item 1A. Risk Factors,” as well as others that we may consider immaterial or do not anticipate at this time. These cautionary statements should be considered in connection with any written or oral forward-looking statements that we may make in the future or may file or furnish with the SEC. We do not undertake any obligation to release publicly any revisions to these forward-looking statements after completion of the filing of this Quarterly Report on Form 10-Q to reflect later events or circumstances or to reflect the occurrence of unanticipated events. All forward-looking statements attributable to us are expressly qualified in their entirety by these cautionary statements.

In addition, with respect to all our forward-looking statements, we claim the protection of the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995.

Part I – FINANCIAL INFORMATION

Item 1. Financial Statements

uniQure N.V.

UNAUDITED CONSOLIDATED BALANCE SHEETS

	June 30, 2018	December 31, 2017
	in thousands, except share and per share amounts	
Current assets		
Cash and cash equivalents	$ 259,180	$ 159,371
Accounts receivable and accrued income from related party	1,037	1,586
Prepaid expenses	2,071	1,139
Other current assets	418	687
Total current assets	**262,706**	**162,783**
Non-current assets		
Property, plant and equipment, net	32,126	34,281
Intangible assets, net	10,733	9,570
Goodwill	516	530
Restricted cash	2,458	2,480
Total non-current assets	**45,833**	**46,861**
Total assets	**$ 308,539**	**$ 209,644**
Current liabilities		
Accounts payable	$ 3,866	$ 2,908
Accrued expenses and other current liabilities	8,920	8,838
Current portion of long-term debt	8,028	1,050
Current portion of deferred rent	1,082	737
Current portion of deferred revenue	8,463	4,613
Current portion of contingent consideration	1,081	1,084
Total current liabilities	**31,440**	**19,230**
Non-current liabilities		
Long-term debt, net of current portion	12,840	19,741
Deferred rent, net of current portion	8,464	9,114
Deferred revenue, net of current portion	32,853	67,408
Contingent consideration, net of current portion	2,704	2,880
Derivative financial instruments related party	1,309	1,298
Other non-current liabilities	513	614
Total non-current liabilities	**58,683**	**101,055**
Total liabilities	**90,123**	**120,285**
Commitments and contingencies (see note 13)		
Shareholders' equity		
Ordinary shares, €0.05 par value: 60,000,000 shares authorized at June 30, 2018 and December 31, 2017 and 37,126,741 and 31,339,040 ordinary shares issued and outstanding at June 30, 2018 and December 31, 2017, respectively.	2,288	1,947
Additional paid-in-capital	712,399	566,530
Accumulated other comprehensive loss	(4,688)	(3,800)
Accumulated deficit	(491,583)	(475,318)
Total shareholders' equity	**218,416**	**89,359**
Total liabilities and shareholders' equity	**$ 308,539**	**$ 209,644**

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

uniQure N.V.

UNAUDITED CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS

	Three months ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
	in thousands, except share and per share amounts		in thousands, except share and per share amounts	
License revenues	$ —	$ (226)	$ —	$ 8
License revenues from related party	2,123	987	4,574	1,936
Collaboration revenues	—	3,058	—	4,638
Collaboration revenues from related party	927	1,123	1,954	1,681
Total revenues	**3,050**	**4,942**	**6,528**	**8,263**
Operating expenses:				
Research and development expenses	(18,493)	(16,866)	(35,551)	(33,860)
Selling, general and administrative expenses	(5,896)	(5,410)	(12,197)	(11,768)
Total operating expenses	**(24,389)**	**(22,276)**	**(47,748)**	**(45,628)**
Other income	565	266	1,180	582
Other expense	(429)	(2,640)	(762)	(2,640)
Loss from operations	**(21,203)**	**(19,708)**	**(40,802)**	**(39,423)**
Interest income	583	12	836	23
Interest expense	(565)	(502)	(981)	(1,006)
Foreign currency gains / (losses), net	2,255	(1,071)	2,433	(1,164)
Other non-operating (loss) / income, net	(1,301)	—	(598)	29
Loss before income tax expense	**(20,231)**	**(21,269)**	**(39,112)**	**(41,541)**
Income tax expense	(361)	—	(269)	—
Net loss	**$ (20,592)**	**$ (21,269)**	**$ (39,381)**	**$ (41,541)**
Other comprehensive (loss) / income, net of income tax:				
Foreign currency translation adjustments net of tax impact of $0.4 million and nil for the three months ended June 30, 2018 and 2017, respectively, and $0.3 million and nil for the six months ended June 30, 2018 and 2017, respectively.	(2,513)	404	(2,692)	726
Total comprehensive loss	**$ (23,105)**	**$ (20,865)**	**$ (42,073)**	**$ (40,815)**
Basic and diluted net loss per ordinary share	$ (0.57)	(0.83)	$ (1.16)	$ (1.63)
Weighted average shares used in computing basic and diluted net loss per ordinary share	36,205,061	25,560,348	33,970,195	25,502,301

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

uniQure N.V.

UNAUDITED CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

	Ordinary shares		Additional paid-in capital	Accumulated other comprehensive income/(loss)	Accumulated deficit	Total shareholders' equity
	No. of shares	Amount				
	in thousands, except share and per share amounts					
Balance at December 31, 2017	**31,339,040**	**$ 1,947**	**$ 566,530**	**$ (3,800)**	**$ (475,318)**	**$ 89,359**
Cumulative effect of retroactive implementation of ASC 606 Revenue recognition	—	—	—	1,802	23,116	24,918
Loss for the period	—	—	—	—	(39,381)	(39,381)
Other comprehensive loss	—	—	—	(2,690)	—	(2,690)
Follow-on public offering	5,175,000	309	138,182	—	—	138,491
Exercise of share options	267,753	12	2,975	—	—	2,987
Restricted and performance share units distributed during the period	344,948	20	(20)	—	—	—
Share-based compensation expense	—	—	4,732	—	—	4,732
Balance at June 30, 2018	**37,126,741**	**2,288**	**712,399**	**(4,688)**	**(491,583)**	**218,416**

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

uniQure N.V.

UNAUDITED CONSOLIDATED STATEMENTS OF CASH FLOWS

	Six months ended June 30,	
	2018	2017
	in thousands	
Cash flows from operating activities		
Net loss	$ (39,381)	$ (41,541)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	3,211	4,257
Share-based compensation expense	4,732	3,531
Change in fair value of derivative financial instruments and contingent consideration	517	397
Unrealized foreign exchange (gains) / losses	(3,417)	1,168
Change in deferred taxes	269	-
Change in lease incentives	(52)	1,634
Changes in operating assets and liabilities:		
Accounts receivable and accrued income, prepaid expenses and other current assets	(202)	5,096
Accounts payable	717	(1,334)
Accrued expenses and other liabilities	208	(696)
Deferred revenue	(4,579)	(3,315)
Net cash used in operating activities	(37,977)	(30,803)
Cash flows from investing activities		
Purchases of intangible assets	(1,445)	(578)
Purchase of property, plant and equipment	(1,197)	(2,830)
Net cash used in investing activities	(2,642)	(3,408)
Cash flows from financing activities		
Proceeds from issuance of shares related to employee stock option plans	2,987	939
Proceeds from public offering of shares, net of issuance costs	138,491	-
Net cash generated from financing activities	141,478	939
Currency effect cash, cash equivalents and restricted cash	(1,071)	4,914
Net decrease in cash, cash equivalents and restricted cash	99,787	(28,358)
Cash, cash equivalents and restricted cash at beginning of period	161,851	134,324
Cash, cash equivalents and restricted cash at the end of period	**$ 261,638**	**$ 105,966**
Supplemental cash flow disclosures:		
Cash and cash equivalents	$ 259,180	$ 104,087
Restricted cash related to leasehold and other deposits	$ 2,458	$ 1,879
Total cash, cash equivalents and restricted cash	**$** 261,638	**$** 105,966
Cash paid for interest	$ (851)	$ (840)
Non-cash increases / (decreases) in accounts payables related to purchases of intangible assets and property, plant and equipment	**$** 316	$ (1,108)

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

1 General business information

uniQure (the "Company") was incorporated on January 9, 2012 as a private company with limited liability (besloten vennootschap met beperkte aansprakelijkheid) under the laws of the Netherlands. The Company is a leader in the field of gene therapy and seeks to deliver to patients suffering from rare and other devastating diseases single treatments with potentially curative results. The Company's business was founded in 1998 and was initially operated through its predecessor company, Amsterdam Molecular Therapeutics (AMT) Holding N.V ("AMT"). In 2012, AMT undertook a corporate reorganization, pursuant to which uniQure B.V. acquired the entire business and assets of AMT and completed a share-for-share exchange with the shareholders of AMT. Effective February 10, 2014, in connection with its initial public offering, the Company converted into a public company with limited liability (naamloze vennootschap) and changed its legal name from uniQure B.V. to uniQure N.V.

The Company is registered in the trade register of the Chamber of Commerce (Kamer van Koophandel) in Amsterdam, the Netherlands under number 54385229. The Company's headquarters are in Amsterdam, the Netherlands, and its registered office is located at Paasheuvelweg 25a, Amsterdam 1105 BP, the Netherlands and its telephone number is +31 20 240 6000. The Company's website address is www.uniqure.com.

The Company's ordinary shares are listed on the NASDAQ Global Select Market and trades under the symbol "QURE".

2 Summary of significant accounting policies

2.1 Basis of preparation

The Company prepared these unaudited consolidated financial statements in compliance with generally accepted accounting principles in the United States of America ("U.S. GAAP") and applicable rules and regulations of the SEC regarding interim financial reporting. Any reference in these notes to applicable guidance is meant to refer to authoritative U.S. GAAP as found in the Accounting Standards Codification ("ASC") and Accounting Standards Update ("ASU") of the Financial Accounting Standards Board ("FASB").

The unaudited consolidated financial statements are presented in U.S. dollars, except where otherwise indicated. Transactions denominated in currencies other than U.S. dollars are presented in the transaction currency with the U.S. dollar amount included in parenthesis, converted at the foreign exchange rate as of the transaction date.

2.2 Unaudited interim financial information

The interim financial statements and related disclosures are unaudited, have been prepared on the same basis as the annual financial statements and, in the opinion of management, reflect all adjustments, which include only normal recurring adjustments, necessary for a fair statement of the financial position, results of operations and changes in financial position for the period presented.

Certain information and footnote disclosures normally included in annual financial statements prepared in accordance with U.S. GAAP have been omitted. The results of operations for the six months ended June 30, 2018, are not necessarily indicative of the results to be expected for the full year ending December 31, 2018, or for any other future year or interim period. The accompanying financial statements should be read in conjunction with the audited financial statements and the related notes thereto included in the Company's Annual Report on Form 10-K for the year ended December 31, 2017, filed with the SEC on March 14, 2018.

2.3 Use of estimates

The preparation of the financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements and reported amounts of revenues and expenses during the reporting periods. Actual results could differ from those estimates.

2.4 Accounting policies

The principal accounting policies applied in the preparation of these unaudited consolidated financial statements are described in the Company's audited financial statements as of and for the year ended December 31, 2017, and the notes thereto, which are included in the Company's Annual Report on Form 10-K for the year ended December 31, 2017, filed with the SEC on March 14, 2018. There have been no material changes in the Company's significant accounting policies during the six months ended June 30, 2018, other than the recent adoption of accounting pronouncements discussed below and changing the description of the line item "other non-current assets" to "restricted cash" in the unaudited consolidated balance sheets.

2.5 Recent accounting pronouncements

Recently Adopted Accounting Pronouncements

Effective January 1, 2018 the Company adopted new revenue recognition policies in accordance with ASC 606. The new revenue recognition policies replace the existing policies in accordance with ASC 605. The Company elected to implement ASC 606 by applying it to active collaboration arrangements as of January 1, 2018 and to record a cumulative adjustment of revenue previously recognized to the accumulated loss as of December 31, 2017. The impact of implementing ASC 606 is summarized below:

- Recognized $2.1 million and $4.6 million of license revenue during the three and six months ended June 30, 2018, respectively related to the collaboration with BMS compared to $1.1 million and $2.2 million, respectively, that would have been recognized in accordance with the previous revenue recognition policies;
- Continued to present revenue recognized during the three and six months ended June 30, 2017, in accordance with the previous revenue recognition policies;
- Decreased the accumulated loss by $24.9 million as of January 1, 2018 and decreased deferred revenue as of the same date by $24.9 million.

In accordance with the previous revenue recognition policies the Company had concluded that the BMS collaboration agreement consisted of three performance obligations, (i) technology (license and target selections), know-how and manufacturing in the field of gene therapy and development and active contribution to the development through the joint steering committee participations, (ii) provision of employees, goods and services for research, and (iii) clinical and commercial manufacturing. The Company determined that these three performance obligations are substantially identical with the performance obligations in accordance with its new revenue recognition policies:

(i) Providing access to its technology and know-how in the field of gene therapy as well as actively contributing to the target selection, the collaboration as a whole, the development during the target selection, the pre-clinical and the clinical phase through participating in joint steering committee and other governing bodies ("License Revenue");

(ii) Providing pre-clinical research activities ("Collaboration Revenue"); and

(iii) Providing clinical and commercial manufacturing services for products ("Manufacturing Revenue").

License Revenue

The Company previously recognized License Revenue over the expected performance period on a straight-line basis commencing on May 21, 2015. The Company now recognizes License Revenue over the expected performance period based on its progress toward the completion of its services (see note 4 for a detailed discussion).

Collaboration and Manufacturing Revenue

The adoption of the new revenue recognition policies did not materially impact the recognition of Collaboration or Manufacturing Revenue.

ASU 2017-09: Compensation (topic 718)- scope of modification accounting

In May 2017, the FASB issued ASU 2017-09, Compensation-stock compensation (topic 718) -- scope of modification accounting ("ASU 2017-09"), which provides clarity regarding the applicability of modification accounting in relation to share-based payment awards. Under the new guidance, modification accounting is required only if the fair value, the vesting conditions, or the classification of the award (as equity or liability) changes as a result of the change in terms or conditions. The standard became effective on January 1, 2018 and needs to be applied prospectively. Application of ASU 2017-09 did not have a material impact on the Company's consolidated financial statements in the three or six month period ended June 30, 2018.

ASU 2016-05: Derivatives and Hedging: Effect of Derivative Contract Novations on Existing Hedge Accounting Relationships

In March 2016, the FASB issued ASU 2016-05, Derivatives and Hedging: Effect of Derivative Contract Novations on Existing Hedge Accounting Relationships ("ASU 2016-05") and ASU 2016-06, Derivatives and Hedging: Contingent Put and Call Options in Debt Instruments. Both ASUs address issues regarding hedge accounting. Application of the standard was effective on January 1, 2018 and did not have a material impact on the Company's consolidated financial statements in the three or six month period ended June 30, 2018.

Recent Accounting Pronouncements Not Yet Effective

There have been no new accounting pronouncements or changes to accounting pronouncements during the six months ended June 30, 2018, as compared to the recent accounting pronouncements described in Note 2.3.23 of the Company's Annual Report on Form 10-K for the year ended December 31, 2017, which could be expected to materially impact the Company's unaudited condensed consolidated financial statements except the one discussed below:

In February 2016, the FASB issued ASU 2016-02, Leases (Topic 842). Under the new guidance, lessees will be required to recognize the assets and liabilities that arise from operating leases. A lessee should recognize in the statement of financial position a liability to make lease payments (the lease liability) and a right-of-use asset representing its right to use the underlying asset for the lease term. For leases with a term of 12 months or less, a lessee is permitted to make an accounting policy election by class of underlying asset not to recognize lease assets and lease liabilities. Lessees and lessors are required to recognize and measure leases at the beginning of the earliest period presented using a modified retrospective approach. ASU 2016-02 will be effective for the Company beginning in the first quarter of 2019 and early application is permitted. The Company does expect ASU 2016-02 to have a material impact on its consolidated financial statements, primarily from recognition of a right-of-use asset and lease liability in the balance sheet and a shift of cash outflows from operating activities to financing activities.

3 Fair value measurement

The Company measures certain assets and liabilities at fair value, either upon initial recognition or for subsequent accounting or reporting. U.S. GAAP, requires disclosure of methodologies used in determining the reported fair values, and establishes a hierarchy of inputs used when available. The three levels of the fair value hierarchy are described below:

- Level 1 - Valuations based on unadjusted quoted prices in active markets for identical assets or liabilities that the Company can access at the measurement date.
- Level 2 - Valuations based on quoted prices for similar assets or liabilities in markets that are not active or models for which the inputs are observable, either directly or indirectly.
- Level 3 - Valuations that require inputs that reflect the Company's own assumptions that are both significant to the fair value measurement and are unobservable.

To the extent that valuation is based on models or inputs that are less observable or unobservable in the market, the determination of fair value requires more judgment. Accordingly, the degree of judgment exercised by the Company in determining fair value is greatest for instruments categorized as Level 3. A financial instrument's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement.

Items measured at fair value on a recurring basis include financial instruments and contingent consideration. The carrying amount of cash and cash equivalents, accrued income from related parties, prepaid expenses, other assets, accounts payable, accrued expenses and other current liabilities reflected in the consolidated balance sheets approximate their fair values due to their short-term maturities.

The following table sets forth the Company's assets and liabilities that are required to be measured at fair value on a recurring basis as of June 30, 2018, and December 31, 2017:

	Quoted prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Total	Classification in consolidated balance sheets
			in thousands		
At December 31, 2017					
Assets:					
Cash, cash equivalents and restricted cash	$ 161,851	$ —	$ —	$ 161,851	
Total assets	161,851	—	—	161,851	
Liabilities:					
Derivative financial instruments - debt	—	—	337	337	Accrued expenses and other current liabilities
Derivative financial instruments - related party	—	—	1,298	1,298	
Contingent consideration	—	—	3,964	3,964	
Total liabilities	$ —	$ —	$ 5,599	$ 5,599	
At June 30, 2018					
Assets:					
Cash, cash equivalents and restricted cash	$ 261,638	$ —	$ —	$ 261,638	
Total assets	261,638	—	—	261,638	
Liabilities:					
Derivative financial instruments - debt	—	—	916	916	Accrued expenses and other current liabilities
Derivative financial instruments - related party	—	—	1,309	1,309	
Contingent consideration	—	—	3,785	3,785	
Total liabilities	$ —	$ —	$ 6,010	$ 6,010	

Changes in Level 3 items during the six months ended June 30, 2018, are as follows

	Contingent consideration	Derivative financial instruments	Total
		in thousands	
Balance at December 31, 2017	**$ 3,964**	**$ 1,635**	**$ 5,599**
(Gains) / losses recognized in profit or loss	(81)	598	517
Currency translation effects	(98)	(8)	(106)
Balance at June 30, 2018	**$ 3,785**	**$ 2,225**	**$ 6,010**

Contingent consideration

In connection with the Company's acquisition of InoCard GmbH ("InoCard") in 2014, the Company recorded contingent consideration related to amounts potentially payable to InoCard's former shareholders. One half of any future milestone can be settled in the form of Company ordinary shares. The amounts payable in accordance with the sale and purchase agreement (as amended in August 2017) are contingent upon realization of the following milestones:

- Early candidate nomination of product by third party;
- Acceptance of investigational new drug application by the United States Food and Drug Administration or an equivalent filing in defined Western European countries or Japan;
- Completion of dosing of all patients in the first clinical study; and
- Full proof of concept of the product in humans after finalization of the first clinical study.

The valuation of the contingent liability is based on significant inputs not observable in the market such as the probability of success ("POS") of achieving certain research milestones (estimated as probable for the first three milestones as of the balance sheet date), the time at which the research milestones are expected to be achieved (ranging from 2018 to 2022), as well as the discount rate applied, which represents a Level 3 measurement. Milestones are discounted using the Company's weighted average rate of capital of 12% (December 31, 2017: 12%).

Varying the timing of the milestones, the discount rate and the POS of unobservable inputs results in the following fair value changes:

	June 30, 2018
	in thousands
Change in fair value	
Moving out of all milestones by 6 months	$ (202)
Increasing the POS for the first milestone by 20%	1,152
Decreasing the POS for the first milestone by 20%	(1,152)
Reducing the discount rate from 12.0% to 2.0%	1,272
Increasing the discount rate from 12.0% to 22.0%	(638)

Derivative financial instruments

The Company issued derivative financial instruments related to its collaboration with Bristol-Meyers Squibb Company ("BMS") and in relation to the issuance of the Hercules Technology Growth Corp. ("Hercules") loan facility. The fair value of these derivative financial instruments as of June 30, 2018, was $2.2 million (December 31, 2017: $1.6 million), and these derivative financial instruments are described in more detail below.

BMS collaboration

On April 6, 2015, the Company entered into several agreements with BMS (the "BMS Agreements"). Pursuant to the terms of the BMS Agreements the Company granted BMS two warrants:

- A warrant allowing BMS to purchase a specific number of uniQure ordinary shares such that its ownership will equal 14.9% immediately after such purchase. The warrant can be exercised on the later of (i) the date on which the Company receives from BMS the Target Designation Fees (as defined in the collaboration agreements) associated with the first six New Targets (as defined in the collaboration agreements); and (ii) the date on which BMS designates the sixth New Target.

- A warrant allowing BMS to purchase a specific number of uniQure ordinary shares such that its ownership will equal 19.9% immediately after such purchase. The warrant can be exercised on the later of (i) the date on which uniQure receives from BMS the Target Designation Fees associated with the first nine New Targets; and (ii) the date on which BMS designates the ninth New Target.

Pursuant to the terms of the BMS Agreements the exercise price, in respect of each warrant, is equal to the greater of (i) the product of (A) $33.84, multiplied by (B) a compounded annual growth rate of 10% and (ii) the product of (A) 1.10 multiplied by (B) the VWAP for the 20 trading days ending on the date that is five trading days prior to the date of a notice of exercise delivered by BMS.

In March 2018, the Company reduced the probability of the warrants being exercised resulting in a reduction of the warrants fair value by $1.1 million.

The Company conducted a sensitivity analysis to assess the impact on changes in assumptions on the fair value. Specifically, the Company examined the impact on the fair market of the warrants by increasing the volatility by 10% to 85%. A further sensitivity analysis was performed assuming the exercise date of the warrants would occur one year later than what was assumed in the initial valuation. The table below illustrates the impact on the fair market valuation associated with these changes in assumptions as of June 30, 2018.

	Total warrants
	in thousands
Base case	$ 1,309
Increase volatility by 10% to 85%	327
Extend exercise dates by one year	38

Hercules loan facility

On June 14, 2013, the Company entered into a venture debt loan facility with (the "Original Facility") with Hercules Technology Growth Capital, Inc. ("Hercules") pursuant to a Loan and Security Agreement (the "Loan Agreement") which included a warrant. The warrant was not closely related to the host contract and was accounted for separately as a derivative financial liability measured at fair value though profit or loss. The warrant included in the Original Facility remained in place following the 2014 and 2016 amendments of the loan.

There were no significant changes in the sensitivity of the fair value from (un)observable inputs as of June 30, 2018, compared to December 31, 2017.

4 Collaboration arrangements and concentration of credit risk

In the three and six months ended June 30, 2018, the Company generated all collaboration and license revenues from its Collaboration and License Agreement with BMS.

The Company and Chiesi Farmaceutici S.p.A. ("Chiesi") terminated their collaboration in 2017.

Services to BMS are rendered through the Dutch operating entity. Total collaboration and license revenue generated from these partners are as follows:

	Three months ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
	in thousands			
Bristol Myers Squibb	$ 3,050	$ 2,110	$ 6,528	$ 3,617
Chiesi Farmaceutici S.p.A (terminated in 2017)	—	2,832	—	4,646
Total	**$ 3,050**	**$ 4,942**	**$ 6,528**	$ **8,263**

Amounts owed by BMS in relation to the collaboration services are as follows:

	June 30, 2018	December 31, 2017
	in thousands	
Bristol Myers Squibb	$ 1,037	$ 1,586

BMS collaboration

In May 2015, the Company closed a Collaboration and License Agreement with BMS (the "BMS Collaboration Agreement") that provides exclusive access to the Company's gene therapy technology platform for multiple targets in cardiovascular (and other target-specific) diseases. The collaboration included the Company's proprietary gene therapy program for congestive heart failure which aims to restore the heart's ability to synthesize AMT-126, a calcium sensor and master regulator of heart function, and thereby improve clinical outcomes for patients with reduced ejection fraction. Beyond cardiovascular diseases, the agreement also included the potential for a target exclusive collaboration in other disease areas. In total, the companies may collaborate on ten targets, including AMT-126.

The Company is conducting the discovery, non-clinical, analytical and process development activities and is responsible for manufacturing of clinical and commercial supplies using the Company's vector technologies and industrial, proprietary insect-cell based manufacturing platform. BMS reimburses the Company for all its research and development efforts in support of the Collaboration, and will lead the clinical development and regulatory activities across all programs. BMS will also be solely responsible for commercialization of all products from the collaboration.

The Company evaluated the BMS Collaboration Agreement and determined that its performance obligations according with its new revenue recognition adopted on January 1, 2018, are as follows:

(i) Providing access to its technology and know-how in the field of gene therapy as well as actively contributing to the target selection, the collaboration as a whole, the development during the target selection, the pre-clinical and the clinical phase through participating in joint steering committee and other governing bodies (“License Revenue”);

(ii) Providing pre-clinical research activities (“Collaboration Revenue”); and

(iii) Providing clinical and commercial manufacturing services for products (“Manufacturing Revenue”).

License revenue – BMS

The Company recognized $2.1 million and $4.6 million of license revenue for the three and six months ended June 30, 2018, respectively, compared to $1.0 million and $1.9 million during the same periods in 2017 in relation to a $60.1 million upfront payment recorded on May 21, 2015, as well as $15.0 million received in relation to the designation of the second, third and fourth collaboration target in August 2015 (together “Consideration”).

The Company also is entitled to an aggregate $16.5 million in target designation payments upon the selection of the fifth to tenth collaboration target. The Company will also be eligible to receive research, development and regulatory milestone payments of up to $254.0 million for AMT-126 and up to $217.0 million for each of the other selected targets, if milestones are achieved. The Company will include the variable consideration related to the selection of the fifth to tenth collaboration target, or any of the milestones, in the transaction price once it is considered probable that including these payments in the transaction price would not result in the reversal of cumulative revenue recognized. The Company will recognize significant amounts of License Revenue for services performed in prior periods if and when the Company considers this probable. Due to the significant uncertainty surrounding the development of gene-therapy product candidates and the dependence on BMS’s performance and decisions the Company does not currently consider this probable.

Additionally, the Company is eligible to receive net sales-based milestone payments and tiered high single to low double-digit royalties on product sales. The royalty term is determined on a licensed-product-by-licensed-product and country-by-country basis and begins on the first commercial sale of a licensed product in a country and ends on the expiration of the last to expire of specified patents or regulatory exclusivity covering such licensed product in such country or, with a customary royalty reduction, ten years after the first commercial sale if there is no such exclusivity. These revenues will be recognized when earned.

Under the previous revenue standard, the Company recognized License Revenue over the expected performance period on a straight-line basis commencing on May 21, 2015. In accordance with the new revenue recognition standards, the Company recognizes License Revenue over the expected performance period based on its measure of progress towards the completion of certain activities related to its services. The Company determines such progress by comparing activities performed at the end of each reporting period with total activities expected to be performed. The Company estimates total expected activities using a number of unobservable inputs, such as the probability of BMS designating additional targets, the probability of successfully completing each phase and estimated time required to provide services during the various development stages. If available, the Company uses product candidate-specific research and development plans. Alternatively, the Company assumes that completion of the pre-clinical phase requires an average of four years and that clinical development and commercial launch on average require 8.5 years.

The estimation of total services at the end of each reporting period involves considerable judgement. The estimated number of product candidates that BMS will pursue significantly impacts the amount of License Revenue the Company recognizes. For example, if the Company would increase the probability of all additional targets being designated by 10% then the revenue for the six months ended June 30, 2018 would have decreased by approximately $1.3 million to $3.3 million, as the Company would be required to render more services in relation to the Consideration received.

Collaboration Revenue – BMS

The Company provides research and development services to BMS. Collaboration revenue related to these contracted services is recognized when earned.

The Company generated $0.9 million and $2.0 million of collaboration revenue during the three and six months ended June 30, 2018, respectively, compared to $1.1 million and $1.7 million during the same periods in 2017.

Manufacturing Revenue – BMS

BMS and the Company also entered into Master Clinical Supply Agreement in April 2017 for the Company to supply gene therapy products during the clinical as well as into a binding term sheet to supply gene therapy products during the commercial phase to BMS. Revenues from product sales will be recognized when earned. To date the Company has not supplied any clinical and commercial gene therapy product to BMS.

5 Property, plant and equipment

The following table presents the Company's property, plant and equipment as of June 30, 2018, and December 31, 2017:

	June 30, 2018	December 31, 2017
	in thousands	
Leasehold improvements	$ 32,428	$ 32,297
Laboratory equipment	15,620	15,976
Office equipment	2,757	2,304
Construction-in-progress	958	745
Total property, plant, and equipment	51,763	51,322
Less accumulated depreciation	(19,637)	(17,041)
Property, plant and equipment, net	**$ 32,126**	**$ 34,281**

Total depreciation expense was $1.5 million and $3.0 million during the three and six months ended June 30, 2018, respectively, compared to $1.7 million and $3.4 million during the same periods in 2017.

6 Intangible assets

The following table presents the Company's acquired licenses:

	June 30, 2018	December 31, 2017
	in thousands	
Licenses	$ 7,426	$ 9,551
Less accumulated amortization and impairment	(2,143)	(5,575)
Licenses, net	**$ 5,283**	**$ 3,976**
Acquired research and development	5,450	5,594
Intangible assets, net	**$ 10,733**	**$ 9,570**

Amortization expense was $0.1 million and $0.2 million for the three and six months ended June 30, 2018, respectively, compared to $0.7 million and $0.8 million during the same periods in 2017.

During the six months ended June 30, 2018, the Company capitalized $1.6 million of expenditures related to contractual milestone payments under existing license agreements as well as costs incurred in relation to entering into new license agreements. During the same period the Company disposed a number of fully amortized, expired licenses.

The Company acquired research and development as part of its acquisition of InoCard in July 2014. The carrying amount as at June 30, 2018 is $5.5 million (December 31, 2017: $5.6 million).

7 Accrued expenses and other current liabilities, other non-current expenses

Accrued expenses and other current liabilities include the following items:

	June 30, 2018	December 31, 2017
	in thousands	
Accruals for services provided by vendors-not yet billed	$ 3,365	$ 2,348
Personnel related accruals and liabilities	4,694	5,646
Other current liabilities	861	844
Total	**$ 8,920**	**$ 8,838**

According to the previously reported Glybera Termination Agreement the Company is responsible for terminating the Phase IV post-approval study. As of June 30, 2018, the accrual related to these obligations was $0.4 million (including a non-current portion of $0.2 million) compared to $0.6 million ($0.3 million non-current) as of December 31, 2017.

Restructuring plan

In November 2016, the Company announced a plan to restructure its activities resulting from a company-wide strategic review with the aim of refocusing its pipeline, consolidating its manufacturing capabilities into its Lexington, Massachusetts site, reducing operating costs and enhancing overall execution. At various dates between December 2016 and February 2018, the Company entered into termination agreements with certain employees. Depending on the circumstances surrounding an employee's departure, the Company accrued the related termination costs over the service period or at the date of communication to the employee. Changes in accrued termination benefits (included in research and development expenses) for the six months ended June 30, 2018, are detailed in the table below.

	Accrued termination benefits
	in thousands
Balance at December 31, 2017	**$ 625**
Accrued through operations	96
Payments	(644)
Currency translation effects	3
Balance at June 30, 2018	**$ 80**

8 Long-term debt

On June 14, 2013, the Company entered into a venture debt loan facility with Hercules, which was amended and restated on June 26, 2014, and again on May 6, 2016 ("2016 Amended Facility"). The 2016 Amended Facility extended the maturity date from June 30, 2018, to May 1, 2020. As at June 30, 2018, and December 31, 2017, $20.0 million was outstanding. The interest rate is adjustable and is the greater of (i) 8.25% or (ii) 8.25% plus the prime rate less 5.25%. Under the 2016 Amended Facility, the interest rate was initially 8.25% per annum with a back-end fee of 4.85% and a facility fee of 0.75% of the outstanding loan amounts. The interest-only payment period was extended by 12 months to November 30, 2018 as a result of raising more than $50.0 million in equity financing in October 2017.

The amortized cost of the 2016 Amended Facility was $20.8 million as June 30, 2018, compared to $20.8 million as of December 31, 2017, and is recorded net of discount and debt issuance costs. The foreign currency loss on the loan in the three and six months ended June 30, 2018, was $1.1 million and $0.6 million, respectively, compared to a foreign currency gain of $1.3 million and $1.6 million during the same periods in 2017. The fair value of the loan approximates its carrying amount.

Interest expense associated with the 2016 Amended Facility during the three and six months ended June 30, 2018 was $0.5 million and $0.9 million, respectively, compared to $0.5 million and $1.0 million during the same periods in 2017.

As a covenant in the 2016 Amended Facility, the Company has periodic reporting requirements and is required to keep a minimum cash balance deposited in bank accounts in the United States, equivalent to the lesser of the outstanding balance of principal due and 50% of worldwide cash reserves. This restriction on the cash reserves only relates to the deposit location of the cash reserves, and such cash reserves can be used at the discretion of the Company. In combination with other covenants, the 2016 Amended Facility restricts the Company's ability to, among other things, incur future indebtedness and obtain additional debt financing, to make investments in securities or in other companies, to transfer assets, to perform certain corporate changes, to make loans to employees, officers and directors, and to make dividend payments and other distributions. The Company secured the facilities by pledging the shares in its subsidiaries, substantially all its receivables, moveable assets as well as the equipment, fixtures, inventory and cash of uniQure Inc.

9 Shareholders' Equity

On May 7, 2018, the Company completed a follow-on public offering of 5,175,000 ordinary shares at $28.50 per ordinary share, resulting in gross proceeds to the Company of approximately $147.5 million. The net proceeds to the Company from this offering were approximately $138.5 million, after deducting underwriting discounts and commissions and other estimated offering expenses payable by the Company. The Company capitalized $0.2 million of expenses related to this offering (which were deducted from additional paid-in capital in the accompanying consolidated balance sheet).

On May 2, 2018, the Company and Leerink mutually terminated with immediate effect the September 2017 Sales Agreement with Leerink for an at-the-market offering program ("ATM program"). The ATM program allowed for the offer and sale of up to 5 million ordinary shares at prevailing market prices from time to time. The Company did not offer or sell any ordinary shares under the ATM program.

10 Share-based compensation

Share-based compensation expense recognized by classification included in the consolidated statements of operations and comprehensive loss was as follows:

	Three months ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
	in thousands			
Research and development	$ 993	$ 794	$ 1,799	$ 1,481
Selling, general and administrative	1,212	1,132	2,933	2,050
Total	**$ 2,205**	**$ 1,926**	**$ 4,732**	**$ 3,531**

Share-based compensation expense recognized by award type was as follows:

	Three months ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
	in thousands			
Award type				
Share options	$ 1,096	$ 883	$ 2,155	$ 1,709
Restricted share units ("RSUs")	540	716	1,286	1,232
Performance share units ("PSUs")	569	327	1,291	590
Total	**$ 2,205**	**$ 1,926**	**$ 4,732**	**$ 3,531**

As of June 30, 2018, the unrecognized compensation costs related to unvested awards under the various share-based compensation plans were:

Award type	Unrecognized compensation costs	Weighted-average remaining period for recognition
	in thousands	in years
Share options	$ 12,237	3.18
Restricted share units	4,683	2.00
Performance share units	6,708	2.10
Total	**$ 23,628**	**2.64**

The Company satisfies the exercise of share options and vesting of RSUs and PSUs through newly issued shares.

The Company's share-based compensation plans include the 2014 Amended and Restated Share Option Plan (the "2014 Plan") and inducement grants under Rule 5653(c)(4) of the NASDAQ Global Select Market with terms similar to the 2014 Plan. At the annual general meeting of shareholders in June 2018, the Company's shareholders approved amendments of the 2014 Plan, increasing the shares authorized for issuance by 3,000,0000 to a total of 8,601,471. The Company previously had a 2012 Equity Incentive Plan ("2012 Plan"). As of June 30, 2018, 33,467 fully vested share options are outstanding (December 31, 2017: 72,818) under the 2012 Plan.

Share options

The following table summarizes option activity for the six months ended June 30, 2018:

	Options	Weighted average exercise price
Outstanding at December 31, 2017	**2,456,433**	**$ 10.06**
Granted	708,137	$ 22.24
Forfeited	(227,175)	$ 12.52
Expired	(10,572)	$ 13.29
Exercised	(232,082)	$ 11.63
Outstanding at June 30, 2018	**2,694,741**	**$ 12.91**
Fully vested and exercisable at June 30, 2018	948,888	$ 11.38
Outstanding and expected to vest at June 30, 2018	1,745,853	$ 13.74
Total weighted average grant date fair value of options issued during the period (in $ million)		$ 13.1
Granted to directors and officers during the period (options, $ in million)	241,961	$ 2.9
Proceeds from option sales (in $ million)		$ 3.0

Share options are granted on the date of grant and, except for certain grants made to non-executive directors, vest over a period of four years, the first 25% vests after one year from the initial grant date and the remainder vests in equal quarterly installments, straight-line over years two, three and four. Any options that vest must be exercised by the tenth anniversary of the initial grant date.

The fair value of each option issued was estimated at the date of grant using the Hull & White option pricing model with the following weighted-average assumptions:

Assumptions	Three months ended June 30, 2018	Three months ended June 30, 2017	Six months ended June 30, 2018	Six months ended June 30, 2017
Expected volatility	75%	75%	75%	75%
Expected terms (in years)	10 years	10 years	10 years	10 years
Risk free interest rate	2.99% - 3.07%	2.43%	2.77% - 3.07%	2.43% - 2.81%
Expected dividends	0%	0%	0%	0%

Restricted Share Units (RSUs)

The following table summarizes the RSUs activity for the six months ended June 30, 2018:

	RSU	
	Number of shares	Weighted average grant-date fair value
Non-vested at December 31, 2017	**683,663**	**$ 6.38**
Granted	212,599	$ 19.41
Vested	(276,833)	$ 5.99
Forfeited	(53,854)	$ 11.08
Non-vested at June 30, 2018	**565,575**	**$ 11.03**
Total fair value of RSUs awarded during the period (in million)		$ 4.1
Granted to directors and officers during the period (shares, $ in million)	98,808	$ 1.9

RSUs vest over one to three years. RSUs granted in March 2017 to the Company's Chief Executive Officer will vest equally over two years from the date of grant and RSUs granted to non-executive directors will vest one year from the date of grant.

Performance Share Units (PSUs)

The following table summarizes the PSUs activity for the six months ended June 30, 2018:

	PSU	
	Number of shares	Weighted average grant-date fair value
Non-vested at December 31, 2017	**511,074**	**$ 16.73**
Granted	—	
Vested	(68,115)	$ 15.79
Forfeited	(64,681)	$ 18.24
Non-vested at June 30, 2018	**378,278**	**$ 16.74**
PSUs awarded but not yet earned	117,197	$ 23.50
Total non-vested and discretionary PSUs	495,475	$ 18.34
Total weighted average grant date fair value of PSUs awarded during the period (in million)		$ 2.8

In January 2018, the Company awarded PSUs to its executives and other members of senior management. These PSUs are earned based on the Board's assessment of the level of achievement of agreed upon performance targets through December 31, 2018.

11 Income taxes

Deferred tax assets and deferred tax liabilities are recognized based on the expected future tax consequences of temporary differences between the financial statement carrying amounts and the income tax basis of assets and liabilities, using current statutory rates. A valuation allowance is recorded against deferred tax assets if it is more likely than not that some or all the deferred tax assets will not be realized. Due to the uncertainty surrounding the realization of the favorable tax attributes in future tax returns, the Company has recorded a full valuation allowance against the Company's otherwise recognizable net deferred tax assets.

12 Basic and diluted earnings per share

Diluted earnings per share are calculated by adjusting the weighted average number of ordinary shares outstanding, assuming conversion of all potentially dilutive ordinary shares. As the Company has incurred a loss, all potentially dilutive ordinary shares would have an antidilutive effect, if converted, and thus have been excluded from the computation of loss per share.

The potentially dilutive ordinary shares are summarized below:

	June 30,	
	2018	2017
	ordinary shares	
BMS warrants	7,530,000	5,282,647
Stock options under 2014 Plan and Nasdaq inducement rules	2,694,741	2,627,863
Non-vested RSUs and earned PSUs	943,853	742,202
Stock options under 2012 Plan	33,467	196,702
Warrants	37,175	37,175
Total potential dilutive ordinary shares	**11,239,236**	**8,886,589**

13 Leases

The Company leases various office space and laboratory space under the following operating lease agreements:

Lexington, Massachusetts / United States

In July 2013, uniQure entered into a lease for a facility in Lexington, Massachusetts, United States. The term of the lease commenced in November 2013 and was set for 10 years and is non-cancellable. The lease for this facility terminates in 2024, and subject to the provisions of the lease, may be renewed for two subsequent five-year terms. The lease provides for annual minimum increases in rent, based on a consumer price index.

Amsterdam / The Netherlands

In March 2016, the Company entered into a 16-year lease for a facility in Amsterdam, the Netherlands, and amended this agreement in June 2016. The Company consolidated its three Amsterdam sites into the new site at the end of May 2017. The lease for this facility terminates in 2032, with an option to extend in increments of five-year periods. The lease contract provides for annual minimum increases in rent based on a consumer price index.

On December 1, 2017, the Company entered into an agreement to sub-lease three of the seven floors of its Amsterdam facility for a ten-year term ending on December 31, 2027, with an option for the sub-lessee to extend until December 31, 2031. The minimum rentals to be received through December 31, 2027 amount to $10.2 million as of June 30, 2018.

As of June 30, 2018, aggregate minimum lease payments for the calendar years and lease incentives received were as follows:

	Lexington	Amsterdam	Total
		in thousands	
2018 (six months remaining)	$ 934	$ 985	$ 1,919
2019	1,903	1,971	3,874
2020	1,956	1,971	3,927
2021	2,009	1,971	3,980
2022 and beyond	4,890	20,029	24,919
Total minimum lease payments	**$ 11,692**	**$ 26,927**	**$ 38,619**
Deferred rent related to lease incentives-non current	$ 4,440	$ 4,024	$ 8,464
Deferred rent related to lease incentives-current	764	318	1,082

Rent expense is calculated on a straight-line basis over the term of the leases and considers the lease incentives received. Aggregate rent expense was as follows:

	Three months ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
	in thousands			
Rent expense-Lexington	$ 278	$ 274	$ 556	$ 552
Rent expense-Amsterdam	422	777	851	1,525
Total rent expense	**$ 700**	**$ 1,051**	**$ 1,407**	**$ 2,077**

14 Subsequent event

The Company appointed Robert Gut M.D., Ph.D. as Chief Medical Officer effective August 20, 2018. Dr. Gut has served as a non-executive member of the Company's Board of Directors since June 2018 and the Company expects that Dr. Gut will be appointed as an executive director of the Board pursuant to Dutch law. Contingent on the negotiation and execution of a final employment agreement, the Board approved an annual base salary for Dr. Gut of $425,000, eligibility for an annual bonus of 40% of his base salary, and an initial stock grant of 35,000 restricted stock units and an option to purchase 70,000 ordinary shares of the Company. Dr. Gut has nearly 20 years of experience in the biopharmaceutical industry leading clinical development and medical affairs activities in hematology and other therapeutic areas and will succeed Steven Zelenkofske, who recently resigned effective August 20, 2018 due to personal reasons.

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

The following Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") is intended to help the reader understand our results of operations and financial condition. This MD&A is provided as a supplement to, and should be read in conjunction with, our unaudited condensed consolidated financial statements and the accompanying notes thereto and other disclosures included in this Quarterly Report on Form 10-Q, including the disclosures under Part II, Item 1A "Risk Factors", and our audited financial information and the notes thereto included in our Annual Report on Form 10-K for the year ended December 31, 2017, which was filed with the Securities and Exchange Commission (the "SEC"), on March 14, 2018. Our unaudited condensed consolidated financial statements have been prepared in accordance with generally accepted accounting principles in the US ("U.S. GAAP") and unless otherwise indicated are presented in U.S. dollars.

Overview

We are a leader in the field of gene therapy, seeking to develop single treatments with potentially curative results for patients suffering from genetic and other devastating diseases. We are advancing a focused pipeline of innovative gene therapies that have been developed both internally and through partnerships, such as our collaboration with Bristol Myers-Squibb focused on cardiovascular diseases. We have established clinical proof-of-concept in our lead indication, hemophilia B, and achieved preclinical proof-of-concept in Huntington's disease. We believe our validated technology platform and manufacturing capabilities provide us distinct competitive advantages, including the potential to reduce development risk, cost and time to market. We produce our adeno-associated virus ("AAV") -based gene therapies in our own facilities with a proprietary, commercial-scale, current good manufacturing practices ("cGMP")-compliant, manufacturing process. We believe our Lexington, Massachusetts-based facility is one of the world's leading, most versatile, gene therapy manufacturing facilities.

Business Developments

Below is a summary of our recent significant business developments:

Hemophilia B program

On October 19, 2017, we announced that, following multi-disciplinary meetings with the U.S. Food and Drug Administration ("FDA") and the European Medicines Agency ("EMA"), we plan to expeditiously advance AMT-061, which combines an AAV5 vector with the Factor IX ("FIX") Padua mutant, into a pivotal study in 2018 for patients with severe and moderately severe hemophilia B.

During the first months of 2018, we completed the full comparability analysis for AMT-061 and submitted an Investigational New Drug ("IND") amendment to the FDA supporting our planned AMT-061 dose-confirmation study. Extensive data including comparability, manufacturing capability and non-clinical safety and bioequivalence were included in the submission. We also completed the manufacturing and full quality release of product for use in the dose-confirmation study. The product was produced in our state-of-the-art manufacturing facility in Lexington, Massachusetts.

In May 2018, we presented data at the American Society of Gene & Cell Therapy Annual Meeting in Chicago showing successful liver transduction with the AAV5 vector in both non-human primates and humans with pre-existing anti-AAV5 neutralizing antibodies ("NABs"). In a study re-analyzing pre-treatment sera samples of the ten patients in the Phase I/II clinical trial of AMT-060, no relationship was detected between the presence of pre-treatment anti-AAV5 NABs and clinical outcomes of AMT-060 in patients with hemophilia B.

In June 2018, we enrolled the first patient in the Phase III pivotal study of AMT-061. The Phase III pivotal trial is a multinational, multi-center, open-label, single-arm study to evaluate the safety and efficacy of AMT-061. Approximately 50 adult hemophilia B patients classified as severe or moderately severe will be enrolled in a six-month observational period during which time they will continue to use their current standard of care to establish a baseline control. After the six-month lead-in period, patients will receive a single intravenous administration of AMT-061. We have initiated cGMP production of clinical material expected to be used in the pivotal trial.

In June 2018 we initiated recruitment for our Phase IIb dose confirmation study of AMT-061. The dose-confirmation study, which is expected to include approximately three patients, will be conducted concurrently with the lead-in phase of the pivotal study. The first patient has now been consented and successfully screened for study and is expected to be treated shortly. Patients will receive a single dose of $2x10^{13}$ vc/kg and be evaluated for a period of approximately six to eight weeks to determine FIX activity and confirm the dose of AMT-061 for the pivotal study.

We believe that AMT-061 continues to leverage AAV5's favorable tolerability and immunogenicity results. AAV5-based gene therapies have been demonstrated to be generally safe and well-tolerated in a multitude of clinical trials, including three uniQure trials conducted in 22 patients in hemophilia B and other indications. In contrast to data reported using other AAV capsids delivered systemically via IV infusion, no patient treated in clinical trials with our AAV5 gene therapies has experienced any confirmed, T-cell-mediated immune response to the capsid or material loss of FIX activity. An independent clinical trial has demonstrated that AAV5 has the lowest prevalence of preexisting neutralizing antibodies (NAb) compared to other AAV vectors. Data from the Phase I/II study of AMT-060 also demonstrated clinical proof-of-concept in the presence of preexisting NAb to AAV5, suggesting that all, or nearly all hemophilia B patients may be eligible for treatment with AMT-061.

Huntington program (AMT-130)

AMT-130 is our gene therapy candidate targeting Huntington's disease that utilizes an AAV vector carrying an engineered micro-RNA designed to silence the huntingtin gene. AMT-130 has received orphan drug designation from the FDA and Orphan Medicinal Product Designation from the EMA.

In September 2017, we initiated a good laboratory practice ("GLP") safety and toxicology study in non-human primates with AMT-130. The six-month in-life portion of a GLP-safety and toxicology study on AMT-130 in non-human primates has been completed and all study reports are expected to be finalized in the third quarter of 2018. Data from this study will be used in support of an IND application for AMT-130 which is expected to be submitted to the FDA later this year.

In April 2018, we presented an overview of its preclinical data establishing proof-of-concept for AMT-130 at the 2018 American Academy of Neurology Annual Meeting in Los Angeles, California. Data from multiple studies in Huntington's disease animal models across three different species show that a single intraparenchymal administration of AMT-130 into the striatum, resulted in a dose-dependent and sustained reduction of mutant huntingtin protein (mHTT) in both the deep structures of the brain and the cortex. Specifically, we presented data from an ongoing preclinical study in transgenic minipigs, one of the largest Huntington's disease animal models available, demonstrating significant reductions in human mHTT by a median of 68% in the striatum and a median of 47% in the frontal cortex at 6 months after administration of AMT-130.

BMS collaboration

We continue to progress our research collaboration with Bristol-Myers Squibb (BMS), which includes research programs focused on cardiovascular and other diseases. In January 2018, BMS initiated a preclinical study of AMT-126, a gene therapy candidate targeting congestive heart failure, in a diseased minipig model to evaluate its impact on heart function.

Intellectual property

Expanding Padua FIX patents

In 2017, we acquired from Professor Simioni, a renowned hemophilia expert at the University of Padua, Italy. The intellectual property includes U.S. Patent Number 9,245,405, which covers compositions of FIX-Padua nucleic acids and polypeptides (proteins), as well as their therapeutic uses.

On May 29, 2018, the U.S. Patent and Trademark Office ("USPTO") granted us a second patent, U.S. Patent Number 9,982,248, which broadly covers methods of treating coagulopathies (bleeding disorders), including hemophilia B, using AAV-based gene therapy with nucleic acid encoding the hyperactive FIX Padua variant. The FIX Padua variant is a Factor IX protein carrying a leucine at the R338 position, often called the "FIX-Padua" or "Padua mutant".

In addition to the U.S. patent, on February 20, 2018, the Canadian Intellectual Property Office granted Patent Number 2,737,094, which broadly covers FIX-Padua nucleic acids for use in gene therapy and FIX-Padua polypeptides for use in FIX replacement therapy. We are also currently pursuing European patents directed toward therapeutic uses of FIX-Padua nucleic acids and polypeptides.

Expanding Intellectual Property Portfolio in Manufacturing

We continue to strengthen the intellectual property related to our proprietary insect cell-based AAV manufacturing process. In May 2018, the USPTO granted U.S. Patent Number 9,840,694, which includes claims covering nanofiltration to selectively remove potential residual baculovirus from the product. We believe this nanofiltration step is important for product quality and safety and that nanofiltration generally may be required to comply with viral clearance standards established by global regulatory authorities. Related patents were previously granted in Europe, Japan and several other jurisdictions.

The 9,840,694 patent expands our intellectual property portfolio directed to large-scale, highly-reproducible manufacturing of AAV in insect cells using baculovirus vectors. Our portfolio includes multiple important molecular and process-related patents, as well as extensive know-how covering essential production, purification, and processing steps that are necessary for the large-scale insect cell-based manufacturing and for compliance with the regulatory authorities.

Financing

On May 7, 2018, we completed a follow-on public offering of 5,175,000 ordinary shares at $28.50 per ordinary share, resulting in gross proceeds to us of approximately $147.5 million. The net proceeds from this offering were approximately $138.5 million, after deducting underwriting discounts and commissions and other estimated offering expenses. We capitalized $0.2 million of expenses (which are presented as a reduction of additional paid-in capital) related to this offering.

On May 2, 2018, we and Leerink mutually terminated with immediate effect the September 2017 Sales Agreement with Leerink for an at-the-market offering program ("ATM program"). The ATM program allowed for the offer and sale of up to 5 million ordinary shares at prevailing market prices from time to time. We did not offer or sell any ordinary shares under the ATM program.

Organization

On June 13, 2018, our shareholders voted to approve the appointment of Robert Gut, M.D., Ph.D. and David Meek to our Board of Directors. On August 7, 2018, we appointed Robert Gut M.D., Ph.D. Chief Medical Officer effective August 20, 2018. Dr. Gut has served as a non-executive member of our Board of Directors since June 2018 and we expect that Dr. Gut will be appointed as an executive director of the Board pursuant to Dutch law. Contingent on the negotiation and execution of a final employment agreement, the Board approved an annual base salary for Dr. Gut of $425,000 annually, eligibility for an annual bonus of 40% of his base salary, and an initial stock grant of 35,000 restricted stock units and an option to purchase 70,000 ordinary shares of the Company. Dr.Gut has nearly 20 years of experience in the biopharmaceutical industry leading clinical development and medical affairs activities in hematology and other therapeutic areas. He will succeed Steven Zelenkofske, who recently resigned due to personal family reasons.

Financial Overview

Key components of our results of operations include the following:

	Three months ended June 30,		Six months ended June 30,	
	2018	2017	2018	2017
	in thousands			
Total revenues	$ 3,050	$ 4,942	$ 6,528	$ 8,263
Research and development expenses	(18,493)	(16,866)	(35,551)	(33,860)
Selling, general and administrative expenses	(5,896)	(5,410)	(12,197)	(11,768)
Net loss	(20,592)	(21,269)	(39,381)	(41,541)

As of June 30, 2018, and December 31, 2017, we had cash and cash equivalents of $259.2 million and $159.4 million, respectively. We had a net loss of $20.6 million and $39.4 million in the three and six months ended June 30, 2018, respectively compared to $21.3 million and $41.5 million for the same periods in 2017. As of June 30, 2018, and December 31, 2017, we had accumulated deficits of $491.6 million and $475.3 million, respectively. We anticipate that our loss from operations will increase in the future as we:

- Advance AMT-061 into later-stage clinical development;
- Complete our IND-enabling studies for our proprietary Huntington's disease gene therapy program and initiate clinical studies;
- Advance multiple research programs related to gene therapy candidates targeting liver-directed and central nervous system ("CNS") diseases;
- Continue to enhance and optimize our technology platform, including our manufacturing capabilities, next-generation viral vectors and promoters, and other enabling technologies;
- Seek marketing approval for any product candidates that successfully complete clinical trials;
- Acquire or in-license rights to new therapeutic targets or product candidates;

- Maintain, expand and protect our intellectual property portfolio, including in-licensing additional intellectual property rights from third parties; and
- Build-out our clinical, medical and regulatory capabilities in the U.S.

See “Results of Operations” below for a discussion of the detailed components and analysis of the amounts above.

Critical Accounting Policies and Estimates

In preparing our consolidated financial statements in accordance with U.S. GAAP and pursuant to the rules and regulations promulgated by the SEC, our management makes assumptions, judgments and estimates that can have a significant impact on our net income/loss and affect the reported amounts of certain assets, liabilities, revenue and expenses, and related disclosures. On an ongoing basis, we evaluate our estimates and judgments, including those related to the BMS collaboration agreement, share-based payments, contingent consideration, valuation of derivative financial instruments, and research and development expenses. We base our estimates on historical experience, known trends and events and various other factors that are believed 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 clear from other sources. Actual results may differ from these estimates under different assumptions or conditions. In making estimates and judgments, management employs critical accounting policies. With the exception of ASC 606 revenue recognition, there were no material changes to our critical accounting policies as reported in our Annual Report on Form 10-K for the year ended December 31, 2017, which was filed with the SEC on March 14, 2018, during the six months ended June 30, 2018.

Adoption of ASC 606 revenue recognition on January 1, 2018

On January 1, 2018 we adopted new revenue recognition policies in accordance with ASC 606. The new revenue recognition policies replace the existing policies in accordance with ASC 605. We elected to implement ASC 606 by applying it to active collaboration arrangements as of January 1, 2018 and to record a cumulative adjustment of revenue previously recognized to our accumulated loss as of December 31, 2017. The impact of implementing ASC 606 is summarized below:

- Recognized $2.1 million and $4.6 million of license revenue during the three and six months ended June 30, 2018, respectively, related to the collaboration with BMS compared to $1.1 million and $2.2 million that would have been recognized in accordance with the previous revenue recognition policies;
- Continued to present revenue recognized during the three and six months ended June 30, 2017, in accordance with the previous revenue recognition policies;
- Decreased the accumulated loss by $24.9 million as of January 1, 2018 and decreased deferred revenue as of the same date by $24.9 million.

In accordance with the previous revenue recognition policies we had concluded that the BMS collaboration agreement consisted of three performance obligations, (i) technology (license and target selections), know-how and manufacturing in the field of gene therapy and development and active contribution to the development through the joint steering committee participations, (ii) provision of employees, goods and services for research, and (iii) clinical and commercial manufacturing. We determined that these three performance obligations are substantially identical with the performance obligations in accordance with our new revenue recognition policies:

(i) Providing access to our technology and know-how in the field of gene therapy as well as actively contributing to the target selection, the collaboration as a whole, the development during the target selection, the pre-clinical and the clinical phase through participating in joint steering committee and other governing bodies (“License Revenue”);

(ii) Providing pre-clinical research activities (“Collaboration Revenue”); and

(iii) Providing clinical and commercial manufacturing services for products (“Manufacturing Revenue”).

License Revenue

We generate license revenue from a $60.1 million upfront payment recorded on May 21, 2015, as well as $15.0 million received in relation to the designation of the second, third and fourth collaboration target in August 2015. We are also entitled to an aggregate $16.5 million in target designation payments upon the selection of the fifth to tenth collaboration target. We will also be eligible to receive research, development and regulatory milestone payments of up to $254.0 million for AMT-126 and up to $217.0 million for each of the other selected targets, if

milestones are achieved. We will include the variable consideration related to the selection of the fifth to tenth collaboration target, or any of the milestones, in the transaction price once it is considered probable that including these payments in the transaction price would not result in the reversal of cumulative revenue recognized. We might recognize significant amounts of License Revenue for services performed in prior periods if and when we consider this probable. Due to the significant uncertainty surrounding the development of gene-therapy product candidates and the dependence on BMS's performance and decisions we so far did not consider this probable.

Additionally, we are eligible to receive net sales-based milestone payments and tiered high single to low double-digit royalties on product sales. The royalty term is determined on a licensed-product-by-licensed-product and country-by-country basis and begins on the first commercial sale of a licensed product in a country and ends on the expiration of the last to expire of specified patents or regulatory exclusivity covering such licensed product in such country or, with a customary royalty reduction, ten years after such first commercial sale if there is no such exclusivity. These revenues will be recognized when earned.

Under the previous revenue standard, we recognized License Revenue over the expected performance period on a straight-line basis commencing on May 21, 2015. In accordance with the new revenue recognition standards, we recognize License Revenue over the expected performance period based on our measure of progress towards the completion of certain activities related to our services. We determine such progress by comparing activities performed at the end of each reporting period with total activities expected to be performed. We estimate total expected activities using a number of unobservable inputs, such as the probability of BMS designating additional targets, the probability of successfully completing each phase and estimated time required to provide services during the various development stages. If available, we use product candidate specific research and development plans. Alternatively, we assume that completion of the pre-clinical phase requires an average of four years and that clinical development and commercial launch on average require 8.5 years to complete.

The estimation of total services at the end of each reporting period involves considerable judgement. The estimated number of product candidates that BMS will pursue, significantly impacts the amount of License Revenue we recognize. For example, if we would increase the probability of all additional targets being designated by 10% then the revenue for the six months ended June 30, 2018, would have decreased by approximately $1.3 million to $3.3 million as we would be required to render more services in relation to the Consideration received.

Collaboration and Manufacturing Revenue

The adoption of the new revenue recognition policies did not materially impact the recognition of Collaboration or Manufacturing Revenue.

Revenues

We recognize collaboration revenues associated with development activities that are reimbursable by Chiesi (up to the July 2017 termination of the collaboration) and BMS under our respective collaboration agreements.

We recognize license revenues associated with the amortization of the non-refundable upfront payment, target designation fees and research and development milestone payments we received or might receive from BMS and Chiesi (until June 2017). The timing of these cash payments may differ from the recognition of revenue, as revenue is deferred and recognized over the duration of the performance period. We recognize other revenue, such as sales milestone payments, when earned.

Research and development expenses

We expense research and development costs ("R&D") as incurred. Our R&D expenses generally consist of costs incurred for the development of our target candidates, which include:

- Employee-related expenses, including salaries, benefits, travel and share-based compensation expense;
- Costs incurred for laboratory research, preclinical and nonclinical studies, clinical trials, statistical analysis and report writing, and regulatory compliance costs incurred with clinical research organizations and other third-party vendors;
- Costs incurred to conduct consistency and comparability studies;
- Costs incurred for the start-up and validation of our Lexington facility;
- Costs incurred for the development and improvement of our manufacturing processes and methods;
- Costs associated with our research activities for our next-generation vector and promoter platform;

- Changes in the fair value of the contingent consideration related to our acquisition of InoCard;
- Facilities, depreciation and other expenses, which include direct and allocated expenses for rent and maintenance of facilities, insurance and other supplies; and
- Amortization of intangible assets.

Our research and development expenses primarily consist of costs incurred for the research and development of our product candidates, which include:

- *AMT-060/061 (hemophilia B).* We have incurred costs related to the research, development and production of AMT-060 and AMT-061 for the treatment of hemophilia B. In the first quarter of 2015, we initiated a Phase I/II clinical trial of AMT-060, and in June 2018, we initiated a pivotal study of AMT-061. In July 2017, we and Chiesi terminated our Hemophilia Collaboration Agreement. Accordingly, all future development expenses will be borne by us (previously Chiesi reimbursed 50% of such costs);
- *AMT-130 (Huntington's disease).* We have incurred costs related to preclinical and nonclinical studies of AMT-130;
- *AMT-126 (congestive heart failure).* In the third quarter of 2014, we started to incur costs related to the preclinical development of product candidates targeting the S100A1 gene. Since May 2015, all costs related to the program are reimbursed by BMS under our collaboration agreement;
- *Preclinical research programs*. We incur costs related to the research of multiple preclinical gene therapy product candidates with the potential to treat certain rare and other serious medical conditions; and
- *Technology platform development and other related research.* We incur significant research and development costs related to vector design, manufacturing and other aspects of our modular gene therapy technology platform that are applicable across all our programs.

Our research and development expenses may vary substantially from period to period based on the timing of our research and development activities, including manufacturing campaigns, regulatory submissions and enrollment of patients in clinical trials. The successful development of our product candidates is highly uncertain. Estimating the nature, timing or cost of the development of any of our product candidates involves considerable judgement due to numerous risks and uncertainties associated with developing gene therapies, including the uncertainty of:

- the scope, rate of progress and expense of our research and development activities;
- our ability to successfully manufacture and scale-up production;
- clinical trial protocols, speed of enrollment and resulting data;
- the effectiveness and safety of our product candidates;
- the timing of regulatory approvals; and
- our ability to agree to ongoing development budgets with collaborators who share the costs of our development programs.

A change in the outcome of any of these variables with respect to our product candidates that we may develop could mean a significant change in the expenses and timing associated with the development of such product candidate.

Selling, general and administrative expenses

Our general and administrative expenses consist principally of employee, office, consultancy, legal and other professional and administrative expenses. We incur expenses associated with operating as a public company, including expenses for personnel, legal, accounting and audit fees, board of directors' costs, directors' and officers' liability insurance premiums, NASDAQ listing fees, expenses related to investor relations and fees related to business development and maintaining our patent and license portfolio. We began the commercialization of Glybera in September 2015 and decided to cease commercialization in April 2017. During this period, we incurred selling and marketing costs related to maintaining a patient registry and conducting a post-approval, Phase IV study for Glybera.

Other items, net

Our other income consists of payments to subsidize our research and development efforts as well as income from the sublicensing of our Amsterdam facility (as from January 2018 onwards).

Our other expense consists of expenses we incur in relation to our sublicensing income.

Results of Operations

Comparison of the three months ended June 30, 2018, and 2017

The following table presents a comparison of the three months ended June 30, 2018, and 2017.

	Three months ended June 30,		
	2018	2017	2018 vs 2017
	in thousands		
Total revenues	$ 3,050	$ 4,942	$ (1,892)
Operating expenses:			
Research and development expenses	(18,493)	(16,866)	(1,627)
Selling, general and administrative expenses	(5,896)	(5,410)	(486)
Total operating expenses	**(24,389)**	**(22,276)**	**(2,113)**
Other income	565	266	299
Other expense	(429)	(2,640)	2,211
Loss from operations	**(21,203)**	**(19,708)**	**(1,495)**
Other non-operating items, net	972	(1,561)	2,533
Loss before income tax benefit	**(20,231)**	**(21,269)**	**1,038**
Income tax benefit	(361)	—	(361)
Net loss	**$ (20,592)**	**$ (21,269)**	**$ 677**

Revenue

Our revenue for the three months ended June 30, 2018, and 2017 was as follows:

	Three months ended June 30,		
	2018	2017	2018 vs 2017
	in thousands		
License revenue	$ 2,123	$ 761	$ 1,362
Collaboration revenue BMS	927	1,123	(196)
Collaboration revenue Chiesi	—	3,058	(3,058)
Total revenues	**$ 3,050**	**$ 4,942**	**$ (1,892)**

We recognize license revenue related to upfront payments and target designation fees received from BMS in 2015. We recognized $2.1 million of BMS license revenue in the three months ended June 30, 2018, in accordance with our new revenue recognition policies we adopted effective January 1, 2018. The increase in license revenue is a consequence of the method we use to determine the amount of services rendered. We recognized $1.0 million of BMS license revenue in the three months ended June 30, 2017, in accordance with our previous revenue recognition policies.

We recognized $0.9 million collaboration revenue from BMS in the three months ended June 30, 2018, compared to $1.1 million for the same period in 2017.

Following the termination of our collaboration with Chiesi in July 2017, we no longer recognize collaboration revenue from our co-development of hemophilia B with Chiesi. We recognized $3.1 million of Chiesi collaboration revenue during the three months ended June 30, 2017, in accordance with our previous revenue recognition policies.

Research and development expenses

Research and development expenses for the three months ended June 30, 2018, were $18.5 million compared to $16.9 million for the same period in 2017.

- We incurred $7.6 million in personnel and consulting expenses in the three months ended June 30, 2018, compared to $8.0 million for the same period in 2017. Our costs during the three months ended June 30, 2018 decreased by $0.4 million as a result of a restructuring implemented in the beginning of 2017;
- We incurred $1.0 million in share-based compensation expenses in the three months ended June 30, 2018, compared to $0.8 million for the same period in 2017. The increase of $0.2 million was driven by the recruitment of personnel to support the expansion of our proprietary and collaborator sponsored programs;
- We recorded no termination benefits in the three months ended June 30, 2018, compared to $0.7 million in the same period in 2017 related to our restructuring;
- We incurred $6.9 million in external services and costs related to the development of our product candidates in the three months ended June 30, 2018, compared to $3.2 million in the same period in 2017. The increase was a result of costs we incurred preparing for the initiation of our pivotal study for AMT-061, as well as costs associated with our ongoing GLP toxicology study for AMT-130, which we initiated in September 2017;
- We incurred $3.0 million in operating expenses and depreciation expenses related to our rented facilities in the three months ended June 30, 2018, compared to $3.4 million in the same period in 2017. Our costs decreased as a result of consolidating our facilities in Amsterdam into one new facility in April 2017; and
- We recorded $0.0 million in expenses related to an increase in the fair value of the contingent consideration owed to the sellers of InoCard business in the three months ended June 30, 2018, compared to $0.3 million in the same period in 2017.

Selling, general and administrative expenses

Selling, general and administrative expenses for the three months ended June 30, 2018, were $5.9 million compared to $5.4 million for the same period in 2017.

- We incurred $2.3 million in personnel and consulting expenses in the three months ended June 30, 2018, compared to $2.0 million in the same period in 2017;
- We incurred $1.2 million of share-based compensation expenses in the three months ended June 30, 2018, compared to $1.1 million in the same period in 2017. The increase was driven by the appreciation of our share price; and
- We incurred $1.0 million in professional fees in the three months ended June 30, 2018, compared to $1.0 million in the same period in 2017.

Other items, net

We recognized $0.2 million of income from payments received from European authorities to subsidize our research and development efforts in the Netherlands in the three months ended June 30, 2018, compared to $0.3 million for the same period in 2017.

We recognized other expense of $1.7 million related to contractual commitments in relation to terminating the marketing of our Glybera program, as well as our collaborations with Chiesi in the three months ended June 30, 2017. We did not recognize any such expenses in the same period in 2018.

In the three months ended June 30, 2017, we accrued $0.9 million as a result of the contract termination related to vacated facilities at our Amsterdam site. We did not recognize any such expenses in the same period in 2018.

Other non-operating items, net

We recognize interest income associated with our cash and cash equivalents.

We hold monetary items and enter into transactions in foreign currencies, predominantly in euros and U.S. dollars. We recognize foreign exchange results related to changes in these foreign currencies.

We issued warrants to Hercules in 2013 and to BMS in 2015. We recognize changes in the fair value of these warrants within other non-operating income / (expense).

Our other non-operating items, net, for the three months ended June 30, 2018, and 2017 were as follows:

	Three months ended June 30,		
	2018	2017	2018 vs 2017
	in thousands		
Interest income	$ 583	$ 12	$ 571
Interest expense - Hercules long-term debt	(565)	(502)	(63)
Foreign currency gains / (losses), net	2,255	(1,071)	3,326
Other non-operating income	(1,301)	—	(1,301)
Total other non-operating income / (expense), net	**$ 972**	**$ (1,561)**	**$ 2,533**

We recognized a net foreign currency gain related to our borrowings from Hercules and our cash and cash equivalents of $2.2 million during the three months ended June 30, 2018, compared to a net loss of $1.1 million during the same period in 2017.

In the three months ended June 30, 2018, we recognized an expense of $1.3 million related to fair value changes of warrants compared to a result of $0.0 million for the same period in 2017.

Comparison of the six months ended June 30, 2018, and 2017

The following table presents a comparison of the six months ended June 30, 2018, and 2017.

	Six months ended June 30,		
	2018	2017	2018 vs 2017
	in thousands		
Total revenues	$ 6,528	$ 8,263	$ (1,735)
Operating expenses:			
Research and development expenses	(35,551)	(33,860)	(1,691)
Selling, general and administrative expenses	(12,197)	(11,768)	(429)
Total operating expenses	**(47,748)**	**(45,628)**	**(2,120)**
Other income	1,180	582	598
Other expense	(762)	(2,640)	1,878
Loss from operations	**(40,802)**	**(39,423)**	**(1,379)**
Non-operating items, net	1,690	(2,118)	3,808
Loss before income tax expense	**(39,112)**	**(41,541)**	**2,429**
Income tax benefit / (expense)	(269)	—	(269)
Net loss	**$ (39,381)**	**$ (41,541)**	**$ 2,160**

Revenue

Our revenue for the six months ended June 30, 2018, and 2017 was as follows:

	Six months ended June 30,		
	2018	2017	2018 vs 2017
	in thousands		
License revenue	$ 4,574	$ 1,944	$ 2,630
Collaboration revenue BMS	1,954	1,681	273
Collaboration revenue Chiesi	—	4,638	(4,638)
Total revenues	**$ 6,528**	**$ 8,263**	**$ (1,735)**

We recognize license revenue related to upfront payments and target designation fees received from BMS in 2015. We recognized $4.6 million of BMS license revenue in the six months ended June 30, 2018, in accordance with our new revenue recognition policies we adopted effective January 1, 2018. The increase in license revenue is a consequence of the method we use to determine the amount of services rendered. We recognized $1.9 million of BMS license revenue in the six months ended June 30, 2017, in accordance with our previous revenue recognition policies.

We recognized $2.0 million collaboration revenue from BMS in the six months ended June 30, 2018, compared to $1.7 million for the same period in 2017.

Following the termination of our collaboration with Chiesi in July 2017, we no longer recognize collaboration revenue from our co-development of hemophilia B with Chiesi. We recognized $4.6 million of Chiesi collaboration revenue during the six months ended June 30, 2017, in accordance with our previous revenue recognition policies.

Research and development

Research and development expenses for the six months ended June 30, 2018, were $35.6 million compared to $33.9 million for the same period in 2017.

- We incurred $15.4 million in personnel and consulting expenses in the six months ended June 30, 2018, compared to $16.0 million for the same period in 2017. Our costs decreased by $0.6 million as a result of a restructuring implemented in the beginning of 2017;
- We incurred $1.8 million in share-based compensation expenses in the six months ended June 30, 2018, compared to $1.5 million in the same period in 2017. The increase of $0.3 million was driven by the recruitment of personnel to support the expansion of our proprietary and collaborator sponsored programs;
- We recorded no termination benefits in the six months ended June 30, 2018, compared to $0.9 million in the same period in 2017 related to the restructuring;
- We incurred $11.9 million in external services and costs related to the development of our product candidates in the six months ended June 30, 2018, compared to $7.1 million for the same period in 2017. The increase was primarily driven by costs we incurred preparing for the initiation of our pivotal study for AMT-061, as well as costs associated with our ongoing GLP toxicology study for AMT-130, which we initiated in September 2017;
- We incurred $6.0 million operating expenses and depreciation expenses related to our rented facilities in the six months ended June 30, 2018, compared to $7.2 million for the same period in 2017. Our costs decreased as a result of consolidating our facilities in Amsterdam into one new facility in April 2017; and
- We recorded $0.1 million in expenses related to a decrease in the fair value of the contingent consideration owed to the sellers of InoCard business in the six months ended June 30, 2018, compared to an increase of $0.4 million for the same period in 2017.

Selling, general and administrative expenses

Selling, general and administrative expenses for the six months ended June 30, 2018, were $12.2 million compared to $11.8 million for the same period in 2017.

- We incurred $4.4 million in personnel and consulting expenses in the six months ended June 30, 2018, compared to $4.2 million in the same period in 2017;
- We incurred $2.9 million of share based compensation expenses in the six months ended June 30, 2018, compared to $2.1 million in the same period in 2017. The increase was driven by the appreciation of our share price; and
- We incurred $2.2 million in professional fees in the six months ended June 30, 2018, compared to $2.8 million in the same period in 2017. The decrease was primarily due to the nonrecurring costs we incurred in 2017 related to our conversion from a foreign private issuer to a U.S. domestic filer.
- We incurred no costs associated with the Glybera global registry and Phase IV study during the six months ended June 30, 2018, compared to $0.3 million during the same period in 2017.

Other items, net

We recognized $0.5 million income from payments received from European authorities to subsidize our research and development efforts in the Netherlands in the six months ended June 30, 2018, compared to $0.6 million for the same period in 2017.

We recognized other expense of $1.7 million related to contractual commitments in relation to terminating the marketing our Glybera program, as well as our collaborations with Chiesi in the six months ended June 30, 2017. We did not recognize any such expenses in the same period in 2018.

We accrued $0.9 million of contract termination cost related to vacated facilities at our Amsterdam site in the six months ended June 30, 2017. We did not recognize any such expenses in the same period in 2018.

Other non-operating items, net

We recognize interest income associated with cash and cash equivalents.

We hold monetary items and enter into transactions in foreign currencies, predominantly in euros and U.S. dollars. We recognize foreign exchange results related to changes in these foreign currencies.

We issued warrants to Hercules in 2013 and to BMS in 2015. We recognize changes in the fair value of these warrants within other non-operating income / (expense).

Our other non-operating items, net, for the six months ended June 30, 2018, and 2017 were as follows:

	Six months ended June 30,		
	2018	2017	2018 vs 2017
	in thousands		
Interest income	$ 836	$ 23	$ 813
Interest expense - Hercules long term debt	(981)	(1,006)	25
Foreign currency gains / (losses), net	2,433	(1,164)	3,597
Other non-operating (expense) / income	(598)	29	(627)
Total non-operating (expense) / income, net	**$ 1,690**	**$ (2,118)**	**$ 3,808**

We recognized a net foreign currency gain related to our borrowings from Hercules and our cash and cash equivalents of $2.4 million during the six months ended June 30, 2018, compared to a net loss of $1.2 million during the same period in 2017.

In the six months ended June 30, 2018, we recognized a loss of $0.6 million related to fair value changes of warrants compared to no gain or loss for the same period in 2017.

Financial Position, Liquidity and Capital Resources

As of June 30, 2018, we had cash, cash equivalents and restricted cash of $261.6 million. We currently expect that our cash and cash equivalents will be sufficient to fund operations into 2021. The table below summarizes our consolidated cash flow data for the six months ended June 30, 2018, and 2017.

	Six months ended June 30,	
	2018	2017
	in thousands	
Cash, cash equivalents and restricted cash at the beginning of the period	$ 161,851	$ 134,324
Net cash used in operating activities	(37,977)	(30,803)
Net cash used in investing activities	(2,642)	(3,408)
Net cash generated from financing activities	141,478	939
Foreign exchange impact	(1,071)	4,914
Cash, cash equivalents and restricted cash at the end of period	**$ 261,638**	$ **105,966**

We have incurred losses and cumulative negative cash flows from operations since our business was founded by our predecessor entity AMT Therapeutics ("AMT") Holding N.V. in 1998. We had a net loss of $20.6 million and $39.4 million during the three and six months ended June 30, 2018, respectively, compared to a loss of $21.3 million and $41.5 million during the same periods in 2017. As of June 30, 2018, we had an accumulated deficit of $491.5 million.

Sources of liquidity

From our first institutional venture capital financing in 2006 through June 30, 2018, we funded our operations primarily through private and public placements of equity securities and convertible and other debt securities as well as payments from our collaboration partners.

On May 7, 2018, we completed a follow-on public offering of 5,175,000 ordinary shares at $28.50 per ordinary share, resulting in gross proceeds to us of approximately $147.5 million. The net proceeds to us from this offering were approximately $138.5 million, after deducting underwriting discounts and commissions and other estimated offering expenses payable by us. We capitalized $0.2 million of expenses (which are presented as a reduction of additional paid-in capital) related to this offering.

On October 27, 2017, we completed a follow-on public offering of 5,000,000 ordinary shares at $18.25 per ordinary share, resulting in gross proceeds of approximately $91.3 million. The net proceeds to us from this offering were approximately $85.3 million, after deducting underwriting discounts and commissions and other offering expenses payable by us.

We expect to continue to incur losses and to generate negative cash flows. We have no firm sources of additional financing other than our collaboration agreement with BMS. Until such time, if ever, as we can generate substantial cash flows from successfully commercializing our product candidates, we expect to finance our cash needs through a combination of equity offerings, debt financings, collaborations, strategic alliances and marketing, distribution and licensing arrangements.

We are subject to covenants under our Loan Agreement with Hercules and may become subject to covenants under any future indebtedness that could limit our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends, which could adversely impact our ability to conduct our business. In addition, our pledge of assets as collateral to secure our obligations under the Hercules loan agreement may limit our ability to obtain debt financing. To the extent we need to finance our cash needs through equity offerings or debt financings, such financing may be subject to unfavorable terms including without limitation, the negotiation and execution of definitive documentation, as well as credit and debt market conditions, and we may not be able to obtain such financing on terms acceptable to us or at all. If financing is not available when needed, including through debt or equity financings, or is available only on unfavorable terms, we may be unable to meet our cash needs. If we raise additional funds through collaborations, strategic alliances or marketing, distribution or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams or product candidates or grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financings when needed, we may be required to delay, limit, reduce or terminate our product

development or future commercialization efforts or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves, which could have a material adverse effect on our business, financial conditions, results of operations and cash flows.

Net Cash used in operating activities

Net cash used in operating activities was $38.0 million for the six months ended June 30, 2018, an increase of $7.2 million compared to the $30.8 million of cash used in the same period in 2017.

The increase in net cash used in operating activities is primarily due to the decrease in collaboration revenue during the six-month period ending June 30, 2018 compared to the prior year period, as well as changes in net working capital. In the six-month period ending June 30, 2017, we recognized $4.6 million in Chiesi-related collaboration revenue, compared to $0.0 million in the current period. Additionally, in the six months ended June 30, 2017 we had a $5.1 million reduction in current assets primarily related to the timing of collections from our partner, BMS, whereas in the six month period ending June 30, 2018 we had an increase in current assets of $0.2 million.

Net cash used in investing activities

In the six months ended June 30, 2018, we used $2.6 million in our investing activities compared to $3.4 million for the same period in 2017.

	Six months ended June 30,	
	2018	2017
	in thousands	
Build out of Lexington site	$ (818)	$ (477)
Build out of Amsterdam sites	(379)	(2,353)
Acquisition of licenses and patents	(1,445)	(578)
Total investments	**$ (2,642)**	**$ (3,408)**

Net cash generated from financing activities

We received net proceeds of $138.5 million associated with our follow-on offering in May 2018.

During the six months ended June 30, 2018, we received $3.0 million from the exercise of options to purchase ordinary shares in relation to our share incentive plans compared to $0.9 million in the same period 2017.

Funding requirements

We currently expect that our cash and cash equivalents as of June 30, 2018 will be sufficient to fund operations into 2021. Our future capital requirements will depend on many factors, including but not limited to:

- the potential to receive future consideration pursuant to our collaboration with BMS, which is largely contingent on achieving certain research, development, regulatory and sales milestones;
- our ability to enter into collaboration arrangements in the future;
- the scope, timing, results and costs of our current and planned clinical trials, including those for AMT-061 in hemophilia B and AMT-130 in Huntington's disease;
- the scope, timing, results and costs of preclinical development and laboratory testing of our additional product candidates;
- the need for any additional tests, studies, or trials beyond those originally anticipated to confirm the safety or efficacy of our product candidates and technologies;
- the cost, timing and outcome of regulatory reviews associated with our product candidates;
- the cost and timing of future commercialization activities, including product manufacturing, marketing, sales and distribution of any of our product candidates for which we receive marketing approval in the future;
- the amount and timing of revenue, if any, we receive from commercial sales of any product candidates for which we, or our collaboration partner, receives marketing approval in the future;
- the costs and timing of preparing, filing, expanding, acquiring, licensing, maintaining, enforcing and prosecuting patents and patent applications, as well as defending any intellectual property-related claims;

- the repayments of the principal amount of our venture debt loan with Hercules, which will contractually start in December 2018 and will run through May 2020;
- the extent to which we acquire or in-license other businesses, products, product candidates or technologies;
- the costs associated with maintaining quality compliance and optimizing our manufacturing processes, including the operating costs associated with our Lexington, Massachusetts manufacturing facility; and
- the costs associated with recent and future hiring of senior management and other personnel.

Contractual obligations and commitments

The table below sets forth our contractual obligations and commercial commitments as of June 30, 2018, that are expected to have an impact on liquidity and cash flows in future periods.

	Undefined	Less than 1 year	Between 1 and 2 years	Between 2 and 5 years	Over 5 years	Total
	in thousands					
Debt obligations (including $3.1 million interest payments)	$ —	$ 9,463	$ 13,678	$ —	$ —	$ 23,141
Operating lease obligations	—	3,847	3,900	12,018	18,853	38,618
Contingent consideration (nominal amount)	15,769	—	—	—	—	15,769
Total	**$ 15,769**	**$ 13,310**	**$ 17,578**	**$ 12,018**	**$ 18,853**	**$ 77,528**

Due to uncertainty of the timing of achieving certain contractual milestones, the contingent consideration of $15.8 million (€13.5 million) related to our acquisition of InoCard (later renamed uniQure GmbH) is considered to have an undefined contractual maturity. As of June 30, 2018, we expect the milestone obligations will become payable between 2018 and 2022. When due, 50% of the obligations can be settled either in cash or in a variable number of our shares. As of June 30, 2018, we recorded this obligation at its fair value of $3.8 million.

We also have obligations to make future payments to third parties that become due and payable on the achievement of certain development, regulatory and commercial milestones (such as the start of a clinical trial, filing of a Biologics License Application, approval by the FDA or product launch). We have not included these commitments on our balance sheet or in the table above because the achievement and timing of these milestones is not fixed and determinable.

We enter into contracts in the normal course of business with clinical research organizations (“CROs”) for preclinical research studies and clinical trials, research supplies and other services and products for operating purposes. These contracts generally provide for termination on notice, and therefore are cancelable contracts and not included in the table of contractual obligations and commitments.

Off-Balance Sheet Arrangements

As of June 30, 2018, we did not have any off-balance sheet arrangements as defined in Item 303(a) (4) of Regulation S-K.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

We are exposed to a variety of financial risks in the normal course of our business, including market risk (including currency, price and interest rate risk), credit risk and liquidity risk. Our overall risk management program focuses on preservation of capital and the unpredictability of financial markets and has sought to minimize potential adverse effects on our financial performance and position.

Our market risks and exposures to such market risks during the six months ended June 30, 2018, have not materially changed from our market risks and our exposure to market risk discussed in Part II, Item 7A of our Annual Report on Form 10-K for the year ended December 31, 2017, which was filed with the SEC on March 14, 2018.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our chief executive and financial officer ("CEO"), evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")) as of June 30, 2018. Based on such evaluation, our CEO has concluded that as of June 30, 2018, our disclosure controls and procedures were effective to ensure that information required to be disclosed by it in reports the Company files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC, and that such material information is accumulated and communicated to the Company's management, including its Principal Executive Officer and Principal Financial Officer, to allow timely decisions regarding required disclosure. Because of the inherent limitations in all control systems, any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and management necessarily is required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Furthermore, the Company's controls and procedures can be circumvented by the individual acts of some persons, by collusion of two or more people or by management override of such control, and misstatements due to error or fraud may occur and not be detected on a timely basis.

Changes in Internal Control over Financial Reporting

During the six months ended June 30, 2018, we implemented appropriate changes to our internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act) to support the recognition of revenue and the preparation of additional revenue-related disclosures in accordance with ASC 606.

Part II – OTHER INFORMATION

Item 1. Legal Proceedings

None.

Item 1A. Risk Factors

An investment in our ordinary shares involves a high degree of risk. You should carefully consider the following information about these risks, together with the other information appearing elsewhere in this Quarterly Report on Form 10-Q, including our financial statements and related notes thereto, and the risk factors discussed in Part I, Item 1A "Risk Factors" in our Annual Report on Form 10-K for the year ended December 13, 2017, filed with the SEC on March 14, 2018, before deciding to invest in our ordinary shares. We operate in a dynamic and rapidly changing industry that involves numerous risks and uncertainties. The risks and uncertainties described below are not the only ones we face. Other risks and uncertainties, including those that we do not currently consider material, may impair our business. If any of the risks discussed below actually occur, our business, financial condition, operating results or cash flows could be materially adversely affected. This could cause the value of our securities to decline, and you may lose all or part of your investment.

Risks Related to the Development of Our Product Candidates

We may encounter substantial delays in and impediments to the progress of our clinical trials or fail to demonstrate the safety and efficacy of our product candidates.

Clinical and non-clinical development is expensive, time-consuming and uncertain as to outcome. Our product candidates are in early clinical or preclinical development, and there is a significant risk of failure or delay in each of these programs. We cannot guarantee that any preclinical tests or clinical trials will be completed as planned or completed on schedule, if at all. A failure of one or more preclinical tests or clinical trials can occur at any stage of testing. Events that may prevent successful or timely completion of clinical development include, but are not limited to:

- delays in reaching a consensus with regulatory agencies on study design;
- delays in reaching agreement on acceptable terms with prospective clinical research organizations ("CROs") and clinical trial sites;
- delays in receiving regulatory authority to conduct the clinical trials or a regulatory authority decision that the clinical trial should not proceed;
- delays in obtaining required Institutional Review Board ("IRB") approval at each clinical trial site;
- imposition of a clinical hold by regulatory agencies after an inspection of our clinical trial operations or trial sites;
- failure by CROs, other third parties or us to adhere to clinical trial requirements or otherwise properly manage the clinical trial process, including meeting applicable timelines, properly documenting case files, including the retention of proper case files, and properly monitoring and auditing clinical sites;
- failure of sites or clinical investigators to perform in accordance with good clinical practices ("GCP") or applicable regulatory guidelines in other countries;
- difficulty or delays in patient recruiting into clinical trials;
- delays or deviations in the testing, validation, manufacturing and delivery of our product candidates to the clinical sites;
- delays in having patients' complete participation in a study or return for post-treatment follow-up;
- clinical trial sites or patients dropping out of a study;
- occurrence of serious adverse events associated with a product candidate that are viewed to outweigh its potential benefits; or
- changes in regulatory requirements and guidance that require amending or submitting new clinical protocols, undertaking additional new tests or analyses or submitting new types or amounts of clinical data.

Before obtaining marketing approval from regulatory authorities for the sale of our product candidates, we must conduct extensive clinical trials to demonstrate the safety and efficacy of the product candidates in humans. Such trials and regulatory review and approval take many years. It is impossible to predict when or if any of our clinical trials will demonstrate that product candidates are effective or safe in humans. If the results of our clinical trials are inconclusive, or fail to meet the level of statistical significance required for approval or if there are safety concerns or adverse events associated with our product candidates, we may:

- be delayed in or altogether prevented from obtaining marketing approval for our product candidates;
- obtain approval for indications or patient populations that are not as broad as intended or desired;
- obtain approval with labeling that includes significant use or distribution restrictions or safety warnings;
- be subject to changes with the way the product is administered;
- be required to perform additional clinical trials to support approval or be subject to additional post-marketing testing requirements;
- have regulatory authorities withdraw their approval of the product or impose restrictions on its distribution in the form of a modified risk evaluation and mitigation strategy;
- be subject to the addition of labeling statements, such as warnings or contraindications;
- be sued; or
- experience damage to our reputation.

Because of the nature of the gene therapies we are developing, regulators may also require us to demonstrate long-term gene expression, clinical efficacy and safety, which may require additional or longer clinical trials and which may not be able to be demonstrated to the regulatory authorities' standards.

Our ability to recruit patients for our trials is often reliant on third parties, such as the pharmacies at our clinical trial sites. These third parties may not have the adequate infrastructure established to handle gene therapy products or to support certain gene therapy product formulations, or may not agree to recruit patients on our behalf.

In addition, we or our collaborator may not be able to locate and enroll enough eligible patients to participate in these trials as required by the FDA, the EMA or similar regulatory authorities outside the United States and the European Union. This may result in our failure to initiate or continue clinical trials for our product candidates, or may cause us to abandon one or more clinical trials altogether. Because our programs are focused on the treatment of patients with rare or orphan or ultra-orphan diseases, our ability to enroll eligible patients in these trials may be limited or slower than we anticipate considering the small patient populations involved and the specific age range required for treatment eligibility in some indications. In addition, our potential competitors, including major pharmaceutical, specialty pharmaceutical and biotechnology companies, academic institutions and governmental agencies and public and private research institutions, may seek to develop competing therapies, which would further limit the small patient pool available for our studies.

Any inability to successfully initiate or complete preclinical and clinical development could result in additional costs to us or impair our ability to receive marketing approval, to generate revenues from product sales or obtain regulatory and commercialization milestones and royalties. In addition, if we make manufacturing or formulation changes to our product candidates, including changes in the vector or manufacturing process used, we may need to conduct additional studies to bridge our modified product candidates to earlier versions. Clinical trial delays could also shorten any periods during which we may have the exclusive right to commercialize our product candidates or allow our competitors to bring products to market before we do, which could impair our ability to successfully commercialize our product candidates and may harm our business and results of operations.

Our progress in early-stage clinical trials may not be indicative of long-term efficacy in late-stage clinical trials, and our progress in trials for one product candidate may not be indicative of progress in trials for other product candidates.

The product candidates in our pipeline are at early-stages of development. Study designs and results from previous studies are not necessarily predictive of our future clinical study designs or results, and initial results may not be confirmed upon full analysis of the complete study data. Our product candidates may fail to show the required level of safety and efficacy in later stages of clinical development despite having successfully advanced through initial clinical studies. In 2017, we announced our plans to advance AMT-061, which includes an AAV5 vector carrying the FIX-Padua transgene, into a pivotal study. While we believe AMT-061 and AMT-060, our product candidate that was previously studied in a Phase I/II study, have been demonstrated to be materially comparable in nonclinical studies and manufacturing quality assessments, it is possible that future clinical studies of AMT-061 may show unexpected differences from AMT-060. Should these differences have an unfavorable impact on clinical outcomes, they may adversely impact our ability to achieve regulatory approval or market acceptance of AMT-061.

In our Phase I/II clinical study of AMT-060, we screened patients for preexisting anti-AAV5 antibodies to determine their eligibility for the trial. Three of the ten patients screened for the study tested positive for anti-AAV5 antibodies on reanalysis. Since we did not observe any ill-effects or correlation between the level of anti-AAV5 antibodies and clinical outcomes, patients who have anti-AAV5 antibodies will be permitted to enroll in our planned pivotal study of AMT-061. Since we only have been able to test a limited number of patients and have limited clinical and pre-clinical data, it is possible that future clinical studies may not confirm these results, and if so, negatively impact the outcome of our study.

In advance of treating patients in the pivotal study of AMT-061, we are conducting a short study to confirm the dose expected to be used in the pivotal trial. The dose-confirmation study is expected to enroll approximately three patients, who will be administered a single dose of 2×10^{13} gc/kg. We will rely on the short-term data from this study, including FIX activity and safety outcomes during the weeks following administration of AMT-061, to confirm the dose to be used in the pivotal study. Given the limited number of patients and short follow-up period, data from this study may exhibit significant variability and differ materially from the future results of our planned pivotal study of AMT-061.

A number of companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in later-stage clinical trials even after achieving promising results in early-stage clinical trials. If a larger population of patients does not experience positive results during clinical trials, if these results are not reproducible or if our products show diminishing activity over time, our product candidates may not receive approval from the FDA or EMA. Data obtained from preclinical and clinical activities are subject to varying interpretations, which may delay, limit or prevent regulatory approval. In addition, we may encounter regulatory delays or rejections because of many factors, including changes in regulatory policy during the period of product development. Failure to confirm favorable results from earlier trials by demonstrating the safety and effectiveness of our products in later-stage clinical trials with larger patient populations could have a material adverse effect on our business that would cause our share price to decline.

Fast track product, breakthrough therapy, priority review, or Regenerative Medicine Advanced Therapy ("RMAT") designation by the FDA, or access to the PRIME scheme by the EMA, for our product candidates may not lead to faster development or regulatory review or approval process, and it does not increase the likelihood that our product candidates will receive marketing approval.

We may seek fast track, breakthrough therapy designation, RMAT designation, PRIME scheme access or priority review designation for our product candidates if supported by the results of clinical trials. A fast track product designation is designed to facilitate the clinical development and expedite the review of drugs intended to treat a serious or life-threatening condition which demonstrate the potential to address an unmet medical need. A breakthrough therapy is defined as a drug that is intended, alone or in combination with one or more other drugs, to treat a serious or life-threatening disease or condition, where preliminary clinical evidence indicates that the drug may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. A RMAT designation is designed to accelerate approval for regenerative advanced therapies. Priority review designation is intended to speed the FDA marketing application review timeframe for drugs that treat a serious condition and, if approved, would provide a significant improvement in safety or effectiveness. PRIME is a scheme provided by the EMA to enhance support for the development of medicines that target an unmet medical need.

For drugs and biologics that have been designated as fast track products or breakthrough therapies, or granted access to the PRIME schema, interaction and communication between the regulatory agency and the sponsor of the trial can help to identify the most efficient path for clinical development. Sponsors of drugs with fast track products or breakthrough therapies may also be able to submit marketing applications on a rolling basis, meaning that the FDA may review portions of a marketing application before the sponsor submits the complete application to the FDA, if the sponsor pays the user fee upon submission of the first portion of the marketing application. For products that receive a priority review designation, the FDA's marketing application review goal is shortened to six months, as opposed to ten months under standard review. This review goal is based on the date the FDA accepts the marketing application for review, this application validation period typically adds approximately two months to the timeline for review and decision from the date of submission. RAT designations will accelerate approval but the exact mechanisms have not yet been announced by FDA.

Designation as a fast track product, breakthrough therapy, RMAT, PRIME, or priority review product is within the discretion of the regulatory agency. Accordingly, even if we believe one of our product candidates meets the criteria for designation as a fast track product, breakthrough therapy, RMAT, PRIME, or priority review product, the agency may disagree and instead determine not to make such designation. In any event, the receipt of such a designation for a product candidate may not result in a faster development process, review or approval compared to drugs considered for approval under conventional regulatory procedures and does not assure ultimate marketing approval by the agency. In addition, regarding fast track products and breakthrough therapies, the FDA may later decide that the products no longer meet the conditions for qualification as either a fast track product, RMAT, or a breakthrough therapy or, for priority review products, decide that period for FDA review or approval will not be shortened.

We may not be successful in our efforts to use our gene therapy technology platform to build a pipeline of additional product candidates.

An element of our strategy is to use our gene therapy technology platform to expand our product pipeline and to progress these candidates through clinical development ourselves or together with our collaborator. Although we currently have a pipeline of programs at various stages of development, we may not be able to identify or develop product candidates that are safe and effective. Even if we are successful in continuing to build our pipeline, the potential product candidates that we identify may not be suitable for clinical development. Research programs to identify new product candidates require substantial technical, financial and human resources. We or our collaborator may focus our efforts and resources on potential programs or product candidates that ultimately prove to be unsuccessful. If we do not continue to successfully develop and commercialize product candidates based upon our technology, we may face difficulty in obtaining product revenues in future periods, which could result in significant harm to our financial position and adversely affect our share price.

Our strategy of obtaining rights to key technologies through in-licenses may not be successful.

We seek to expand our product pipeline in part by in-licensing the rights to key technologies, including those related to gene delivery, genes and gene cassettes. The future growth of our business will depend in significant part on our ability to in-license or otherwise acquire the rights to additional product candidates or technologies, particularly through our collaborations with academic research institutions. However, we may be unable to in-license or acquire the rights to any such product candidates or technologies from third parties on acceptable terms or at all. The in-licensing and acquisition of these technologies is a competitive area, and many more established companies are also pursuing strategies to license or acquire product candidates or technologies that we may consider attractive. These established companies may have a competitive advantage over us due to their size, cash resources and greater clinical development and commercialization capabilities. In addition, companies that perceive us to be competitors may be unwilling to license rights to us. Furthermore, we may be unable to identify suitable product candidates or technologies within our areas of focus. If we are unable to successfully obtain rights to suitable product candidates or technologies, our business, financial condition and prospects could suffer.

Negative public opinion and increased regulatory scrutiny of gene therapy and genetic research may damage public perception of our product candidates or adversely affect our ability to conduct our business or obtain marketing approvals for our product candidates.

Public perception may be influenced by claims that gene therapy is unsafe, and gene therapy may not gain the acceptance of the public or the medical community. The risk of cancer remains a concern for gene therapy, and we cannot assure that it will not occur in any of our planned or future clinical studies. In addition, there is the potential risk of delayed adverse events following exposure to gene therapy products due to persistent biological activity of the genetic material or other components of products used to carry the genetic material.

As of June 30, 2018, a total of three patients reported serious adverse events related to the treatment of AMT-060 in our Phase I/II hemophilia B trial, including one patient with a short, self-limiting fever in the first 24 hours after treatment and two patients with mild, asymptomatic elevations in liver transaminases.

Adverse events in our clinical trials or those conducted by other parties (even if not ultimately attributable to our product candidates), and the resulting publicity, could result in increased governmental regulation, unfavorable public perception, failure of the medical community to accept and prescribe gene therapy treatments, potential regulatory delays in the testing or approval of our product candidates, stricter labeling requirements for those product candidates that are approved and a decrease in demand for any such product candidates.

Risks Related to Our Manufacturing

Our manufacturing facility is subject to significant government regulations and approvals. If we fail to comply with these regulations or maintain these approvals our business will be materially harmed.

Our manufacturing facility in Lexington is subject to ongoing regulation and periodic inspection by the EMA, FDA and other regulatory bodies to ensure compliance with current Good Manufacturing Practices ("cGMP"). Any failure to follow and document our adherence to such cGMP regulations or other regulatory requirements may lead to significant delays in the availability of products for commercial sale or clinical study, may result in the termination of or a hold on a clinical study, or may delay or prevent filing or approval of marketing applications for our products.

Failure to comply with applicable regulations could also result in the EMA, FDA or other applicable authorities taking various actions, including levying fines and other civil penalties; imposing consent decrees or injunctions; requiring us to suspend or put on hold one or more of our clinical trials; suspending or withdrawing regulatory approvals; delaying or refusing to approve pending applications or supplements to approved applications; requiring us to suspend manufacturing activities or product sales, imports or exports; requiring us to communicate with physicians and other customers about concerns related to actual or potential safety, efficacy, and other issues involving our products; mandating product recalls or seizing products; imposing operating restrictions; and seeking criminal prosecutions. Any of the foregoing could materially harm our business.

Gene therapies are complex and difficult to manufacture. We could experience production or technology transfer problems that result in delays in our development or commercialization schedules or otherwise adversely affect our business.

The insect-cell based manufacturing process we use to produce our products and product candidates is highly complex and in the normal course is subject to variation or production difficulties. Issues with the manufacturing process, even minor deviations from the normal process, could result in insufficient yield, product deficiencies or manufacturing failures that result in lot failures, insufficient inventory, product recalls and product liability claims.

Many factors common to the manufacturing of most biologics and drugs could also cause production interruptions, including raw materials shortages, raw material failures, growth media failures, equipment malfunctions, facility contamination, labor problems, natural disasters, disruption in utility services, terrorist activities, or acts of god beyond our control. We also may encounter problems in hiring and retaining the experienced specialized personnel needed to operate our manufacturing process, which could result in delays in our production or difficulties in maintaining compliance with applicable regulatory requirements.

Any problems in our manufacturing processes or facilities could make us a less attractive collaborator for academic research institutions and other parties, which could limit our access to additional attractive development programs, result in delays in our clinical development or marketing schedules and harm our business.

Our use of viruses, chemicals and other hazardous materials requires us to comply with regulatory requirements and exposes us to significant potential liabilities.

Our development and manufacturing processes involve the use of viruses, chemicals, other (potentially) hazardous materials and produce waste products. Accordingly, we are subject to national, federal, state and local laws and regulations in the United States and the Netherlands governing the use, manufacture, distribution, storage, handling, treatment and disposal of these materials. In addition to ensuring the safe handling of these materials, applicable requirements require increased safeguards and security measures for many of these agents, including controlling access and screening of entities and personnel who have access to them, and establishing a comprehensive national database of registered entities. In the event of an accident or failure to comply with environmental, occupational health and safety and export control laws and regulations, we could be held liable for damages that result, and any such liability could exceed our assets and resources.

Risks Related to Regulatory Approval of Our Products

We are implementing modifications to our lead product candidate for hemophilia B, which may require additional pre-clinical, non-clinical, or clinical studies, or additional chemistry, manufacturing and control development.

In October 2017 we modified our lead product candidate for hemophilia B from AMT-060 (an AAV-5 based vector encoding the wild-type factor IX gene) to a product candidate designated AMT-061 (an AAV5 based vector encoding the FIX-Padua mutant). Both product candidates are identical in structure apart from two nucleotide substitutions in the coding sequence for FIX. We believe incorporating the FIX-Padua mutant may result in enhanced FIX activity. We have conducted a GLP non-human primate pre-clinical study using AMT-061, which demonstrated a substantial increase in FIX activity over AMT-060. The results of our pre-clinical study using AMT-061 may not be predictive of any future clinical trial results for AMT-061. Our pivotal trial, which will be conducted with AMT-061, may not ultimately provide the desired efficacy results or may reveal adverse events or other safety concerns.

We will conduct a clinical study to confirm the appropriate dose for our Phase III study of AMT-061. If we are unable to confirm the dose, we might be required to modify the design or extend the study, resulting in a delay of the treatment phase of our pivotal trial.

We have conducted our pre-clinical studies with both AMT-060 and AMT-061, as well our Phase I/II clinical study with AMT-060, with drug product manufactured at our Amsterdam facility. We intend to manufacture AMT-061 for our future clinical studies at our Lexington facility using a scaled-up and modified process.

While we believe we have satisfactorily demonstrated comparability between AMT-061, manufactured at our Lexington facility and AMT-060, manufactured at our Amsterdam facility, the applicable regulatory authorities may require additional studies or analyses to support regulatory approval and the commencement of patient dosing in our Phase III clinical trial. It is possible that the applicable regulatory authorities may ultimately not agree with the design or conduct of our comparability, clinical, pre-clinical or non-clinical studies, or with our chemistry, manufacturing, and control development work. The applicable regulatory authorities may find that our data does not support the submission, acceptance or approval of our IND amendment or marketing applications. During future interactions with FDA and the EMA, we may receive unfavorable comments, guidance, and recommendations that negatively impact our development timelines. The approach required by the applicable regulatory authorities may change in the future due to a variety of reasons, including changes in regulatory policy, the outcome of our studies and continuing development, and how our studies and continuing development efforts are ultimately conducted.

Any of the above could delay the submission of a marketing application, or regulatory authorities may not approve or may require material restrictions on any approvals that are received. Any of the foregoing would materially harm our commercial prospects.

We cannot predict when or if we will obtain marketing approval to commercialize a product candidate.

The development and commercialization of our product candidates, including their design, testing, manufacture, safety, efficacy, purity, recordkeeping, labeling, storage, approval, advertising, promotion, sale and distribution, are subject to comprehensive regulation by the FDA and other regulatory agencies in the United States, the EMA and other regulatory agencies of the member states of the European Union, and similar regulatory authorities in other jurisdictions. Failure to obtain marketing approval for a product candidate in a specific jurisdiction will prevent us from commercializing the product candidate in that jurisdiction.

The process of obtaining marketing approval for our product candidates in the European Union, the United States and other countries is expensive and may take many years, if approval is obtained at all. Changes in marketing approval policies during the development period, changes in or the enactment of additional statutes or regulations, or changes in regulatory review for each submitted product application, may cause delays in the approval or rejection of an application. Regulatory authorities have substantial discretion in the approval process and may refuse to accept any application, may decide that our data are insufficient for approval, may require additional preclinical, clinical or other studies and may not complete their review in a timely manner. Further, any marketing approval we ultimately obtain may be for only limited indications, or be subject to stringent labeling or other restrictions or post-approval commitments that render the approved product not commercially viable.

If we experience delays in obtaining marketing approval for any of our product candidates in the United States or other countries, the commercial prospects of our other product candidates may be harmed and our ability to generate revenues will be materially impaired.

The risks associated with the marketing approval process are heightened by the status of our products as gene therapies.

We believe that all our current product candidates will be viewed as gene therapy products by the applicable regulatory authorities. Gene therapies are relatively new treatments for which regulators do not have extensive experience or standard review and approval processes. The FDA, unlike the EMA, does not have an exceptional circumstances approval pathway.

Both the FDA and EMA have demonstrated caution in their regulation of gene therapy treatments, and ethical and legal concerns about gene therapy and genetic testing may result in additional regulations or restrictions on the development and commercialization of our product candidates that are difficult to predict. The FDA and the EMA have issued various guidance documents pertaining to gene therapy products, with which we likely must comply to gain regulatory approval of any of our product candidates in the United States or European Union, respectively. The close regulatory scrutiny of gene therapy products may result in delays and increased costs, and may ultimately lead to the failure to obtain approval for any gene therapy product.

Regulatory requirements affecting gene therapy have changed frequently and may continue to change, and agencies at both the U.S. federal and state level, as well as congressional committees and foreign governments, have sometimes expressed interest in further regulating biotechnology. For example, the European Commission conducted a public consultation in early 2013 on the application of EU legislation that governs advanced therapy medicinal products, including gene therapy products, which could result in changes in the data we need to submit to the EMA for our product candidates to gain regulatory approval or change the requirements for tracking, handling and distribution of the products which may be associated with increased costs. In addition, divergent scientific opinions among the various bodies involved in the review process may result in delays, require additional resources and ultimately result in rejection. These regulatory agencies, committees and advisory groups and the new regulations and guidelines they promulgate may lengthen the regulatory review process, require us to perform additional studies, increase our development costs, lead to changes in regulatory positions and interpretations, delay or prevent approval and commercialization of our product candidates or lead to significant post-approval limitations or restrictions. Delay or failure to obtain, or unexpected costs in obtaining, the regulatory approval necessary to bring a potential product to market could decrease our ability to generate sufficient product revenues to maintain our business.

Our failure to obtain or maintain orphan product exclusivity for any of our product candidates for which we seek this status could limit our commercial opportunity, and if our competitors are able to obtain orphan product exclusivity before we do, we may not be able to obtain approval for our competing products for a significant period.

Regulatory authorities in some jurisdictions, including the European Union and the United States, may designate drugs for relatively small patient populations as orphan drugs. Generally, if a product with an orphan drug designation subsequently receives the first marketing approval for the relevant indication, the product is entitled to a period of market exclusivity, which precludes the EMA or FDA from approving another marketing application for the same drug for the same indication for that period. The EMA, however, may subsequently approve a similar drug for the same indication during the first product's market exclusivity if the EMA concludes that the later drug is clinically superior in that it is shown to be safer, more effective or makes a major contribution to patient care.

Orphan drug exclusivity may be lost if the EMA or FDA determines that the request for designation was materially defective, or if the manufacturer is unable to assure sufficient quantity of the drug to meet the needs of patients with the rare disease or condition or if the incidence and prevalence of patients who are eligible to receive the drug in these markets materially increase.

As appropriate, we intend to seek all available periods of regulatory exclusivity for our product candidates. However, there is no guarantee that we will be granted these periods of regulatory exclusivity or that we will be able to maintain these periods of exclusivity.

The FDA grants product sponsors certain periods of regulatory exclusivity, during which the agency may not approve, and in certain instances, may not accept, certain marketing applications for competing drugs. For example, biologic product sponsors may be eligible for twelve years of exclusivity from the date of approval, seven years of exclusivity for drugs that are designated to be orphan drugs, and/or a six-month period of exclusivity added to any existing exclusivity period or patent life for the submission of FDA requested pediatric data. While we intend to apply for all periods of market exclusivity that we may be eligible for, there is no guarantee that we will receive all such periods of market exclusivity. Additionally, under certain circumstances, the FDA may revoke the period of market exclusivity. Thus, there is no guarantee that we will be able to maintain a period of market exclusivity, even if granted. In the case of orphan designation, other benefits, such as tax credits and exemption from user fees may be available. If we are not able to obtain or maintain orphan drug designation or any period of market exclusivity to which we may be entitled, we will be materially harmed, as we will potentially be subject to greater market competition and may lose the benefits associated with programs.

Risks Related to Commercialization

If we or our collaborator are unable to successfully commercialize our product candidates or experience significant delays in doing so, our business will be materially harmed.

Our ability to generate product revenues will depend on the successful development and eventual commercialization of our product candidates. The success of our product candidates will depend on many factors, including:

- successful completion of preclinical studies and clinical trials;
- receipt and maintenance of marketing approvals from applicable regulatory authorities;
- our ability to timely manufacture sufficient quantities according to required quality specifications;
- obtaining and maintaining patent and trade secret protection and non-patent, orphan drug exclusivity for our product candidates;
- obtaining and maintaining regulatory approval for our manufacturing facility in Lexington, Massachusetts;
- launch and commercialization of our products, if approved, whether alone or in collaboration with others;
- identifying and engaging effective distributors or resellers on acceptable terms in jurisdictions where we plan to utilize third parties for the marketing and sales of our product candidates;
- acceptance of our products, if approved, by patients, the medical community and third-party payers;
- effectively competing with existing therapies and gene therapies based on safety and efficacy profile;
- achieve value-based pricing levels based on durability of expression, safety and efficacy;
- obtaining and maintaining healthcare coverage and adequate reimbursement;
- complying with any applicable post-approval requirements and maintaining a continued acceptable overall safety profile; and
- obtain adequate reimbursement for the total patient population and each sub group to sustain a viable commercial business model in US and EU markets.

Failure to achieve or implement any of these elements could result in significant delays or an inability to successfully commercialize our product candidates, which could materially harm our business.

The affected populations for our gene therapies may be smaller than we or third parties currently project, which may affect the size of our addressable markets.

Our projections of the number of people who have the diseases we are seeking to treat, as well as the subset of people with these diseases who have the potential to benefit from treatment with our therapies, are estimates based on our knowledge and understanding of these diseases. The total addressable market opportunities for these therapies will ultimately depend upon many factors, including the diagnosis and treatment criteria included in the final label, if approved for sale in specified indications, acceptance by the medical community, patient consent, patient access and product pricing and reimbursement.

Prevalence estimates are frequently based on information and assumptions that are not exact and may not be appropriate, and the methodology is forward-looking and speculative. The use of such data involves risks and uncertainties and is subject to change based on various factors. Our estimates may prove to be incorrect and new studies may change the estimated incidence or prevalence of the diseases we seek to address. The number of patients with the diseases we are targeting may turn out to be lower than expected or may not be otherwise amenable to treatment with our products, reimbursement may not be sufficient to sustain a viable business for all sub populations being studied, or new patients may become increasingly difficult to identify or access, any of which would adversely affect our results of operations and our business.

The addressable markets for AAV-based gene therapies are also impacted by the prevalence of neutralizing antibodies to the capsids, which are an integral component of our gene therapy constructs. Patients that have pre-existing antibodies to a particular capsid are generally not eligible for administration of a gene therapy that includes this particular capsid. For example, our AMT-061 gene therapy candidate for hemophilia B patients incorporates an AAV5 capsid. In our Phase I/II clinical study of AMT-060, we screened patients for preexisting anti-AAV5 antibodies to determine their eligibility for the trial. Three of the ten patients screened for the study tested positive for anti-AAV5 antibodies on reanalysis. However, we did not observe any ill-effects or correlation between the level of anti-AAV5 antibodies and clinical outcomes in these three patients, suggesting that patients who have anti-AAV5 antibodies may still be eligible for AAV5-based gene therapies. Since we only have been able to test a limited number of patients and have limited clinical and pre-clinical data, it is possible that future clinical studies may not confirm these results. This may limit the addressable market for AMT-061 and any future revenues derived from the sale of the product, if approved.

Any approved gene therapy we seek to offer may fail to achieve the degree of market acceptance by physicians, patients, third party payers and others in the medical community necessary for commercial success.

Doctors may be reluctant to accept a gene therapy as a treatment option or, where available, choose to continue to rely on existing symptomatic treatments. The degree of market acceptance of any of our product candidates that receive marketing approval in the future will depend on many factors, including:

- the efficacy and potential advantages of our therapies compared with alternative treatments;
- our ability to convince payers of the long-term cost-effectiveness of our therapies and, consequently, the availability of third party coverage and adequate reimbursement;
- the limitations on use and label requirements imposed by regulators;
- the convenience and ease of administration of our gene therapies compared with alternative treatments;
- the willingness of the target patient population to try new therapies, especially a gene therapy, and of physicians to administer these therapies;
- the strength of marketing and distribution support;
- the prevalence and severity of any side effects;
- limited access to site of service that can perform the product preparation and administer the infusion; and
- any restrictions on the use of our products.

We face substantial competition, which may result in others discovering, developing or commercializing products before or more successfully than we do.

The development and commercialization of new biotechnology and biopharmaceutical products, including gene therapies, is highly competitive. We may face competition with respect to our product candidates, as well as with respect to any product candidates that we may seek to develop or commercialize in the future, from large and specialty pharmaceutical companies and biotechnology companies worldwide, who currently market and sell products or are pursuing the development of products for the treatment of many of the disease indications for which we are developing our product candidates. Potential competitors also include academic institutions, government agencies and other public and private research organizations that conduct research, seek patent protection and establish collaborative arrangements for research, development, manufacturing and commercialization. In recent years, there has been a significant increase in commercial and scientific interest and financial investment in gene therapy as a therapeutic approach, which has intensified the competition in this area.

We are aware of numerous companies focused on developing gene therapies in various indications, including AGTC, Abeona Therapeutics, Adverum Biotechnologies, Allergan, Ally Therapeutics, Audentes Therapeutics, AVROBIO, Axovant Sciences, Bayer, BioMarin, bluebird bio, Expression Therapeutics, Freeline Therapeutics, Generation Bio, Genethon, GlaxoSmithKline, Homology Medicines, Lysogene, Megenics, Milo Therapeutics, Nightstar, Novartis, Pfizer, REGENXBIO, Renova Therapeutics, Rocket, Pharmaceuticals, Sangamo BioSciences, Sanofi, Selecta Biosciences, Sarepta, Shire, Solid Biosciences, Spark Therapeutics, Takara, Ultragenyx, Vivet Therapeutics, and Voyager, as well as several companies addressing other methods for modifying genes and regulating gene expression. We may also face competition with respect to the treatment of some of the diseases that we are seeking to target with our gene therapies from protein, nucleic acid, antisense and other pharmaceuticals under development or commercialized at pharmaceutical and biotechnology companies such as Amgen, Bayer, Biogen, BioMarin, CSL Behring, Ionis, Novartis, Novo Nordisk, Pfizer, Translate Bio, Roche, Sangamo, Sanofi, Shire, Sobi, Spark, Wave Biosciences, and numerous other pharmaceutical and biotechnology firms.

Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize products that are safer, more effective, have fewer or less severe side effects, are more convenient or are less expensive than the products that we develop. Our competitors also may obtain FDA, EMA or other regulatory approval for their products more rapidly than we do, which could result in our competitors establishing a strong market position before we are able to enter the market. Because we expect that gene therapy patients may generally require only a single administration, we believe that the first gene therapy product to enter the market for a particular indication will likely enjoy a significant commercial advantage, and may also obtain market exclusivity under applicable orphan drug regimes.

Many of the companies with which we are competing or may compete in the future have significantly greater financial resources and expertise than we do in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approvals and marketing approved products. Mergers and acquisitions in the pharmaceutical and biotechnology industries may result in more resources being concentrated among a smaller number of our competitors. Smaller and other early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These third parties compete with us in recruiting and retaining qualified scientific and management personnel, establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs.

Risks Related to Our Dependence on Third Parties

If our collaboration with BMS is not successful or if BMS designates fewer targets than expected in our collaboration agreement, our development plans, financial position and opportunities for growth may be adversely affected.

To earn all milestone payments and royalties potentially due under our collaboration with BMS, we are dependent on BMS electing to designate and actively pursue target indications covered by the collaboration and our achievement of all development, clinical and regulatory milestones under the collaboration. If BMS designates or actively pursues fewer development targets, utilizes contract research organizations, instead of our organization, to conduct non-clinical and pre-clinical studies, or if we fail to achieve a significant number of the applicable milestones, the total payments we receive under this collaboration may be materially lower than are potentially payable.

We rely on third parties for important aspects of our development programs. If these parties do not perform successfully or if we are unable to maintain any of our collaboration arrangements, or enter into new collaborations, our business could be adversely affected.

We have entered into, and expect in the future to enter into, collaborations with other companies and academic research institutions with respect to important elements of our commercial and development programs.

Our existing collaboration, and any future collaborations we enter, may pose several risks, including the following:

- collaborators have significant discretion in determining the efforts and resources that they will apply to these collaborations;
- we generally have limited or no control over the design or conduct of clinical trials sponsored by our current collaborators;
- we may be hampered from entering into collaboration arrangements if we are unable to obtain consent form our licensor to enter into sublicensing arrangements of technology we have licensed from such licensors;

- if our collaborators do not conduct the clinical trials they sponsor in accordance with regulatory requirements or stated protocols, we will not be able to rely on the data produced in such trials in our further development efforts;
- collaborators may not perform their obligations as expected;
- collaborators may also have relationships with other entities, some of which may be our competitors;
- collaborators may not pursue development and commercialization of any product candidates or may elect not to continue or renew development or commercialization programs based on clinical trial results, changes in the collaborators' strategic focus or available funding, or external factors, such as an acquisition, that divert resources or create competing priorities;
- collaborators may delay clinical trials, provide insufficient funding for a clinical trial program, stop a clinical trial or abandon a product candidate, repeat or conduct new clinical trials or require a new formulation of a product candidate for clinical testing;
- collaborators could develop, independently or with third parties, products that compete directly or indirectly with our products or product candidates, if the collaborators believe that competitive products are more likely to be successfully developed or can be commercialized under terms that are more economically attractive than ours;
- our collaboration arrangements may impose restrictions on our ability to undertake other development efforts that may appear to be attractive to us;
- product candidates discovered in collaboration with us may be viewed by our collaborators as competitive with their own product candidates or products, which may cause collaborators to cease to devote resources to the commercialization of our product candidates;
- a collaborator with marketing and distribution rights that achieves regulatory approval may not commit sufficient resources to the marketing and distribution of such product or products;
- disagreements with collaborators, including over proprietary rights, contract interpretation or the preferred course of development, could cause delays or termination of the research, development or commercialization of product candidates, lead to additional responsibilities for us, delay or impede reimbursement of certain expenses or result in litigation or arbitration, any of which would be time-consuming and expensive;
- collaborators may not properly maintain or defend our intellectual property rights or may use our proprietary information in such a way as to invite litigation that could jeopardize or invalidate our rights or expose us to potential litigation;
- collaborators may infringe the intellectual property rights of third parties, which may expose us to litigation and potential liability; and
- collaborations may in some cases be terminated for the convenience of the collaborator and, if terminated, we could be required to expend additional funds to pursue further development or commercialization of the applicable product or product candidates.

If our collaborations do not result in the successful development and commercialization of products or if one of our collaborators terminates its agreement with us, we may not receive future research funding or milestone or royalty payments under the collaboration, and we may lose access to important technologies and capabilities of the collaboration. All the risks relating to product development, regulatory approval and commercialization described herein also apply to the activities of our development collaborators.

Risks Related to Our Intellectual Property

We rely on licenses of intellectual property from third parties, and such licenses may not provide adequate rights or may not be available in the future on commercially reasonable terms or at all, and our licensors may be unable to obtain and maintain patent protection for the technology or products that we license from them.

We currently are heavily reliant upon licenses of proprietary technology from third parties that is important or necessary to the development of our technology and products, including technology related to our manufacturing process, our vector platform, our gene cassettes and the therapeutic genes of interest we are using. These and other licenses may not provide adequate rights to use such technology in all relevant fields of use. Licenses to additional third-party technology that may be required for our development programs may not be available in the future or may not be available on commercially reasonable terms, which could have a material adverse effect on our business and financial condition.

In some circumstances, we may not have the right to control the preparation, filing and prosecution of patent applications, or to maintain the patents, covering technology that we license from third parties. In addition, some of our agreements with our licensors require us to obtain consent from the licensor before we can enforce patent rights, and our licensor may withhold such consent or may not provide it on a timely basis. Therefore, we cannot be certain that these patents and applications will be prosecuted and enforced in a manner consistent with the best interests of our business. In addition, if third parties who license patents to us fail to maintain such patents, or lose rights to those patents, the rights we have licensed may be reduced or eliminated.

Our intellectual property licenses with third parties may be subject to disagreements over contract interpretation, which could narrow the scope of our rights to the relevant intellectual property or technology or increase our financial or other obligations to our licensors.

The agreements under which we license intellectual property or technology from third parties are complex, and certain provisions in such agreements may be susceptible to multiple interpretations. The resolution of any contract interpretation disagreement that may arise could narrow what we believe to be the scope of our rights to the relevant intellectual property or technology, or increase what we believe to be our financial or other obligations under the relevant agreement, either of which could have a material adverse effect on our business and financial condition.

If we fail to comply with our obligations in our intellectual property licenses with third parties, we could lose rights that are important to our business.

We in-license intellectual property from third parties that is material to our product candidates, including technology related to our manufacturing process, our vector platform, and the therapeutic genes and gene cassettes we are using. Our licensing arrangements with third parties impose diligence, development and commercialization timelines, milestone payment, royalty, insurance and other obligations on us. If we fail to comply with these obligations, our counterparties may have the right to terminate these agreements, in which case we might not be able to develop, manufacture or market any product that is covered by these agreements or may face other penalties under the agreements. Such an occurrence could materially adversely affect the value of the product candidate being developed under any such agreement. Termination of these agreements or reduction or elimination of our rights under these agreements may result in our having to negotiate new or amended agreements with less favorable terms, or cause us to lose our rights under these agreements, including our rights to important intellectual property or technology.

If we are unable to obtain and maintain patent protection for our technology and products, or if the scope of the patent protection is not sufficiently broad, our ability to successfully commercialize our products may be impaired.

We rely upon a combination of in-licensed and owned patents, trade secret protection and confidentiality agreements to protect our intellectual property. Our success depends in a large part on our ability to obtain and maintain this protection in the European Union, the United States and other countries, in part by filing patent applications related to our novel technologies and product candidates. Our patents may not provide us with any meaningful commercial protection, prevent competitors from competing with us or otherwise provide us with any competitive advantage. Our competitors may be able to circumvent our owned or licensed patents by developing similar or alternative technologies or products in a non-infringing manner. Successful challenges to our patents may result in loss of exclusivity or freedom to operate or in patent claims being narrowed, invalidated or held unenforceable, in whole or in part, which could limit our ability to stop others from using or commercializing similar or identical technology and products, or limit the duration of the patent protection of our technology and products.

The patent prosecution process is expensive, time-consuming and uncertain, and we may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. It is also possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection. Additionally, given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. As a result, our owned and licensed patent portfolio may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours.

The patent position of biotechnology and pharmaceutical companies generally is highly uncertain, involves complex legal and factual questions and has in recent years been the subject of much litigation. In addition, the laws of foreign countries may not protect our rights to the same extent as the laws of the United States. For example, EU patent law with respect to the patentability of methods of treatment of the human body is more limited than U.S. law. Publications of discoveries in the scientific literature often lag the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until 18 months after their priority date, or in some

cases at all. Therefore, we cannot know with certainty whether we were the first to make the inventions or that we were the first to file for patent protection of the inventions claimed in our owned or licensed patents or pending patent applications. As a result, the issuance, scope, validity, enforceability and commercial value of our patent rights are highly uncertain. Our pending and future patent applications may not result in patents being issued that protect our technology or products, in whole or in part, or which effectively prevent others from commercializing competitive technologies and products. Changes in either the patent laws or interpretation of the patent laws in the European Union, the United States or other countries may diminish the value of our patents or narrow the scope of our patent protection.

We may become involved in lawsuits to protect or enforce our patents or other intellectual property or third parties may assert their intellectual property rights against us, which could be expensive, time consuming and unsuccessful.

Competitors may infringe our owned or licensed patents or other intellectual property. To counter infringement or unauthorized use, we may be required to file infringement claims, which can be expensive and time consuming. An adverse result in any litigation proceeding could put one or more of our patents at risk of being invalidated, maintained in more narrowly amended form or interpreted narrowly.

Even if resolved in our favor, litigation or other legal proceedings relating to intellectual property claims may cause us to incur significant expenses, increase our operating losses, reduce available resources and could distract our technical and management personnel from their normal responsibilities. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments, which could have an adverse effect on the price of our ordinary shares.

Third parties may initiate legal proceedings alleging that we are infringing their intellectual property rights, the outcome of which would be uncertain and could have a material adverse effect on the success of our business. If we are found to infringe a third party's intellectual property rights, we could be required to obtain a license from such third party to continue developing and marketing our products and technology. We may not be able to obtain the required license on commercially reasonable terms or at all. Even if we could obtain a license, it could be non-exclusive, thereby giving our competitors access to the same technologies licensed to us. We could be forced, including by court order, to cease commercializing the infringing technology or product or otherwise to cease using the relevant intellectual property. In addition, we could be found liable for monetary damages, including treble damages and attorneys' fees if we are found to have willfully infringed a patent. A finding of infringement could prevent us from commercializing our product candidates or force us to cease or materially modify some of our business operations, which could materially harm our business. Claims that we have misappropriated the confidential information or trade secrets of third parties could have a similar negative impact on our business.

For example, we are aware of patents owned by third parties that relate to some aspects of our programs that are still in development. In some cases, because we have not determined the final methods of manufacture, the method of administration or the therapeutic compositions for these programs, we cannot determine whether rights under such third party patents will be needed. In addition, in some cases, we believe that the claims of these patents are invalid or not infringed, or will expire before commercialization. However, if such patents are needed and found to be valid and infringed, we could be required to obtain licenses, which might not be available on commercially reasonable terms, or to cease or delay commercializing certain product candidates, or to change our programs to avoid infringement.

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

Because we collaborate with various organizations and academic research institutions on the advancement of our gene therapy platform, we must, at times, share trade secrets with them. We seek to protect our proprietary technology in part by entering into confidentiality agreements and, if applicable, materials transfer agreements, collaborative research agreements, consulting agreements or other similar agreements with our collaborators, advisors and consultants prior to beginning research or disclosing proprietary information. These agreements typically limit the rights of the third parties to use or disclose our confidential information, such as trade secrets. Despite the contractual provisions employed when working with third parties, the need to share trade secrets and other confidential information increases the risk that such trade secrets become known by our competitors, are inadvertently incorporated into the technology of others, or are disclosed or used in violation of these agreements. Given that our proprietary position is based, in part, on our know-how and trade secrets, a competitor's discovery of our trade secrets or other unauthorized use or disclosure would impair our competitive position and may have a material adverse effect on our business.

In addition, these agreements typically restrict the ability of our collaborators, advisors and consultants to publish data potentially relating to our trade secrets. Our academic collaborators typically have rights to publish data, if we are notified in advance and may delay publication for a specified time in order to secure our intellectual property rights arising from the collaboration. In other cases, publication rights are controlled exclusively by us, although in some cases we may share these rights with other parties. We also conduct joint research and development programs that may require us to share trade secrets under the terms of our research and development partnerships or similar agreements.

Some courts inside and outside the United States are less willing or unwilling to protect trade secrets. If any of our trade secrets were to be lawfully obtained or independently developed by a competitor, we would have no right to prevent them, or those to whom they communicate it, from using that technology or information to compete with us.

Risks Related to Pricing and Reimbursement

We face uncertainty related to insurance coverage of, and pricing and reimbursement for product candidates for which we may receive marketing approval.

We anticipate that the cost of treatment using our product candidates will be significant. We expect that most patients and their families will not be capable of paying for our products themselves. There will be no commercially viable market for our product candidates without reimbursement from third party payers, such as government health administration authorities, private health insurers and other organizations. Even if there is a commercially viable market, if the level of third party reimbursement is below our expectations, our revenues and gross margins will be adversely affected, and our business will be harmed.

Government authorities and other third-party payers, such as private health insurers and health maintenance organizations, decide which medications they will pay for and establish reimbursement levels. Reimbursement systems vary significantly by country and by region, and reimbursement approvals must be obtained on a country-by-country basis. Government authorities and third-party payers have attempted to control costs by limiting coverage and the amount of reimbursement for particular medications and procedures. Increasingly, third party payers require drug companies to provide them with predetermined discounts from list prices, are exerting influence on decisions regarding the use of particular treatments and are limiting covered indications. Additionally, in the United States and some foreign jurisdictions, legislative and regulatory changes regarding the healthcare system and insurance coverage, particularly considering the new U.S. presidential administration, could result in more rigorous coverage criteria and downward pressure on drug prices, and may affect our ability to profitably sell any products for which we obtain marketing approval.

The pricing review period and pricing negotiations for new medicines take considerable time and have uncertain results. Pricing review and negotiation usually begins only after the receipt of regulatory marketing approval, and some authorities require approval of the sale price of a product before it can be marketed. In some markets, particularly the countries of the European Union, prescription pharmaceutical pricing remains subject to continuing direct governmental control and to drug reimbursement programs even after initial approval is granted and price reductions may be imposed. Prices of medical products may also be subject to varying price control mechanisms or limitations as part of national health systems if products are considered not cost-effective or where a drug company's profits are deemed excessive. In addition, pricing and reimbursement decisions in certain countries can lead to mandatory price reductions or additional reimbursement restrictions in other countries. Because of these restrictions, any product candidates for which we may obtain marketing approval may be subject to price regulations that delay or prohibit our or our partners' commercial launch of the product in a particular jurisdiction. In addition, we or our collaborators may elect to reduce the price of our products to increase the likelihood of obtaining reimbursement approvals. If countries impose prices, which are not sufficient to allow us or our collaborators to generate a profit, we or our collaborators may refuse to launch the product in such countries or withdraw the product from the market. If pricing is set at unsatisfactory levels, or if the price decreases, our business could be harmed, possibly materially. If we fail to obtain and sustain an adequate level of coverage and reimbursement for our products by third party payers, our ability to market and sell our products would be adversely affected and our business would be harmed.

Due to the generally limited addressable market for our target orphan indications and the potential for our therapies to offer therapeutic benefit in a single administration, we face uncertainty related to pricing and reimbursement for these product candidates.

The relatively small market size for orphan indications and the potential for long-term therapeutic benefit from a single administration present challenges to pricing review and negotiation of our product candidates for which we may obtain marketing authorization. Most of our product candidates target rare diseases with relatively small patient populations. If we are unable to obtain adequate levels of reimbursement relative to these small markets, our ability to support our development and commercial infrastructure and to successfully market and sell our product candidates for which we may obtain marketing approval will be adversely affected.

We also anticipate that many or all of our gene therapy product candidates may provide long-term, and potentially curative benefit, with a single administration. This is a different paradigm than that of other pharmaceutical therapies, which often require an extended course of treatment or frequent administration. As a result, governments and other payers may be reluctant to provide the significant level of reimbursement that we seek at the time of administration of our gene therapies or may seek to tie reimbursement to clinical evidence of continuing therapeutic benefit over time. Although it is possible that our product candidates will need to be administered only once, there may be situations in which re-administration is required, which may further complicate the pricing and reimbursement for these treatments. In addition, considering the anticipated cost of these therapies, governments and other payers may be particularly restrictive in making coverage decisions. These factors could limit our commercial success and harm our business.

Risks Related to Our Financial Position and Need for Additional Capital

We have incurred significant losses to date, expect to incur losses over the next several years and may never achieve or maintain profitability.

We had a net loss of $39.4 million in the six months ended June, 30, 2018, $79.3 million in the full year 2017 and $73.4 million in 2016. As of June 30, 2018, we had an accumulated deficit of $491.6 million. To date, we have financed our operations primarily through the sale of equity securities and convertible debt, venture loans, through upfront payments from our collaboration partners and, to a lesser extent, subsidies and grants from governmental agencies and fees for services. We have devoted substantially all our financial resources and efforts to research and development, including preclinical studies and clinical trials. A significant portion of potential consideration under our agreement with BMS is contingent on achieving research, development, regulatory and sales milestones. We expect to continue to incur significant expenses and losses over the next several years, and our net losses may fluctuate significantly from quarter to quarter and year to year.

We anticipate that our expenses will increase substantially as we:

- Advance AMT-061 into later-stage clinical development;
- Complete our IND-enabling studies for our proprietary Huntington’s disease gene therapy program and initiate clinical studies;
- Advance multiple research programs related to gene therapy candidates targeting liver-directed and central nervous system (“CNS”) diseases;
- Continue to enhance and optimize our technology platform, including our manufacturing capabilities, next-generation viral vectors and promoters, and other enabling technologies;
- Seek marketing approval for any product candidates that successfully complete clinical trials;
- Acquire or in-license rights to new therapeutic targets or product candidates; and
- Maintain, expand and protect our intellectual property portfolio, including in-licensing additional intellectual property rights from third parties.

We and our collaborator may never succeed in these activities and, even if we do, may never generate revenues that are sufficient to achieve or sustain profitability. Our failure to become and remain profitable would depress the value of our company and could impair our ability to expand our business, maintain our research and development efforts, diversify our product offerings or even continue our operations.

We will likely need to raise additional funding, which may not be available on acceptable terms, or at all. Failure to obtain capital when needed may force us to delay, limit or terminate our product development efforts or other operations which could have a material adverse effect on our business, financial conditions, results of operations and cash flows.

We expect to incur significant expenses in connection with our on-going activities and that we will likely need to obtain substantial additional funding in connection with our continuing operations. In addition, we have based our estimate of our financing requirements on assumptions that may prove to be wrong, and we could use our capital resources sooner than we currently expect.

Adequate capital may not be available to us when needed or may not be available on acceptable terms. Our ability to obtain debt financing may be limited by covenants we have made under our Loan and Security Agreement with Hercules Technology Growth Capital, Inc. ("Hercules") and our pledge to Hercules of substantially all our assets as collateral. If we raise additional capital through the sale of equity or convertible debt securities, our shareholders' ownership interest will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of holders of our ordinary shares.

If we raise additional funds through collaborations, strategic alliances, or marketing, distribution or licensing arrangements with third parties, we may have to issue additional equity, relinquish valuable rights to our technologies, future revenue streams, products or product candidates, or grant licenses on terms that may not be favorable to us. If we are unable to raise capital when needed or on attractive terms, we could be forced to delay, reduce or eliminate our research and development programs or any future commercialization efforts, which would have a negative impact on our financial condition, results of operations and cash flows. If our collaboration with BMS is not successful, our development plans, financial position and opportunities for growth may be adversely affected.

Our existing and any future indebtedness could adversely affect our ability to operate our business.

As of June 30, 2018, we had $20.0 million of outstanding principal of borrowings under our Loan and Security Agreement with Hercules, which we are required to repay in monthly principal installments from December 2018 through May 2020. We could in the future incur additional debt obligations beyond our borrowings from Hercules. Our existing loan obligations, together with other similar obligations that we may incur in the future, could have significant adverse consequences, including:

- requiring us to dedicate a portion of our cash resources to the payment of interest and principal, reducing money available to fund working capital, capital expenditures, research and development and other general corporate purposes;
- increasing our vulnerability to adverse changes in general economic, industry and market conditions;
- subjecting us to restrictive covenants that may reduce our ability to take certain corporate actions or obtain further debt or equity financing;
- limiting our flexibility in planning for, or reacting to, changes in our business and the industry in which we compete; and
- placing us at a disadvantage compared to our competitors that have less debt or better debt servicing options.

We may not have sufficient funds, and may be unable to arrange for additional financing, to pay the amounts due under our existing loan obligations. Failure to make payments or comply with other covenants under our existing debt could result in an event of default and acceleration of amounts due. Under our agreement with Hercules, the occurrence of an event that would reasonably be expected to have a material adverse effect on our business, operations, assets or condition is an event of default. If an event of default occurs and the lender accelerates the amounts due, we may not be able to make accelerated payments, and the lender could seek to enforce security interests in the collateral securing such indebtedness, which includes substantially all our assets.

Risks Related to Other Legal Compliance Matters

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

Healthcare providers, physicians and third-party payers will play a primary role in the recommendation and prescription of any products for which we obtain marketing approval. Our future arrangements with third party payers and customers may expose us to broadly applicable anti-bribery laws, including the Foreign Corrupt Practices Act, as well as fraud and abuse and other healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which we market, sell and distribute any products for which we obtain marketing approval.

Many federal, state and foreign laws govern the privacy and security of health information and other personal and private information. They often differ from each other in significant ways. For instance, the EU has adopted a comprehensive data protection law called the General Data Protection Regulation ("GDPR") that took effect on May 25, 2018. The GDPR, together with the national legislation of the EU member states governing the processing of personal data, impose strict obligations and restrictions on the ability to collect, analyze and transfer personal data, including health data from clinical trials and adverse event reporting. In particular, these obligations and restrictions concern the consent of the individuals to whom the personal data relates, the information provided to the individuals, the transfer of personal data out of the EU, security breach notifications, security and confidentiality of the personal data, and imposition of substantial potential fines for breaches of the data protection obligations. The GDPR imposes penalties for non-compliance of up to the greater of €20 million or 4% of worldwide revenue. Data protection authorities from the different EU member states may interpret the GDPR and national laws differently and impose additional requirements, which add to the complexity of processing personal data in the EU. Guidance on implementation and compliance practices are often updated or otherwise revised. The significant costs of compliance with, risk of regulatory enforcement actions under, and other burdens imposed by the GDPR as well as under other regulatory schemes throughout the world related to privacy and security of health information and other personal and private data could have an adverse impact on our business.

Efforts to ensure that our business arrangements with third parties will comply with applicable laws and regulations will involve substantial costs. If our operations, or the activities of our collaborators, distributors or other third-party agents are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant civil, criminal and administrative penalties, damages, fines, imprisonment, exclusion of products from government funded healthcare programs and the curtailment or restructuring of our operations.

If we fail to comply with environmental, health and safety laws and regulations, we could become subject to fines or penalties or incur costs that could harm our business.

We are subject to numerous environmental, health and safety laws and regulations, including those governing laboratory procedures and the handling, use, storage, treatment and disposal of hazardous materials and wastes. Our operations involve the use of hazardous and flammable materials, including chemicals and biological materials. Our operations also produce hazardous waste products. We cannot eliminate the risk of contamination or injury from these materials. We also could incur significant costs associated with civil or criminal fines and penalties for failure to comply with such laws and regulations.

Although we maintain employer's liability insurance to cover us for costs and expenses we may incur due to injuries to our employees resulting from the use of hazardous materials, this insurance may not provide adequate coverage against potential liabilities. We do not maintain insurance for environmental liability or toxic tort claims that may be asserted against us in connection with our storage or disposal of biological, hazardous or radioactive materials.

In addition, we may incur substantial costs to comply with current or future environmental, health and safety laws and regulations. These current or future laws and regulations may impair our research, development or production efforts. Our failure to comply with these laws and regulations also may result in substantial fines, penalties or other sanctions.

Product liability lawsuits could cause us to incur substantial liabilities and to limit commercialization of our therapies.

We face an inherent risk of product liability related to the testing of our product candidates in human clinical trials and in connection with product sales. If we cannot successfully defend ourselves against claims that our product candidates or products caused injuries, we will incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

- decreased demand for any product candidates or products that we develop or sell;
- injury to our reputation and significant negative media attention;
- negative publicity or public opinion surrounding gene therapy;
- withdrawal of clinical trial participants;
- significant costs to defend the related litigation;
- substantial monetary awards to trial participants or patients;
- loss of revenue;
- reduced resources of our management to pursue our business strategy; and
- the inability to further develop or commercialize any products that we develop.

Dependent upon the country where the clinical trial is conducted, we currently hold a maximum of €6,000,000 and minimum of €2,000,000 in clinical trial insurance coverage in the aggregate, with a per incident limit of €450,000 to €1,000,000 with respect to the clinical studies we conduct. Such coverage may not be adequate to cover all liabilities that we may incur. We may need to increase our insurance coverage as we expand our clinical trials. In addition, insurance coverage is increasingly expensive. We may not be able to maintain insurance coverage at a reasonable cost or in an amount adequate to satisfy any liability that may arise.

Risks Related to Employee Matters and Managing Growth

Our future success depends on our ability to retain key executives and technical staff and to attract, retain and motivate qualified personnel.

We are highly dependent on hiring, training, retaining and motivating key personnel to lead our research and development, clinical operations and manufacturing efforts. Although we have entered into employment agreements with our key personnel, each of them may terminate their employment on short notice. We do not maintain key person insurance for any of our senior management or employees.

The loss of the services of our key employees could impede the achievement of our research and development objectives and seriously harm our ability to successfully implement our business strategy. Furthermore, replacing senior management and key employees may be difficult and may take an extended period because of the limited number of individuals in our industry with the breadth and depth of skills and experience required to successfully develop gene therapy products. Competition to hire from this limited pool is intense, and we may be unable to hire, train, retain or motivate these key personnel on acceptable terms.

If we are unable to continue to attract and retain high quality personnel, our ability to pursue our growth strategy will be limited.

Risks Related to Our Ordinary Shares

The price of our ordinary shares has been and may in the future be volatile and fluctuate substantially.

Our share price has been and may in the future be volatile. From the start of trading of our ordinary shares on the NASDAQ Global Select Market on February 4, 2014 through August 6, 2018, the sale price of our ordinary shares ranged from a high of $40.99 to a low of $4.72. The closing price on August 6, 2018, was $31.59 per ordinary share. The stock market in general and the market for smaller biopharmaceutical companies in particular, have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. The market price for our ordinary shares may be influenced by many factors, including:

- the success of competitive products or technologies;
- results of clinical trials of our product candidates or those of our competitors;
- public perception of gene therapy;
- regulatory delays and greater government regulation of potential products due to adverse events;
- regulatory or legal developments in the European Union, the United States and other countries;
- developments or disputes concerning patent applications, issued patents or other proprietary rights;
- the recruitment or departure of key personnel;
- the level of expenses related to any of our product candidates or clinical development programs;
- the results of our efforts to discover, develop, acquire or in-license additional product candidates or products;
- actual or anticipated changes in estimates as to financial results, development timelines or recommendations by securities analysts;
- variations in our financial results or those of companies that are perceived to be similar to us;
- changes in the structure of healthcare payment systems;
- market conditions in the pharmaceutical and biotechnology sectors; and
- general economic, industry and market conditions.

An active trading market for our ordinary shares may not be sustained.

Although our ordinary shares are listed on The NASDAQ Global Select Market, an active trading market for our shares may not be sustained. If an active market for our ordinary shares does not continue, it may be difficult for our shareholders to sell their shares without depressing the market price for the shares or sell their shares at all. Any inactive trading market for our ordinary shares may also impair our ability to raise capital to continue to fund our operations by selling shares and may impair our ability to acquire other companies or technologies by using our shares as consideration.

Our directors, executive officers and major shareholders, if they choose to act together, will continue to have a significant degree of control with respect to matters submitted to shareholders for approval.

Our directors, executive officers and major shareholders holding more than 5% of our outstanding ordinary shares, in the aggregate, beneficially own approximately 40.3% of our issued shares (including such shares to be issued in relation to exercisable options to purchase ordinary shares) as at June 30, 2018. As a result, if these shareholders were to choose to act together, they may be able, as a practical matter, to control many matters submitted to our shareholders for approval, as well as our management and affairs. For example, these persons, if they choose to act together, could control the election of the board directors and the approval of any merger, consolidation or sale of all or substantially all our assets.

Provisions of our articles of association or Dutch corporate law might deter acquisition bids for us that might be considered favorable and prevent or frustrate any attempt to replace our board.

Certain provisions of our articles of association may make it more difficult for a third party to acquire control of us or effect a change in our board. These provisions include:

- staggered terms of our directors;
- a provision that our directors may only be removed at a general meeting of shareholders by a two-thirds majority of votes cast representing more than half of the issued share capital of the Company; and
- a requirement that certain matters, including an amendment of our articles of association, may only be brought to our shareholders for a vote upon a proposal by our board.

We do not expect to pay dividends in the foreseeable future.

We have not paid any dividends since our incorporation. Even if future operations lead to significant levels of distributable profits, we currently intend that earnings, if any, will be reinvested in our business and that dividends will not be paid until we have an established revenue stream to support continuing dividends. Accordingly, shareholders cannot rely on dividend income from our ordinary shares and any returns on an investment in our ordinary shares will likely depend entirely upon any future appreciation in the price of our ordinary shares.

We will lose our status as an "emerging growth company," as of December 31, 2018.

We are an emerging growth company, as defined in the Jumpstart Our Business Startups Act of 2012 (“JOBS Act”). On the last business day of our second quarter in fiscal year 2018 the aggregate worldwide market value of ordinary shares held by our non-affiliate shareholders exceeded $700 million. As a result, as of December 31, 2018, we will be considered a large accelerated filer and will as a consequence lose our status as an emerging growth company. We will therefore no longer be permitted to rely on exemptions from certain disclosure requirements that are applicable to other public companies that are not emerging growth companies. These exemptions include:

- reduced disclosure obligations surrounding executive compensation in our periodic reports and proxy statements;
- exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved;
- not being required to comply with the independent auditor attestation requirements in the assessment of our internal control over financial reporting; and
- not being required to comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the independent auditor's report providing additional information about the audit and the financial statements.

Meeting these disclosure requirements as well as the auditor attestation of our internal control over financial reporting will require additional resources.

If we fail to maintain an effective system of internal controls, we may be unable to accurately report our results of operations or prevent fraud or fail to meet our reporting obligations, and investor confidence and the market price of our ordinary shares may be materially and adversely affected.

If we fail to maintain the adequacy of our internal control over financial reporting, we may not be able to conclude on an ongoing basis that we have effective internal control over financial reporting. If we fail to maintain effective internal control over financial reporting, we could experience material misstatements in our financial statements and fail to meet our reporting obligations, which would likely cause investors to lose confidence in our reported financial information. This could in turn limit our access to capital markets, harm our results of operations, and lead to a decline in the trading price of our ordinary shares. Additionally, ineffective internal control over financial reporting could expose us to increased risk of fraud or misuse of corporate assets and subject us to potential delisting from The NASDAQ Global Select Market, regulatory investigations and civil or criminal sanctions. Our reporting and compliance obligations may place a significant strain on our management, operational and financial resources and systems for the foreseeable future.

Risks for U.S. Holders

We have in the past qualified and in the future may qualify as a passive foreign investment company, which may result in adverse U.S. federal income tax consequence to U.S. holders.

Based on our average value of our gross assets, our cash and cash equivalents as well as the price of our shares we qualified as a passive foreign investment company ("PFIC") for U.S. federal income tax for 2016 but not in 2017. A corporation organized outside the United States generally will be classified as a PFIC for U.S. federal income tax purposes in any taxable year in which at least 75% of its gross income is passive income or on average at least 50% of the gross value of its assets is attributable to assets that produce passive income or are held to produce passive income. Passive income for this purpose generally includes dividends, interest, royalties, rents and gains from commodities and securities transactions. Our status in any taxable year will depend on our assets and activities in each year, and because this is a factual determination made annually after the end of each taxable year, there can be no assurance that we will continue to qualify as a PFIC in future taxable years. The market value of our assets may be determined in large part by reference to the market price of our ordinary shares, which is likely to fluctuate, and may fluctuate considerably given that market prices of biotechnology companies have been especially volatile. If we were considered a PFIC for the current taxable year or any future taxable year, a U.S. holder would be required to file annual information returns for such year, whether the U.S. holder disposed of any ordinary shares or received any distributions in respect of ordinary shares during such year.

Any U.S. or other foreign judgments may be difficult to enforce against us in the Netherlands.

Although we now report as a U.S. domestic filer for SEC reporting purposes, we are incorporated under the laws of the Netherlands. Some of the members of our board and senior management reside outside the United States. As a result, it may not be possible for shareholders to effect service of process within the United States upon such persons or to enforce judgments against them or us in U.S. courts, including judgments predicated upon the civil liability provisions of the federal securities laws of the United States. In addition, it is not clear whether a Dutch court would impose civil liability on us or any of our Board members in an original action based solely upon the federal securities laws of the United States brought in a court of competent jurisdiction in the Netherlands.

The United States and the Netherlands currently do not have a treaty providing for the reciprocal recognition and enforcement of judgments, other than arbitration awards, in civil and commercial matters. Consequently, a final judgment for payment given by a court in the United States, whether or not predicated solely upon U.S. securities laws, would not automatically be recognized or enforceable in the Netherlands. To obtain a judgment which is enforceable in the Netherlands, the party in whose favor a final and conclusive judgment of the U.S. court has been rendered will be required to file its claim with a court of competent jurisdiction in the Netherlands. Such party may submit to the Dutch court the final judgment rendered by the U.S. court. If and to the extent that the Dutch court finds that the jurisdiction of the U.S. court has been based on grounds which are internationally acceptable and that proper legal procedures have been observed, the Dutch court will, in principle, give binding effect to the judgment of the U.S. court, unless such judgment contravenes principles of public policy of the Netherlands. Dutch courts may deny the recognition and enforcement of punitive damages or other awards. Moreover, a Dutch court may reduce the amount of damages granted by a U.S. court and recognize damages only to the extent that they are necessary to compensate actual losses or damages. Enforcement and recognition of judgments of U.S. courts in the Netherlands are solely governed by the provisions of the Dutch Civil Procedure Code.

Therefore U.S. shareholders may not be able to enforce against us or our board members or senior management who are residents of the Netherlands or countries other than the United States any judgments obtained in U.S. courts in civil and commercial matters, including judgments under the U.S. federal securities laws.

The rights and responsibilities of our shareholders and directors are governed by Dutch law and differ in some important respects from the rights and responsibilities of shareholders under U.S. law.

Although we now report as a U.S. domestic filer for SEC purposes, our corporate affairs are governed by our articles of association and by the laws governing companies incorporated in the Netherlands. The rights of our shareholders and the responsibilities of members of our board under Dutch law are different than under the laws of some U.S. jurisdictions. In the performance of their duties, our board members are required by Dutch law to consider the interests of uniQure, its shareholders, its employees and other stakeholders and not only those of our shareholders.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

None.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

None.

Item 6. Exhibits

See the Exhibit Index immediately preceding the signature page to this Quarterly Report on Form 10-Q for a list of exhibits filed or furnished with this report, which Exhibit Index is incorporated herein by reference.

EXHIBIT INDEX

3.1	Amended Articles of Association (incorporated by reference to Exhibit 1.1 of the Company's annual report on Form 10-K for the year ended December 31, 2016 (file no. 0001-36294) filed with the Securities and Exchange Commission).
31.1*	Rule 13a-14(a)/15d-14(a) Certification of Chief Executive Officer
31.2*	Rule 13a-14(a)/15d-14(a) Certification of Chief Financial Officer
32.1±	Section 1350 Certification
101*	The following financial information from our Quarterly Report on Form 10-Q for the period ended June 30, 2018, filed with the Securities and Exchange Commission on August 8, 2018 is formatted in Extensible Business Reporting Language ("XBRL"): (i) Consolidated Balance Sheets; (ii) Consolidated Statements of Operations and Comprehensive Loss; (iii) Consolidated Statements of Shareholders' Equity; (iv) Consolidated Statements of Cash Flows; and (v) Notes to Consolidated Financial Statements (tagged as blocks of text)

* Filed herewith.

± Furnished herewith

SIGNATURE

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

UNIQURE, N.V.

By: /s/ Matthew Kapusta
Matthew Kapusta
Chief Executive Officer
(Principal Executive and Financial Officer)

By: /s/ Christian Klemt
Christian Klemt
Chief Accounting Officer

Dated August 8, 2018

Exhibit 31.1

Certification of Chief Executive Officer

I, Matthew Kapusta, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of uniQure N.V.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal controls over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation;

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting;

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

By: /s/ MATTHEW KAPUSTA

Matthew Kapusta
Chief Executive Officer
August 8, 2018

Exhibit 31.2

Certification of Chief Financial Officer

I, Matthew Kapusta, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of uniQure N.V.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal controls over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation;

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting;

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

By: /s/ MATTHEW KAPUSTA

Matthew Kapusta
Principal Financial Officer
August 8, 2018

Exhibit 32.1

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

In connection with this Quarterly Report of uniQure N.V. (the "Company") on Form 10-Q for the period ended June 30, 2018, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, Matthew Kapusta, Chief Executive Officer and Chief Financial Officer of the Company, hereby certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1 the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

2 the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

By: /s/ MATTHEW KAPUSTA

Matthew Kapusta
Chief Executive Officer and
Chief Financial Officer
August 8, 2018

A signed original of this written statement required by Section 906 has been provided to uniQure N.V. and will be retained by uniQure N.V. and furnished to the SEC or its staff upon request.