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 December 31, 2019

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 001-36415

QUOTIENT LIMITED
(Exact name of registrant as specified in its charter)

Jersey, Channel Islands **(State or other jurisdiction of incorporation or organization)**	**Not Applicable** **(I.R.S. Employer Identification No.)**
B1, Business Park Terre Bonne, **Route de Crassier 13,** **1262 Eysins, Switzerland** **(Address of principal executive offices)**	**Not Applicable** **(Zip Code)**

011-41-22-716-9800
(Registrant's telephone number, including area code)

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

Title of each class	Trading Symbol	Name of each exchange on which registered
Ordinary Shares, nil par value	**QTNT**	**The Nasdaq Global Market**

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

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

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

Large accelerated filer	☐	Accelerated filer	☒
Non-accelerated filer	☐	Smaller reporting company	☒
Emerging growth company	☒		

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

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

As of January 31, 2020, there were 80,311,796 Ordinary Shares, nil par value, of Quotient Limited outstanding.

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Cautionary note regarding forward-looking statements

This Quarterly Report on Form 10-Q, and exhibits thereto, contains estimates, predictions, opinions, projections and other statements that may be interpreted as "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, that involve substantial risks and uncertainties. The forward-looking statements are contained principally in Part I, Item 2: "Management's Discussion and Analysis of Financial Condition and Results of Operations" and are also contained elsewhere in this Quarterly Report. Forward-looking statements can be identified by words such as "strategy," "objective," "anticipate," "believe," "estimate," "expect," "intend," "may," "plan," "predict," "project," "target," "potential," "will," "would," "could," "should," "continue," "contemplate," "might," "design" and other similar expressions, although not all forward-looking statements contain these identifying words. Although we believe that we have a reasonable basis for each forward-looking statement contained in this Quarterly Report, we caution you that these statements are based on a combination of facts and factors currently known by us and our expectations of the future, about which we cannot be certain, and are subject to numerous known and unknown risks and uncertainties.

Forward-looking statements include statements about:

- the continuing development, regulatory approval and commercialization of MosaiQ™ ;
- the design of blood grouping and disease screening capabilities of MosaiQ, the potential for the expansion of our MosaiQ technology into the larger clinical diagnostics market and the benefits of MosaiQ for both customers and patients;
- future demand for and customer adoption of MosaiQ, the factors that we believe will drive such demand and our ability to address such demand;
- our expected profit margins for MosaiQ;
- the size of the market for MosaiQ;
- the regulation of MosaiQ by the U.S. Food and Drug Administration, or the FDA, or other regulatory bodies, or any unanticipated regulatory changes or scrutiny by such regulators;
- future plans for our conventional reagent products;
- the status of our future relationships with customers, suppliers, and regulators relating to our products;
- future demand for our conventional reagent products and our ability to meet such demand;
- our ability to manage the risks associated with international operations;
- anticipated changes, trends and challenges in our business and the transfusion diagnostics market;
- the effects of competition;
- the expected outcome or impact of pending or threatened arbitration or litigation, including our ongoing dispute with Ortho-Clinical Diagnostics Inc., or Ortho;
- our ability to protect our intellectual property and operate our business without infringing upon the intellectual property rights of others;
- the status of our business relationship with Ortho;
- our anticipated cash needs, including the adequacy of our available cash and short-term investment balances relative to our forecasted cash requirements for the next twelve months, our expected sources of funding, and our estimates regarding our capital requirements and capital expenditures; and
- our plans for executive and director compensation for the future.

You should also refer to the various factors identified in this and other reports filed by us with the Securities and Exchange Commission, or SEC, including but not limited to those discussed in the section entitled "Risk Factors" in this Quarterly Report and in our Annual Report on Form 10-K for the year ended March 31, 2019 and in our Quarterly Report on Form 10-Q for the quarter ended September 30, 2019, for a discussion of other important factors that may cause our actual results to differ materially from those expressed or implied by our forward-looking statements. As a result of these factors, we cannot assure you that the forward-looking statements in this Quarterly Report will prove to be accurate. Further, if our forward-looking statements prove to be inaccurate, the inaccuracy may be material. In light of the significant uncertainties in these forward-looking statements, you should not regard these statements as a representation or warranty by us that we will achieve our objectives and plans in any specified time frame, or at all. The forward-looking statements in this Quarterly Report represent our views only as of the date of this Quarterly Report. Subsequent events and developments may cause our views to change. While we may elect to update these forward-looking statements at some point in the future, we undertake no obligation to publicly update any forward-looking statements, except as required by law.

You should, therefore, not rely on these forward-looking statements as representing our views as of any date subsequent to the date of this Quarterly Report.

Available Information

Access to our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to these reports filed with or furnished to the SEC, may be obtained through the investor section of our website at www.quotientbd.com as soon as reasonably practical after we electronically file or furnish these reports. We do not charge for access to and viewing of these reports. Information on our website, including in the investor section, is not part of this Quarterly Report on Form 10-Q or any of our other securities filings unless specifically incorporated herein by reference. In addition, our filings with the SEC may be accessed through the SEC's website at www.sec.gov. All statements made in any of our securities filings, including all forward-looking statements or information, are made as of the date of the document in which the statement is included, and we do not assume or undertake any obligation to update any of those statements or documents unless we are required to do so by law.

PART I – FINANCIAL INFORMATION

Item 1. Financial Statements

CONDENSED CONSOLIDATED BALANCE SHEETS (unaudited)
(Expressed in thousands of U.S. Dollars — except for share data and per share data)

	December 31, 2019	March 31, 2019
ASSETS		
Current assets:		
Cash and cash equivalents	$ 4,664	$ 4,096
Short-term investments	133,371	90,729
Trade accounts receivable, net	5,037	3,348
Inventories	19,791	15,551
Prepaid expenses and other current assets	3,856	3,202
Total current assets	166,719	116,926
Restricted cash	9,015	7,507
Property and equipment, net	43,425	47,293
Operating lease right-of-use assets	22,798	—
Intangible assets, net	687	751
Deferred income taxes	564	605
Other non-current assets	4,747	4,688
Total assets	$ 247,955	$ 177,770
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 3,513	$ 5,936
Accrued compensation and benefits	5,899	6,149
Accrued expenses and other current liabilities	12,839	12,458
Current portion of operating lease liability	3,157	—
Current portion of deferred lease rental benefit	—	435
Current portion of finance lease obligation	522	471
Total current liabilities	25,930	25,449
Long-term debt, less current portion	153,717	121,855
Operating lease liability, less current portion	21,139	—
Deferred lease rental benefit, less current portion	—	1,144
Finance lease obligation, less current portion	950	865
Defined benefit pension plan obligation	7,998	7,368
7% Cumulative redeemable preference shares	20,163	19,375
Total liabilities	229,897	176,056
Commitments and contingencies	—	—
Shareholders' equity:		
Ordinary shares (nil par value) 80,256,946 and 65,900,447 issued and outstanding at December 31, 2019 and March 31, 2019 respectively	459,686	368,958
Additional paid in capital	32,040	28,665
Accumulated other comprehensive loss	(14,960)	(14,884)
Accumulated deficit	(458,708)	(381,025)
Total shareholders' equity	18,058	1,714
Total liabilities and shareholders' equity	$ 247,955	$ 177,770

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

CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS (unaudited)
(Expressed in thousands of U.S. Dollars — except for share data and per share data)

	Quarter ended December 31,		Nine months ended December 31,	
	2019	2018	2019	2018
Revenue:				
Product sales	$ 7,636	$ 6,723	$ 22,901	$ 20,834
Other revenues	305	—	1,055	19
Total revenue	7,941	6,723	23,956	20,853
Cost of revenue	(4,532)	(4,186)	(13,067)	(12,803)
Gross profit	3,409	2,537	10,889	8,050
Operating expenses:				
Sales and marketing	(2,290)	(2,233)	(7,123)	(6,359)
Research and development, net of government grants	(14,160)	(11,788)	(38,895)	(37,356)
General and administrative expense:				
Compensation expense in respect of share options and management equity incentives	(1,196)	(1,073)	(3,375)	(3,576)
Other general and administrative expenses	(8,120)	(6,471)	(20,717)	(19,388)
Total general and administrative expense	(9,316)	(7,544)	(24,092)	(22,964)
Total operating expense	(25,766)	(21,565)	(70,110)	(66,679)
Operating loss	(22,357)	(19,028)	(59,221)	(58,629)
Other income (expense):				
Interest expense, net	(7,008)	(5,679)	(20,384)	(14,614)
Other, net	1,894	(1,536)	1,600	(5,516)
Other expense, net	(5,114)	(7,215)	(18,784)	(20,130)
Loss before income taxes	(27,471)	(26,243)	(78,005)	(78,759)
Provision for income taxes	(14)	(11)	(41)	(33)
Net loss	$ (27,485)	$ (26,254)	$ (78,046)	$ (78,792)
Other comprehensive income (loss):				
Change in fair value of foreign currency cash flow hedges	$ 487	$ 41	$ 209	$ (320)
Change in unrealized gain on short-term investments	148	169	342	416
Foreign currency gain (loss)	254	(176)	(771)	554
Provision for pension benefit obligation	48	35	144	107
Other comprehensive income (loss), net	937	69	(76)	757
Comprehensive loss	$ (26,548)	$ (26,185)	$ (78,122)	$ (78,035)
Net loss available to ordinary shareholders - basic and diluted	$ (27,485)	$ (26,254)	$ (78,046)	$ (78,792)
Loss per share - basic and diluted	$ (0.37)	$ (0.46)	$ (1.14)	$ (1.53)
Weighted-average shares outstanding - basic and diluted	73,768,845	56,619,356	68,722,475	51,512,352

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

CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY (DEFICIT) (unaudited)
(Expressed in thousands of U.S. Dollars — except for share data)

	Ordinary shares		Additional paid in capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Shareholders' Equity (Deficit)
	Shares	Amount				
September 30, 2019	66,366,706	$ 369,335	$ 30,844	$ (15,897)	$ (431,223)	$ (46,941)
Issue of shares, net of issue costs of $6,227	13,800,000	$ 90,373				90,373
Issue of shares upon exercise of incentive share options and vesting of RSUs	90,240	(22)	—	—	—	(22)
Net loss	—	—	—	—	(27,485)	(27,485)
Change in the fair value of foreign currency cash flow hedges	—	—	—	487	—	487
Change in unrealized gain on short-term investments	—	—	—	148	—	148
Foreign currency gain (loss) on:						
Long-term investment nature intra-entity balances	—	—	—	(7,435)	—	(7,435)
Retranslation of foreign entities	—	—	—	7,689	—	7,689
Provision for pension benefit obligation	—	—	—	48	—	48
Other comprehensive loss	—	—	—	937	—	937
Stock-based compensation	—	—	1,196	—	—	1,196
December 31, 2019	80,256,946	$ 459,686	$ 32,040	$ (14,960)	$ (458,708)	$ 18,058

	Ordinary shares		Additional paid in capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Shareholders' Equity (Deficit)
	Shares	Amount				
March 31, 2019	65,900,447	$ 368,958	$ 28,665	$ (14,884)	$ (381,025)	$ 1,714
Issue of shares, net of issue costs of $6,227	13,800,000	90,373	—	—	—	90,373
Issue of shares upon exercise of incentive share options and vesting of RSUs	556,499	355	—	—	—	355
Net loss	—	—	—	—	(78,046)	(78,046)
Change in the fair value of foreign currency cash flow hedges	—	—	—	209	—	209
Change in unrealized gain on short-term investments	—	—	—	342	—	342
Foreign currency gain (loss) on:	—	—	—	—	—	—
Long-term investment nature intra-entity balances	—	—	—	2,972	—	2,972
Retranslation of foreign entities	—	—	—	(3,743)	—	(3,743)
Provision for pension benefit obligation	—	—	—	144	—	144
Other comprehensive loss	—	—	—	(76)	—	(76)
Stock-based compensation	—	—	3,375	—	—	3,375
Cumulative effect of accounting changes	—	—	—	—	363	363
December 31, 2019	80,256,946	$ 459,686	$ 32,040	$ (14,960)	$ (458,708)	$ 18,058

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

CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY (DEFICIT) (unaudited)
(Expressed in thousands of U.S. Dollars — except for share data)

	Ordinary shares		Additional paid in capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Shareholders' Equity (Deficit)
	Shares	Amount				
September 30, 2018	54,229,503	$ 303,176	$ 26,211	$ (15,946)	$ (328,177)	$ (14,736)
Issue of shares, net of issue costs of $4,497	10,615,385	64,503	—	—	—	64,503
Issue of shares upon exercise of incentive share options and vesting of RSUs	127,664	—	—	—	—	—
Net loss	—	—	—	—	(26,254)	(26,254)
Change in the fair value of the effective portion of foreign currency cash flow hedges	—	—	—	41	—	41
Unrealized gain on short-term investments	—	—	—	169	—	169
Foreign currency gain (loss) on:						
Long-term investment nature intra-entity balances	—	—	—	3,399	—	3,399
Retranslation of foreign entities	—	—	—	(3,575)	—	(3,575)
Provision for pension benefit obligation	—	—	—	35	—	35
Other comprehensive loss	—	—	—	69	—	69
Stock-based compensation	—	—	1,073	—	—	1,073
December 31, 2018	64,972,552	$ 367,679	$ 27,284	$ (15,877)	$ (354,431)	$ 24,655

	Ordinary shares		Additional paid in capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Shareholders' Equity (Deficit)
	Shares	Amount				
March 31, 2018	45,646,424	$ 253,934	$ 23,708	$ (16,634)	$ (275,639)	$ (14,631)
Issue of shares, net of issue costs of $4,497	19,085,068	113,723	—	—	—	113,723
Issue of shares upon exercise of incentive share options and vesting of RSUs	241,060	22	—	—	—	22
Net loss	—	—	—	—	(78,792)	(78,792)
Change in the fair value of the effective portion of foreign currency cash flow hedges	—	—	—	(320)	—	(320)
Unrealized gain on short-term investments	—	—	—	416	—	416
Foreign currency gain (loss) on:						
Long-term investment nature intra-entity balances	—	—	—	10,848	—	10,848
Retranslation of foreign entities	—	—	—	(10,294)	—	(10,294)
Provision for pension benefit obligation	—	—	—	107	—	107
Other comprehensive loss	—	—	—	757	—	757
Stock-based compensation	—	—	3,576	—	—	3,576
December 31, 2018	64,972,552	$ 367,679	$ 27,284	$ (15,877)	$ (354,431)	$ 24,655

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

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (unaudited)
(Expressed in thousands of U.S. Dollars)

	Nine months ended December 31, 2019	Nine months ended December 31, 2018
OPERATING ACTIVITIES:		
Net loss	$ (78,046)	$ (78,792)
Adjustments to reconcile net loss to net cash provided by operating activities:		
Depreciation and amortization	8,996	9,503
Share-based compensation	3,375	3,576
Increase in deferred lease rentals	215	266
Swiss pension obligation	551	453
Amortization of deferred debt issue costs	7,736	4,097
Accrued preference share dividends	788	788
Deferred income taxes	41	33
Net change in assets and liabilities:		
Trade accounts receivable, net	(1,638)	315
Inventories	(3,838)	147
Accounts payable and accrued liabilities	(2,268)	(5,076)
Accrued compensation and benefits	(268)	(664)
Other assets	(406)	3,833
Net cash used in operating activities	(64,762)	(61,521)
INVESTING ACTIVITIES:		
Increase in short-term investments	(95,000)	(119,000)
Realization of short-term investments	52,700	21,883
Purchase of property and equipment	(3,941)	(3,047)
Purchase of intangible assets	—	(3)
Net cash used in investing activities	(46,241)	(100,167)
FINANCING ACTIVITIES:		
Repayment of finance leases	(337)	(358)
Proceeds from drawdown of new debt	25,000	36,000
Debt issuance costs and fees paid to noteholders	(874)	(5,113)
Proceeds from issuance of ordinary shares and warrants	90,728	113,745
Net cash generated from financing activities	114,517	144,274
Effect of exchange rate fluctuations on cash, cash equivalents and restricted cash	(1,438)	4,187
Change in cash, cash equivalents and restricted cash	2,076	(13,227)
Beginning cash, cash equivalents and restricted cash	11,603	25,205
Ending cash, cash equivalents and restricted cash	$ 13,679	$ 11,978
Supplemental cash flow disclosures:		
Income taxes paid	$ —	$ —
Interest paid	$ 15,959	$ 11,435
Reconciliation of cash, cash equivalents and restricted cash:		
Cash and cash equivalents	$ 4,664	$ 4,468
Restricted cash	9,015	7,510
Total cash, cash equivalents and restricted cash	$ 13,679	$ 11,978

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

Note 1. Description of Business and Basis of Presentation

Description of Business

The principal activity of Quotient Limited (the "Company") and its subsidiaries (the "Group") is the development, manufacture and sale of products for the global transfusion diagnostics market. Products manufactured by the Group are sold to hospitals, blood banking operations and other diagnostics companies worldwide.

Basis of Presentation

The condensed consolidated financial statements have been prepared pursuant to the rules and regulations of the Securities and Exchange Commission ("SEC") and are unaudited. In accordance with those rules and regulations, they do not include all of the information and footnotes required by accounting principles generally accepted in the United States ("GAAP") for complete financial statements.

In the opinion of management, the accompanying unaudited condensed consolidated financial statements contain all adjustments (consisting only of normal recurring adjustments) considered necessary to present fairly the financial position, results of operations, changes in shareholders' equity and cash flows for the interim periods presented. The March 31, 2019 balance sheet was derived from audited financial statements, but does not include all disclosures required by GAAP. However, the Company believes that the disclosures are adequate to make the information presented not misleading. The financial statements should be read in conjunction with the audited consolidated financial statements at and for the year ended March 31, 2019 included in the Company's Annual Report on Form 10-K for the year then ended. The results of operations for the nine month period ended December 31, 2019 are not necessarily indicative of the results of operations that may be expected for the year ending March 31, 2020 and any future period.

The Company has incurred net losses and negative cash flows from operations in each year since it commenced operations in 2007 and had an accumulated deficit of $458.7 million as of December 31, 2019. At December 31, 2019 the Company had available cash holdings and short-term investments of $138.0 million. The Company's existing available cash and short-term investment balances are adequate to meet its forecasted cash requirements for the next twelve months and accordingly the financial statements have been prepared on the going concern basis.

In the longer term, the Company expects to fund its operations, including the ongoing development of MosaiQ through successful field trial completion, achievement of required regulatory authorizations and commercialization, from the use of existing available cash and short-term investment balances and the issuance of new equity or debt.

Note 2. Summary of Significant Accounting Policies

Use of Estimates

The preparation of consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. Actual results could differ from these estimates.

Cash and Cash Equivalents

The Company considers all highly liquid investments with an original maturity of three months or less to be cash equivalents. All cash and cash equivalents comprised readily accessible cash balances. Restricted cash comprised $8.7 million and $7.2 million at December 31, 2019 and March 31, 2019, respectively, held in a cash reserve account pursuant to the indenture governing the Company's 12% Senior Secured Notes ("the Secured Notes") and $315 at December 31, 2019 and $307 at March 31, 2019 held in a restricted account as security for the property rental obligations of the Company's Swiss subsidiary.

Short-term Investments

Short-term investments represent investments in a money-market fund which is valued daily and which has no minimum notice period for withdrawals. The fund is invested in a portfolio of holdings and the creditworthiness requirement for individual investment holdings is a minimum of an A rating from a leading credit-rating agency. The Company records the value of its investment in the fund based on the quoted value of the fund at the balance sheet date. Unrealized gains or losses are recorded in accumulated other comprehensive loss and are transferred to the statement of comprehensive loss when they are realized.

Trade Accounts Receivable

Trade accounts receivable are recorded at the invoiced amount and are not interest bearing. The Company maintains an allowance for doubtful accounts to reserve for potentially uncollectible trade receivables. Movements in the allowance for doubtful accounts are recorded in general and administrative expenses. The Company reviews its trade receivables to identify specific customers with known disputes or collectability issues. In addition, the Company maintains an allowance for all other receivables not included in the specific reserve by applying specific rates of projected uncollectible receivables to the various aging categories. In determining these percentages, the Company analyzes its historical collection experience, customer credit-worthiness, current economic trends and changes in customer payment terms.

Concentration of Credit Risks and Other Uncertainties

The carrying amounts for financial instruments consisting of cash and cash equivalents, accounts receivable, accounts payable and accrued liabilities approximate fair value due to their short maturities. Derivative instruments, consisting of foreign exchange contracts, and short-term investments are stated at their estimated fair values, based on quoted market prices for the same or similar instruments. The counterparties to the foreign exchange contracts consist of large financial institutions of high credit standing. The short-term investments are invested in a fund which is invested in a portfolio of holdings and the creditworthiness requirement for individual investment holdings is a minimum of an A rating from a leading credit-rating agency.

The Company's main financial institutions for banking operations hold all of the Company's cash and cash equivalents as of December 31, 2019 and at March 31, 2019. The Company's accounts receivable are derived from net revenue to customers and distributors located in the United States and other countries. The Company performs credit evaluations of its customers' financial condition. The Company provides reserves for potential credit losses, but has not experienced significant losses to date. There was one customer whose accounts receivable balance represented 10% or more of total accounts receivable, net, as of December 31, 2019 and March 31, 2019. This customer represented 63% and 55% of the accounts receivable balances as of December 31, 2019 and March 31, 2019, respectively.

The Company currently sells products through its direct sales force and through third-party distributors. There was one customer that accounted for 10% or more of total product sales for the nine month periods ended December 31, 2019 and December 31, 2018. This customer represented 60% of total product sales for the nine month period ended December 31, 2019 and 59% for the nine month period ended December 31, 2018.

Fair Value of Financial Instruments

The Company defines fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. The Company's valuation techniques used to measure fair value maximized the use of observable inputs and minimized the use of unobservable inputs. The fair value hierarchy is based on the following three levels of inputs:

- Level 1—Quoted prices in active markets for identical assets or liabilities.
- Level 2—Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.
- Level 3—Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

See Note 6, "Commitment and Contingencies," for information and related disclosures regarding the Company's fair value measurements.

Inventory

Inventory is stated at the lower of standard cost (which approximates actual cost) or market, with cost determined on the first-in-first-out method. Accordingly, allocation of fixed production overheads to conversion costs is based on normal capacity of production. Abnormal amounts of idle facility expense, freight, handling costs and spoilage are expensed as incurred and not included in overhead. No stock-based compensation cost was included in inventory as of December 31, 2019 and March 31, 2019.

Property and Equipment

Property, equipment and leasehold improvements are stated at cost, net of accumulated depreciation and amortization. Depreciation and amortization are computed on a straight-line basis over the estimated useful lives of the related assets as follows:

- Plant, machinery and equipment—4 to 20 years;
- Leasehold improvements—the shorter of the lease term or the estimated useful life of the asset.

Repairs and maintenance expenditures, which are not considered improvements and do not extend the useful life of property and equipment, are expensed as incurred.

Intangible Assets

Intangible assets related to product licenses are recorded at cost, less accumulated amortization. Intangible assets related to technology and other intangible assets acquired in acquisitions are recorded at fair value at the date of acquisition, less accumulated amortization. Intangible assets are amortized over their estimated useful lives, on a straight-line basis as follows:

Customer relationships—5 years

Brands associated with acquired cell lines—40 years

Product licenses—10 years

Other intangibles assets—7 years

The Company reviews its intangible assets for impairment and conducts an impairment review when events or circumstances indicate the carrying value of a long-lived asset may be impaired by estimating the future undiscounted cash flows to be derived from an asset to assess whether or not a potential impairment exists. No impairment losses have been recorded in either of the nine month periods ended December 31, 2019 or December 31, 2018.

Revenue Recognition

Revenue is recognized in accordance with ASU 2014-09,*Revenue from Contracts with Customers.*

Product revenue is recognized at a point in time upon transfer of control of a product to a customer, which is generally at the time of delivery at an amount based on the transaction price. Customers have no right of return except in the case of damaged goods and the Company has not experienced any significant returns of its products. Shipping and handling costs are expensed as incurred and included in cost of product sales. In those cases where the Company bills shipping and handling costs to customers, the amounts billed are classified as revenue.

Revenue is also earned from the provision of development services to a small number of original equipment manufacturer (“OEM”) customers. These development service contracts are reviewed individually to determine the nature of the performance obligations and the associated transaction prices. In recent years, product development revenues have been commensurate with achieving milestones specified in the respective development agreements relating to those products. These milestones may include the approval of new products by the European or U.S. regulatory authorities, which are not within the Company’s control. While there can be no assurance that this will continue to be the case, the milestones have been such that they effectively represent completion of the Company’s performance obligations under a particular part of a development program. Should the Company fail to achieve these milestones the Company would not be entitled under the terms of the development agreements to any compensation for the work undertaken to date. As a result, the milestone-related revenues have been recognized as the contractual milestones are achieved.

Pursuant to an Umbrella Supply Agreement with Ortho, the Company executed a product attachment relating to the development of a range of rare antisera products. During the year ended March 31, 2019, the Company recognized a milestone of $450 related to the submission to the FDA of an application to cover use of the products on an Ortho automation platform and during the nine month period ended December 31, 2019, the Company recognized further milestones totaling $1,050 related to the approval by the FDA of this application and a further FDA submission and approval related to the use of the products on another of Ortho's automation platforms. There are no further milestone revenues due under this agreement.

In January 2015, the Company entered into a supply and distribution agreement with Ortho related to the commercialization and distribution of certain MosaiQ products. Under the terms of this agreement, the Company was entitled to receive milestone payments upon CE-mark and FDA approval, as well as upon the first commercial sale of the relevant MosaiQ products by Ortho within the European Union, United States and within any country outside of these two regions. The Company had concluded that as each of these milestones required significant levels of development work to be undertaken and there was no certainty at the start of the projects that the development work would be successful, these milestones were substantive and the revenue would have been recognized when the milestones were achieved. The Company terminated this agreement effective as of December 27, 2019.

In the nine month period ended December 31, 2019, revenue recognized from performance obligations related to prior periods was not material and, at December 31, 2019, revenue expected to be recognized in future periods related to remaining performance obligations was also not material.

Research and Development

Research and development expenses consist of costs incurred for company-sponsored and collaborative research and development activities. These costs include direct and research-related overhead expenses. The Company expenses research and development costs, including the expenses for research under collaborative agreements, as such costs are incurred. Where government grants or tax credits are available, the income concerned is included as a credit against the related expense.

Stock-Based Compensation

Stock-based compensation cost is measured at the grant date based on the fair value of the award and is recognized as an expense on a straight-line basis over the requisite service period, which is generally the vesting period. The value of the portion of the award that is ultimately expected to vest is recognized as expense over the requisite service periods in the Company's consolidated statements of comprehensive loss.

In determining fair value of the stock-based compensation payments, the Company uses the Black–Scholes model and a single option award approach for share options and a barrier option pricing model for multi-year performance based restricted share units ("MRSUs"), both of which require the input of subjective assumptions. These assumptions include: the fair value of the underlying share, estimating the length of time employees will retain their awards before exercising them (expected term), the estimated volatility of the Company's publicly listed peers over the expected term (expected volatility), risk-free interest rate (interest rate), expected dividends and the number of shares subject to awards that will ultimately not complete their vesting requirements (forfeitures).

Share Warrants

As of December 31, 2019, the Company had one class of warrants to purchase ordinary shares outstanding, which comprised warrants that were issued in December 2013 and August 2015 in connection with the establishment or increase of the Company's then existing secured term loan facility. None of these warrants contain or contained any obligation to transfer value and, as such, the issuance of these warrants has been recorded in additional paid in capital as part of shareholders' equity.

Leases

In February 2016, the Financial Accounting Standards Board, or FASB, issued Accounting Standard Update, or ASU 2016-02, *Leases,* or ASU 2016-02, to enhance the transparency and comparability of financial reporting related to leasing arrangements. The Company adopted ASU 2016-02 on April 1, 2019, or the effective date, and used the effective date as its date of initial application.

At the inception of an arrangement, the Company determines whether the arrangement is or contains a lease based on the unique facts and circumstances present. The Company also reviews the terms of the lease in accordance with ASU 2016-02 in order to determine whether the lease concerned is a finance or an operating lease. Most leases with a term greater than one year are recognized on the balance sheet as right-of-use assets, lease liabilities and, if applicable, long-term lease liabilities. The Company has elected not to recognize on the balance sheet leases with terms of one year or less.

For finance leases, an asset is included within property and equipment and a lease liability equal to the present value of the minimum lease payments is included in current or long-term liabilities. Interest expense is recorded over the life of the lease at a constant rate.

Operating lease liabilities and their corresponding right-of-use assets are recorded based on the present value of lease payments over the expected remaining lease term. The operating lease right-of-use assets also include any lease payments made prior to the commencement date and any initial direct costs incurred, less any lease incentives received. The interest rate implicit in lease contracts is typically not readily determinable. As a result, the Company utilizes its incremental borrowing rates, which are the rates incurred to borrow on a collateralized basis over a similar term an amount equal to the lease payments in a similar economic environment. The incremental borrowing rate is determined at lease commencement, or as of April 1, 2019 for operating leases existing upon adoption of ASU 2016-02. The incremental borrowing rate is subsequently reassessed upon modification to the lease arrangement. Operating lease expense is recognized on a straight-line basis over the lease term.

In accordance with the guidance in ASU 2016-02, components of a lease should be split into three categories: lease components (e.g., land, building, etc.), non-lease components (e.g., common area maintenance, maintenance, consumables, etc.), and non-components (e.g., property taxes, insurance, etc.). Although separation of lease and non-lease components is required, certain practical expedients are available. In particular, entities may elect a practical expedient to not separate lease and non-lease components and instead account for each lease component and the related non-lease component together as a single component. The Company has elected to account for the lease and non-lease components of each of its operating leases as a single lease component and allocate all of the contract consideration to the lease component only. The lease component results in an operating lease right-of-use asset being recorded on the balance sheet and amortized on a straight-line basis as lease expense.

The finance lease assets and operating lease right-of-use assets are assessed for impairment in accordance with the Company’s accounting policy for long-lived assets.

Derivative Financial Instruments

In the normal course of business, the Company’s financial position is routinely subjected to market risk associated with foreign currency exchange rate fluctuations. The Company’s policy is to mitigate the effect of these exchange rate fluctuations on certain foreign currency denominated business exposures. The Company has a policy that allows the use of derivative financial instruments to hedge foreign currency exchange rate fluctuations on forecasted revenue denominated in foreign currencies. The Company carries derivative financial instruments (derivatives) on the balance sheet at their fair values. The Company does not use derivatives for trading or speculative purposes. The Company does not believe that it is exposed to more than a nominal amount of credit risk in its foreign currency hedges, as counterparties are large, global and well-capitalized financial institutions. To hedge foreign currency risks, the Company uses foreign currency exchange forward contracts, where possible and prudent. These forward contracts are valued using standard valuation formulas with assumptions about future foreign currency exchange rates derived from existing exchange rates, interest rates, and other market factors.

The Company considers its most current forecast in determining the level of foreign currency denominated revenue to hedge as cash flow hedges. The Company combines these forecasts with historical trends to establish the portion of its expected volume to be hedged. The revenue and expenses are hedged and designated as cash flow hedges to protect the Company from exposures to fluctuations in foreign currency exchange rates. If the underlying forecasted transaction does not occur, or it becomes probable that it will not occur, the related hedge gains and losses on the cash flow hedge are reclassified from accumulated other comprehensive loss to the consolidated statement of comprehensive loss at that time.

Income Taxes

The Company accounts for income taxes using an asset and liability approach, which requires recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been recognized in the consolidated financial statements, but have not been reflected in taxable income. A valuation allowance is established to reduce deferred tax assets to their estimated realizable value. Therefore, the Company provides a valuation allowance to the extent that is more likely than not that it will generate sufficient taxable income in future periods to realize the benefit of its deferred tax assets. Deferred tax assets and liabilities are classified as noncurrent on the balance sheet.

The Company accounts for uncertain tax positions using a “more-likely-than-not” threshold for recognizing and resolving uncertain tax positions. The Company evaluates uncertain tax positions on a quarterly basis and considers various factors, including, but not limited to, changes in tax law, the measurement of tax positions taken or expected to be taken in tax returns, the effective settlement of matters subject to audit and changes in facts or circumstances related to the tax position.

Debt Issuance Costs and Royalty Rights

The Company follows the requirements of Accounting Standards Update 2015-03, Interest — Imputation of Interest (Subtopic 835-30) — Simplifying the Presentation of Debt Issuance Costs, which requires that debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct deduction from the debt liability rather than as an asset.

On October 14, 2016, June 29, 2018 and May 15, 2019, the Company issued Secured Notes, and, on December 4, 2018, the Company amended the indenture governing the Secured Notes, which amendments became effective on December 18, 2018. In connection with these issuances and this amendment, the Company entered into royalty rights agreements with the subscribers and the consenting note holders, as applicable, which, as of December 31, 2019, provided for an aggregate amount of royalties payable thereunder of 3.4% of net sales of MosaiQ instruments and consumables made in the donor testing market in the United States and the European Union. All of these royalty rights agreements are treated as sales of future revenues that meet the requirements of Accounting Standards Codification Topic 470 "*Debt"* ("ASC 470") to be treated as debt. The future cash outflows under the royalty rights agreements have been combined with the issuance costs (which includes the one-time consent payment of $3.9 million paid to holders of our Secured Notes in December 2018) and interest payable to calculate the effective interest rate of the Secured Notes and will be expensed through interest expense in the consolidated statement of comprehensive loss using the effective interest rate method over the term of the Secured Notes and royalty rights agreements.

Pension Obligation

The Company maintains a pension plan covering employees in Switzerland pursuant to the requirements of Swiss pension law. Certain aspects of the plan require that it be accounted for as a defined benefit plan pursuant to Accounting Standards Codification Topic, 715 *Compensation – Retirement Benefits* ("ASC 715"). The Company recognizes an asset for the plan's overfunded status or a liability for the plan's underfunded status in its consolidated balance sheets. Additionally, the Company measures the plan's assets and obligations that determine its funded status as of the end of the year and recognizes the change in the funded status within ''Accumulated other comprehensive loss''. The service cost component of the net periodic benefit cost is disclosed in the same line item as other employee compensation costs arising from services rendered during the period, and the other components are reported separately from the line item that includes the service cost and within interest expense, net in the consolidated statement of comprehensive loss.

The Company uses an actuarial valuation to determine its pension benefit costs and credits. The amounts calculated depend on a variety of key assumptions, including discount rates and expected return on plan assets. Details of the assumptions used to determine the net funded status are set out in the notes to the Company's audited consolidated financial statements included in the Company's Annual Report on Form 10-K for the fiscal year ended March 31, 2019. The Company's pension plan assets are assigned to their respective levels in the fair value hierarchy in accordance with the valuation principles described in the ''Fair Value of Financial Instruments'' section above.

Adoption of New Accounting Standards

In February 2016, the FASB issued ASU 2016-02,*Leases* that requires lessees to recognize a right-of-use asset and a lease liability on their balance sheet for all leases with lease terms greater than 12 months but recognize expenses in their income statements in a manner similar to the previous guidance. ASU 2016-02 also requires new qualitative and quantitative disclosures to help investors and other financial statement users better understand the amount, timing and uncertainty of cash flows arising from leases. The Company's process of evaluating the impact of ASU 2016-02 has included reviewing all forms of leases and performing a completeness assessment over the lease population. The Company also performed detailed analysis to determine the appropriate incremental borrowing rates used to discount outstanding lease payments.

The Company adopted ASU 2016-02 on April 1, 2019. In adopting this standard the Company applied the package of practical expedients in ASU 2016-02 which allow an entity to not reassess whether any expired or existing contracts are or contain leases, lease classification of any expired or existing leases and the accounting for any initial direct costs on any expired or existing leases. The Company also elected the additional transitional approach prescribed under ASU 2018-11 to allow the Company to apply the new standard from the date of adoption, rather than adjusting comparative periods, and recognize a cumulative-effect adjustment to the opening balance of retained earnings in the period of adoption.

The results for the nine month period to December 31, 2019 reflect the adoption of ASU 2016-02 guidance while the results for the nine month period to December 31, 2018 and the year to March 31, 2019 were prepared under the guidance of the previous leasing standard (Accounting Standard Codification 840). The adoption of ASU 2016-02 has not had a material impact on the Company's consolidated statements of comprehensive loss or consolidated statements of cash flows.

The adoption of ASU 2016-02 resulted in the following impact onits consolidated balance sheet:

(i) no change in the carrying values of assets or liabilities related to the Company's finance leases,
(ii) the recording of right-of-use assets and corresponding lease liabilities related to the Company's operating leases, adjusted for existing balances of accrued rent liabilities and deferred lease rental benefit, and
(iii) adjustments to reclassify the deferred gain on a sale and leaseback transaction to accumulated deficit as of the transition date.

The cumulative effect of adopting ASU 2016-02 to all leases that had commenced at or prior to April 1, 2019 was as follows:

Balance sheet captions impacted by ASU 2016-02	31 March 2019 (prior to adoption of ASU 2016-02)	Effect of the adoption of ASU 2016-02	March 31, 2019 (As adjusted)
Operating lease right-of use assets (1)	$ —	$ 18,478	$ 18,478
Current portion of operating lease liability (2)	—	3,130	3,130
Operating lease liability less current portion (3)	—	16,564	16,564
Current portion of deferred lease rental benefit (4)	435	(435)	—
Deferred lease rental benefit, less current portion (5)	1,144	(1,144)	—
Accumulated deficit (6)	(381,025)	363	(380,662)

(1) Recognition of operating lease right-of-use assets and adjusted for the accrued rent and deferred lease rental benefit reclassifications referred to in footnotes (4) and (5) below.
(2) Recognition of current portion of operating lease liabilities.
(3) Recognition of the long-term portion of operating lease liabilities.
(4) Current portion of deferred gain on sale and lease back transaction transferred to accumulated deficit and reclassification of current portion of deferred lease rental benefit to operating lease right-of-use assets.
(5) Long-term portion of deferred gain on sale and lease back transaction transferred to accumulated deficit and reclassification of accrued rent to operating lease right-of-use assets.
(6) Transfer of deferred gain on sale and leaseback transaction to accumulated deficit.

The Company has included additional disclosures in Note 12 to its condensed consolidated financial statements regarding its leasing portfolio.

In the condensed consolidated statement of cash flows the non-cash amortization of deferred lease rental benefit and movements in other non-cash operating lease accruals in the nine month period ended December 31, 2018 has been retitled as increase in deferred lease rentals.

Recent Accounting Pronouncements Not Yet Adopted

In August 2018, the FASB issued ASU 2018-14, "Compensation Retirement Benefits - Defined Benefit Plans -General (Subtopic 715-20)" or ASU 2018-14. ASU 2018-14 removes the requirements to disclose the amounts in accumulated other comprehensive income (loss) expected to be recognized as components of net periodic benefit cost over the next fiscal year and other disclosure requirements. In addition, the ASU adds the requirement to disclose an explanation for any significant gains and losses related to changes in the benefit obligation for the period. The ASU is effective for fiscal years ending after December 15, 2020 and will be applied on a retrospective basis to all periods presented. Early adoption is permitted. The Company continues to evaluate the impact that adoption of this guidance will have on its consolidated financial statements and related disclosures, but does not expect it to have a material impact.

In June 2016, the FASB issued ASU 2016-13, "Financial Instruments – Credit Losses". The standard requires a financial asset measured on an amortized cost basis, such as accounts receivable, to be presented at the net amount expected to be collected based on relevant information about past events, including historical experience, current conditions, and reasonable and supportable forecasts that affect the collectability of the reported amount. The ASU is effective for fiscal years beginning after December 15, 2019, and interim periods within those fiscal years, and requires the modified retrospective approach. Early adoption is permitted. The Company continues to evaluate the impact that adoption of this guidance will have on its consolidated financial statements and related disclosures, but does not expect it to have a material impact.

Note 3. Intangible Assets

	December 31, 2019			
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted Average Remaining Useful Life
Customer relationships	$ 2,596	$ (2,596)	$ —	—
Brands associated with acquired cell lines	535	(165)	370	27.7 years
Product licenses	904	(587)	317	3.7 years
Other intangibles	169	(169)	—	—
Total	$ 4,204	$ (3,517)	$ 687	16.3years

	March 31, 2019			
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted Average Remaining Useful Life
Customer relationships	$ 2,564	$ (2,564)	$ —	—
Brands associated with acquired cell lines	529	(153)	376	28.4 years
Product licenses	890	(515)	375	4.2 years
Other intangibles	167	(167)	—	—
Total	$ 4,150	$ (3,399)	$ 751	16.3 years

Note 4. Debt

Long-term debt comprises:

	December 31, 2019	March 31, 2019
Total debt	$ 145,000	$ 120,000
Less current portion	—	—
Long-term debt	$ 145,000	$ 120,000
Deferred debt costs and royalty liability, net of amortization	8,717	1,855
	$ 153,717	$ 121,855

The Company's debt at December 31, 2019 was comprised of the Secured Notes. On October 14, 2016, the Company completed the private placement of up to $120 million aggregate principal amount of the Secured Notes and entered into an indenture governing the Secured Notes with the guarantors party thereto and U.S. Bank National Association, a national banking association, as trustee and collateral agent. The Company issued $84 million aggregate principal amount of the Secured Notes on October 14, 2016 and an additional $36 million aggregate principal amount of the Secured Notes on June 29, 2018. On December 18, 2018, the Company also completed certain amendments to the indenture governing the Secured Notes. The amendments included an increase to the aggregate principal amount of Secured Notes that can be issued under the indenture from $120 million to up to $145 million following the European CE Marking of the Company's initial MosaiQ IH Microarray. On April 30, 2019, the Company was notified that it had received the European CE Marking of the initial MosaiQ IH Microarray and, on May 15, 2019, the Company issued the additional $25 million of Secured Notes.

The obligations of the Company under the indenture and the Secured Notes are unconditionally guaranteed on a secured basis by the guarantors, which include all the Company's subsidiaries, and the indenture governing the Secured Notes contains customary events of default. The Company and its subsidiaries must also comply with certain customary affirmative and negative covenants, including a requirement to maintain six-months of interest in a cash reserve account maintained with the collateral agent. Upon the occurrence of a Change of Control, subject to certain conditions, or certain Asset Sales (each, as defined in the indenture), holders of the Secured Notes may require the Company to repurchase for cash all or part of their Secured Notes at a repurchase price equal to 101% or 100%, respectively, of the principal amount of the Secured Notes to be repurchased, plus accrued and unpaid interest to the date of repurchase.

The Company paid $8.7 million of the total proceeds of the three issuances into the cash reserve account maintained with the collateral agent under the terms of the indenture, $1.5 million of which related to the third issuance on May 15, 2019.

Interest on the Secured Notes accrues at a rate of 12% per annum and is payable semi-annually on April 15 and October 15 of each year commencing on April 15, 2017. Commencing on April 15, 2021, the Company will also pay an installment of principal of the Secured Notes on each April 15 and October 15 until April 15, 2024 pursuant to a fixed amortization schedule.

In connection with the three issuances of the Secured Notes as well as the amendment of the related indenture, the Company has entered into royalty rights agreements, pursuant to which the Company has agreed to pay 3.4% of the aggregate net sales of MosaiQ instruments and consumables made in the donor testing market in the United States and the European Union. The royalties will be payable beginning on the date that the Company or its affiliates makes its first sale of MosaiQ consumables in the donor testing market in the European Union or the United States and will end on the last day of the calendar quarter in which the eighth anniversary of the first sale date occurs. The royalty rights agreements are treated as sales of future revenues that meet the requirements of Accounting Standards Codification Topic 470 "*Debt*" to be treated as debt. The estimated future cash outflows under the royalty rights agreements have been combined with the Secured Notes issuance costs and interest payable to calculate the effective interest rate of the Secured Notes and will be expensed through interest expenses using the effective interest rate method over the term of the Secured Notes and such royalty rights agreements. Estimating the future cash outflows under the royalty rights agreements requires the Company to make certain estimates and assumptions about future sales of MosaiQ products. These estimates of the magnitude and timing of MosaiQ sales are subject to significant variability due to the current status of development of MosaiQ products, and thus are subject to significant uncertainty. Therefore, the estimates are likely to change as the Company gains experience of marketing MosaiQ, which may result in future adjustments to the accretion of the interest expense and amortized cost based carrying value of the Secured Notes.

At December 31, 2019, the outstanding debt was repayable as follows:

Within 1 year	$	—
Between 1 and 2 years		24,167
Between 2 and 3 years		42,292
Between 3 and 4 years		48,333
Between 4 and 5 years		30,208
Total debt	$	145,000

Note 5. Consolidated Balance Sheet Detail

Inventory

The following table summarizes inventory by category for the dates presented:

		December 31, 2019		March 31, 2019
Raw materials	$	9,227	$	8,216
Work in progress		7,595		4,959
Finished goods		2,969		2,376
Total inventories	$	19,791	$	15,551

Inventory at December 31, 2019 included $7,520 of raw materials, $3,980 of work in progress and $641 of finished goods related to the MosaiQ project. Inventory at March 31, 2019 included $6,187 of raw materials and $2,311 of work in progress and $235 of finished goods related to the MosaiQ project.

Property and equipment

The following table summarizes property and equipment by categories for the dates presented:

		December 31, 2019		March 31, 2019
Plant and equipment	$	56,440	$	51,327
Leasehold improvements		32,411		32,047
Total property and equipment		88,851		83,374
Less: accumulated depreciation		(45,426)		(36,081)
Total property and equipment, net	$	43,425	$	47,293

Depreciation expenses were $2,901 and $3,058 in the quarters ended December 31, 2019 and December 31, 2018, respectively, and $8,923 and $9,428 in the nine month periods ended December 31, 2019 and 2018, respectively.

Accrued compensation and benefits

Accrued compensation and benefits consist of the following:

	December 31, 2019	March 31, 2019
Salary and related benefits	$ 200	$ 638
Accrued vacation	554	495
Accrued payroll taxes	1,639	1,316
Accrued incentive payments	2,250	3,700
Accrued termination and transition payments	1,256	—
Total accrued compensation and benefits	$ 5,899	$ 6,149

In the quarter ended December 31, 2019, the Company incurred termination benefit costs of $856 in respect of a restructuring of its operations. The Company expects to complete the restructuring during the quarter ended March 31, 2020. In the quarter ended December 31, 2019 the Company also incurred transition benefit costs of $400 in respect of the transitional arrangements with its former group financial controller. No termination benefit or transition benefit costs were incurred in the quarter or nine month period ended December 31, 2018.

Accrued expenses and other current liabilities

Accrued expenses and other current liabilities consist of the following:

	December 31, 2019	March 31, 2019
Accrued legal and professional fees	$ 1,739	$ 405
Accrued interest	3,718	6,628
Goods received not invoiced	2,456	1,337
Accrued capital expenditure	1,256	801
Other accrued expenses	3,670	3,287
Total accrued expenses and other current liabilities	$ 12,839	$ 12,458

Note 6. Commitments and Contingencies

Hedging arrangements

The Company's subsidiary in the United Kingdom ("UK") has entered into three contracts to sell $500 and purchase pounds sterling at £1:$1.3245 in each calendar month from January 2020 through March 2020, three contracts to sell $500 and purchase pounds sterling at £1:$1.30 in each calendar month from April 2020 through June 2020, three contracts to sell $500 and purchase pounds sterling at £1:$1.28 in each calendar month from July 2020 through September 2020 and three contracts to sell $500 and purchase pounds sterling at £:$1.2520 in each calendar month from October 2020 through December 2020 as hedges of its U.S. dollar denominated revenues.

Fair value measurements

The following table summarizes the Company's assets and liabilities that are measured at fair value on a recurring basis, by level, within the fair value hierarchy:

	December 31, 2019			
	Level 1	Level 2	Level 3	Total
Assets:				
Pension plan assets(1)	$ —	$ 11,355	$ —	$ 11,355
Short-term investments(2)	133,371	—	—	133,371
Foreign currency forward contracts(3)	$ —	$ 146	$ —	$ 146
Total assets measured at fair value	$ 133,371	$ 11,501	$ —	$ 144,872

	December 31, 2019			
	Level 1	Level 2	Level 3	Total
Liabilities:				
Foreign currency forward contracts(3)	$ —	$ 7	$ —	$ 7
Total liabilities measured at fair value	$ —	$ 7	$ —	$ 7

	March 31, 2019			
	Level 1	Level 2	Level 3	Total
Assets:				
Pension plan assets(1)	$ —	$ 10,416	$ —	$ 10,416
Short-term investments(2)	90,729	—	—	90,729
Total assets measured at fair value	$ 90,729	$ 10,416	$ —	$ 101,145

	March 31, 2019			
	Level 1	Level 2	Level 3	Total
Liabilities:				
Foreign currency forward contracts(3)	$ —	$ 70	$ —	$ 70
Total liabilities measured at fair value	$ —	$ 70	$ —	$ 70

(1) The fair value of pension plan assets has been determined as the surrender value of the portfolio of active insured employees held within the Swiss Life collective investment fund. See Note 10, "Defined Benefit Pension Plans".

(2) The fair value of short-term investments has been determined based on the quoted value of the units held in the money market fund at the balance sheet date. See Note 2, "Summary of Significant Accounting Policies – Short-term Investments".

(3) The fair value of foreign currency forward contracts has been determined by calculating the present value of future cash flows, estimated using market-based observable inputs including forward and spot exchange rates and interest rate curves obtained from third party market price quotations.

Ortho Arbitration

The Company's subsidiaries, Quotient Suisse SA and QBD (QS-IP) Limited, are involved in an arbitration with Ortho related to the termination of the Company's former supply and distribution agreement with Ortho for the commercialization and distribution of certain MosaiQ products. See Note 2, "Summary of Significant Accounting Policies—Revenue Recognition," for information regarding this agreement. Ortho is seeking a declaration that the Company's subsidiaries do not have the right to terminate the agreement, specific performance of certain provisions of the agreement, and damages. The Company is pursuing counterclaims against Ortho, including for damages. Although the Company believes that Ortho's allegations are without merit, the Company cannot currently estimate a reasonably possible loss or range of loss for this arbitration due to the complexities and uncertainty surrounding the arbitration (including that the arbitration is in its early stages) and the nature of the claims.

Note 7. Ordinary and Preference Shares

Ordinary shares

The Company's issued and outstanding ordinary shares were as follows:

	Shares Issued and Outstanding		
	December 31, 2019	March 31, 2019	Par value
Ordinary shares	80,256,946	65,900,447	$ —
Total	80,256,946	65,900,447	$ —

Preference shares

The Company’s issued and outstanding preference shares consist of the following:

	Shares Issued and Outstanding		Liquidation amount per share	
	December 31, 2019	March 31, 2019	December 31, 2019	March 31, 2019
7% Cumulative Redeemable Preference shares	666,665	666,665	$ 30.24	$ 29.06
Total	666,665	666,665		

On November 12, 2019 the Company completed a public offering of 13,800,000 newly issued ordinary shares at $7.00 per share which raised $96.6 million of gross proceeds before underwriting discounts and other offering expenses of $6.2 million.

Effective as of November 13, 2019 the Company terminated its Open Market Sales Agreement with Jefferies LLC for the Company’s at-the-market public offering, or the Sales Agreement. The Company has not sold any ordinary shares pursuant to the Sales Agreement and the Company was not subject to any termination penalties related to the termination of the Sales Agreement.

Note 8. Share-Based Compensation

The Company records share-based compensation expense in respect of options, multi-year performance based restricted share units (“MRSUs”) and restricted share units (“RSUs”) issued under its share incentive plans. Share-based compensation expense amounted to $1,196 and $1,073 in the quarters ended December 31, 2019 and December 31, 2018, respectively, and $3,375 and $3,576 in the nine month periods ended December 31, 2019 and December 31, 2018, respectively.

Share option activity

The following table summarizes share option activity:

	Number of Share Options Outstanding	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (Months)
Outstanding — March 31, 2019	1,936,397	$ 7.77	78
Granted	85,623	8.69	120
Exercised	(85,920)	4.70	—
Forfeited	(76,121)	12.84	—
Outstanding —December 31, 2019	1,859,979	$ 7.75	70
Exercisable — December 31, 2019	1,513,110	$ 7.91	63

The closing price of the Company’s ordinary shares on The Nasdaq Global Market at December 31, 2019 was $9.51.

The following table summarizes the options granted in the current financial year with their exercise prices, the fair value of ordinary shares as of the applicable grant date, and the intrinsic value:

Grant Date	Number of Options Granted	Exercise Price	Ordinary Shares Fair Value Per Share at Grant Date	Per Share Intrinsic Value of Options
July 16, 2019	28,517	$ 10.52	$ 10.52	$ 6.48
October 31, 2019	57,106	$ 7.78	$ 7.78	$ 4.90

Determining the fair value of share incentive awards

The fair value of each share incentive grant was determined by the Company using the Black-Scholes options pricing model.

Assumptions used in the option pricing models are discussed below. Each of these inputs is subjective and generally requires significant judgment to determine.

Expected volatility. The expected volatility was based on the historical share volatilities of a number of the Company's publicly listed peers over a period equal to the expected terms of the options, as the Company did not have a sufficient trading history to use the volatility of its own ordinary shares.

Fair value of ordinary shares. The fair value of the ordinary shares was based upon the closing price of the Company's shares on The Nasdaq Global Market on the last trading day prior to the date of grant.

Risk-Free Interest Rate. The risk-free interest rate was based on the US Treasury 10-year bond yield in effect at the time of grant.

Expected term. The expected term was determined after giving consideration to the contractual terms of the share-based awards, graded vesting schedules ranging from one to three years and expectations of future employee behavior as influenced by changes to the terms of the Company's share-based awards.

Expected dividend. According to the terms of the awards, the exercise price of the options is adjusted to take into account any dividends paid. As a result dividends were not required as an input to the model, as these reductions in the share price are offset by a corresponding reduction in exercise price.

A summary of the assumptions applicable to the share options issued in the current financial year is as follows:

	July 16, 2019	October 31, 2019
Risk-free interest rate	2.10%	1.77%
Expected lives (years)	6	6
Volatility	67.39%	70.14%
Dividend yield	—	—
Grant date fair value (per share)	$ 10.52	$ 7.78
Number granted	28,517	57,106

A summary of the RSUs in issue at December 31, 2019 is as follows:

	Number of RSUs Outstanding	Weighted Average Remaining Vesting Period (Months)	Period in which the target must be achieved
RSUs subject to time based vesting	726,839	11	N/A
RSUs subject to milestone based vesting	55,000	N/A	N/A

At December 31, 2019, 726,839 RSUs were subject to time-based vesting and the weighted average remaining vesting period was 11 months. In addition, 55,000 RSUs were subject to vesting based on the achievement of various business milestones related mainly to the development, approval and marketing of MosaiQ.

Note 9. Income Taxes

A reconciliation of the income tax expense at the statutory rate to the provision for income taxes is as follows:

	Quarter ended December 31,		Nine months ended December 31,	
	2019	2018	2019	2018
Income tax expense at statutory rate	$ —	$ —	$ —	$ —
Foreign tax rate differential	(1,436)	(1,328)	(3,035)	(3,812)
Increase in valuation allowance against deferred tax assets	1,450	1,339	3,076	3,845
Provision for income tax	$ 14	$ 11	$ 41	$ 33

Significant components of deferred tax are as follows:

	December 31, 2019	March 31, 2019
Provisions and reserves	$ 1,484	$ 1,442
Fixed asset basis difference	44	34
Operating lease liability	3,994	—
Net operating loss carry forwards	20,313	17,330
Gross deferred tax assets	$ 25,835	$ 18,806
Operating lease right-of-use assets	$ (3,994)	$ —
Net deferred tax asset	$ 21,841	$ 18,806
Valuation allowance	(21,277)	(18,201)
Total	$ 564	$ 605

The balance sheet classification of deferred tax is as follows:

	December 31, 2019	March 31, 2019
Net noncurrent deferred tax assets	$ 564	$ 605
Total	$ 564	$ 605

In connection with the sale and leaseback transaction of the Biocampus facility that was completed in March 2018, the Company has agreed to transfer tax allowances related to certain other property, plant and equipment to the purchaser of the facility. An election to effect the transfer of these allowances to the purchaser has been made, but due to uncertainty regarding whether the election will be effective, the tax effect of the transfer of the allowances has not been recorded in the financial statements as at December 31, 2019. If the transfer of the allowances was regarded as being effective at December 31, 2019, the financial statements would reflect an additional deferred tax expense of $1,004 and an equivalent deferred tax liability. The Company will continue to monitor the position regarding the effectiveness of the election to transfer the allowances in order to determine whether the deferred tax liability should be recorded.

Note 10. Defined Benefit Pension Plans

The Company's Swiss subsidiary has a fully insured pension plan managed by Swiss Life. The costs of this plan were:

	Quarter ended December 31,		Nine months ended December 31,	
	2019	2018	2019	2018
Employer service cost	$ 456	$ 388	$ 1,362	$ 1,183
Interest cost	31	38	93	115
Expected return on plan assets	(32)	(32)	(94)	(98)
Amortization of prior service credit	(6)	(4)	(17)	(11)
Amortization of net loss	54	38	161	116
Net pension cost	$ 503	$ 428	$ 1,505	$ 1,305

The employer contributions for the nine month periods ended December 31, 2019 and December 31, 2018 were $954 and $852, respectively. The estimated employer contributions for the fiscal year ending March 31, 2020 are $1,208.

Note 11. Net Loss Per Share

In accordance with Accounting Standards Codification Topic 260 "*Earnings Per Share*", basic earnings available to ordinary shareholders per share is computed based on the weighted average number of ordinary shares outstanding during each period. Diluted earnings available to ordinary shareholders per share is computed based on the weighted average number of ordinary shares outstanding during each period, plus potential ordinary shares considered outstanding during the period, as long as the inclusion of such shares is not anti-dilutive. Potential ordinary shares consist of the incremental ordinary shares issuable upon the exercise of share options (using the treasury shares method), the warrants to acquire ordinary shares and the ordinary shares issuable upon vesting of the MRSUs and RSUs.

The following table sets forth the computation of basic and diluted earnings per ordinary share:

	Quarter ended December 31,		Nine months ended December 31,	
	2019	2018	2019	2018
Numerator:				
Net loss	$ (27,485)	$ (26,254)	$ (78,046)	$ (78,792)
Net loss available to ordinary shareholders - basic and diluted	$ (27,485)	$ (26,254)	$ (78,046)	$ (78,792)
Denominator:				
Weighted-average shares outstanding - basic and diluted	73,768,845	56,619,356	68,722,475	51,512,352
Loss per share - basic and diluted	$ (0.37)	$ (0.46)	$ (1.14)	$ (1.53)

The following table sets out the numbers of ordinary shares excluded from the above computation of earnings per share at December 31, 2019 and December 31, 2018 as their inclusion would have been anti-dilutive:

	December 31, 2019	December 31, 2018
Ordinary shares issuable on exercise of options to purchase ordinary shares	1,859,979	2,241,223
Restricted share units awarded, including the multi-year performance related restricted share units	781,839	1,085,752
Ordinary shares issuable on exercise of warrants at $16.14 per share	111,525	111,525
Ordinary shares issuable on exercise of warrants at $9.375 per share	64,000	64,000
Ordinary shares issuable on exercise of warrants at $0.01 per share	—	550,000
	2,817,343	4,052,500

12. Lease Commitments

The Company has operating lease commitments for real estate and certain equipment in the United States, the United Kingdom, the Republic of Ireland and Switzerland. There are no sublease agreements in place. The Company has finance lease commitments for equipment in the United Kingdom and Switzerland.

The Company leases an 87,200 square foot conventional reagents manufacturing facility, with integrated offices and laboratories, in Edinburgh, Scotland. This lease commenced in March 2018, following completion of a sale and leaseback transaction, and expires in September 2052. Rent is recognized in the consolidated statement of comprehensive loss on a straight-line basis over the lease term. Additionally, the lease required the Company to provide a rent deposit of £3.6 million, which amounted to $4.7 million at December 31, 2019 and $4.7 million at March 31, 2019, and is included within other non-current assets in the consolidated balance sheets. In March 2015, the Company signed a five-year lease agreement for its corporate headquarters and MosaiQ manufacturing facility in Eysins, Switzerland. This lease was extended for a further five-year period to March 14, 2025. The Company also leases office space for commercial and development activities under one to three-year lease agreements in Newtown PA, Chapel Hill NC and Dublin, Republic of Ireland.

The operating lease commitments relating to equipment are not material. The finance lease commitments relate to specialized equipment required for manufacturing operations in both Edinburgh, Scotland and Eysins, Switzerland.

Many of the Company’s leases contain options to renew and extend lease terms and options to terminate leases early. Reflected in the right-of-use asset and lease liability on the Company’s balance sheet are the periods provided by renewal and extension options that the Company is reasonably certain to exercise, as well as the periods provided by termination options that the Company is reasonably certain not to exercise. The Company does not have any existing lease agreements with variable lease components.

In calculating the present value of future lease payments, the Company has elected to utilize its incremental borrowing rate based on the remaining lease term at the date of adoption. Incremental borrowing rates are the rates incurred to borrow on a collateralized basis over a similar term an amount equal to the lease payments in a similar economic environment. The Company has elected to account for each lease component and its associated non-lease component as a single lease component and has allocated all the contract consideration across the lease component only. There are no material non-lease components. As of December 31, 2019, an operating lease right-of-use asset of $22,798 and an operating lease liability of $24,296 (including a current portion of $3,157) were reflected on the condensed consolidated balance sheet. As of December 31, 2019, the Company had entered into finance leases for the purchase of plant and equipment that had net book values of $1,975. An associated finance lease liability of $1,472 (including a current portion of $522) was reflected on the condensed consolidated balance sheet.

The elements of lease expense were as follows:

	Quarter ended December 31, 2019	Nine months ended December 31, 2019
Operating lease cost	$ 950	$ 2,760
Finance lease cost		
Amortization of right-of-use asset	230	565
Interest on lease liabilities	29	84
Short-term lease cost	18	52
Total lease cost	$ 1,227	$ 3,461

Other information related to leases was as follows:

	Nine months ended December 31, 2019
Cash paid for amounts included in the measurement of lease liabilities	
Operating leases - operating cash flows	$ 2,270
Finance leases - finance cash flows	$ 337
Finance leases - operating cash flows	$ 84
Non-cash leases activity	
Right-of-use assets obtained in exchange for new operating lease liabilities	$ 5,160
Right-of-use assets obtained in exchange for new finance lease liabilities	$ 487

	As at December 31, 2019
Weighted average remaining lease terms (in years)	
Operating leases	30.2
Finance leases	2.2
Weighted average discount rate	
Operating leases	10.1%
Finance leases	5.8%

Future lease payments required under non-cancellable operating leases in effect asof December 31, 2019 were as follows:

		December 31, 2019
2020 (excluding the nine months ended December 31, 2019)	$	897
2021		3,441
2022		3,426
2023		3,159
2024		3,164
Thereafter		73,695
Total lease payments	$	87,782
Less : imputed interest		(63,486)
Total operating lease liabilities	$	24,296

Future lease payments required under finance leases in effect as of December 31, 2019 were as follows:

		December 31, 2019
2020 (excluding the nine months ended December 31, 2019)	$	179
2021		578
2022		690
2023		207
2024		3
Thereafter		—
Total lease payments	$	1,657
Less : imputed interest		(185)
Total finance lease liabilities	$	1,472

The Company adopted ASU 2016-02 on April 1, 2019 and, as required, the following disclosure is provided for periods prior to adoption. Future minimum lease payments required under non-cancellable operating leases in effect as of March 31, 2019 were as follows:

		March 31, 2019
2020	$	3,387
2021		1,861
2022		1,858
2023		1,830
2024		1,841
Thereafter		71,507
Total minimum future lease payments	$	82,284

Future annual lease payments required under finance leases in effect as of March 31, 2019 were as follows:

		March 31, 2019
2020		471
2021		369
2022		306
2023		190
Thereafter		—
Total minimum future lease payments	$	1,336

13. Subsequent events

On January 3, 2020 the Company entered into a transition, separation and consultancy agreement with Christopher J. Lindop, its Chief Financial Officer. Under this agreement Mr. Lindop will resign his position as Chief Financial Officer with effect from February 5, 2020, and serve as an Executive Vice President until his retirement on May 31, 2020. Certain transitional benefit payments will be made to Mr. Lindop under the terms of his agreement. Peter Buhler will be appointed as Chief Financial Officer, effective as of February 5, 2020.

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

You should read the following discussion and analysis of our financial condition and results of operations in conjunction with the corresponding section of our Annual Report on Form 10-K for the year ended March 31, 2019 filed with the SEC on May 29, 2019.

The information set forth and discussed below for the quarters and nine month periods ended December 31, 2019 and December 31, 2018 is derived from the condensed consolidated financial statements included under Item 1 above. The financial information set forth and discussed below is unaudited but includes all adjustments (consisting of normal recurring adjustments) that our management considers necessary for a fair presentation of the financial position and the operating results and cash flows for those periods. Our results of operations for a particular quarter may not be indicative of the results that may be expected for other quarters or the entire year.

In addition to historical financial information, the following discussion contains forward looking statements that reflect our plans, estimates, beliefs and expectations that involve risks and uncertainties. Our actual results and the timing of events could differ materially from those discussed in these forward-looking statements. Factors that could cause or contribute to these differences include those discussed below and elsewhere in this Quarterly Report, and our Annual Report on Form 10-K for the year ended March 31, 2019, particularly in “Risk Factors.”

Overview

We were incorporated in Jersey, Channel Islands on January 18, 2012. On February 16, 2012, we acquired the entire issued share capital of Alba Bioscience Limited (or Alba), Quotient Biodiagnostics, Inc. (or QBDI) and QBD (QSIP) Limited (or QSIP) from Quotient Biodiagnostics Group Limited (or QBDG), our predecessor.

Our Business

We are a commercial-stage diagnostics company committed to reducing healthcare costs and improving patient care through the provision of innovative tests within established markets. Our initial focus is on blood grouping and donor disease screening, which is commonly referred to as transfusion diagnostics. Blood grouping involves specific procedures performed at donor or patient testing laboratories to characterize blood, which includes antigen typing and antibody detection. Disease screening involves the screening of donor blood for unwanted pathogens using two different methods, a serological approach (testing for specific antigens or antibodies) and a molecular approach (testing for DNA or RNA).

We have over 30 years of experience developing, manufacturing and commercializing conventional reagent products used for blood grouping within the global transfusion diagnostics market. We are developing MosaiQ, our proprietary technology platform, to better address the comprehensive needs of this large and established market. We believe MosaiQ has the potential to transform transfusion diagnostics, significantly reducing the cost of blood grouping in the donor and patient testing environments, while improving patient outcomes.

We currently operate as one business segment with 420 employees in the United Kingdom, Switzerland and the United States, as of December 31, 2019. Our principal markets are the United States, Europe and Japan. Based on the location of the customer, revenues outside the United States accounted for 44% of total revenue during the nine month ended December 31, 2019 and 50% during the nine month period ended December 31, 2018.

We have incurred net losses and negative cash flows from operations in each year since we commenced operations in 2007. As of December 31, 2019, we had an accumulated deficit of $458.7 million. We expect our operating losses to continue for at least the remainder of the current year as we continue our investment in the commercialization of MosaiQ. For the nine month period ended December 31, 2019, our total revenue was $24.0 million and our net loss was $78.0 million.

From our incorporation in 2012 to March 31, 2019, we have raised $160.0 million of gross proceeds through the private placement of our ordinary and preference shares and warrants, $250.1 million of gross proceeds from public offerings of our shares and issuances of ordinary shares upon exercise of warrants and $120.0 million of gross proceeds from the issuance of 12% Senior Secured Notes, or the "Secured Notes".

On May 15, 2019, we issued an additional $25.0 million aggregate principal amount of the Secured Notes. On May 15, 2019, we paid $1.5 million of the net proceeds of the issuance into the cash reserve account maintained with the collateral agent under the terms of the indenture governing the Secured Notes, which together with the $7.2 million paid into the cash reserve account in respect of previous issuances, brought the total in the cash reserve account to $8.7 million at December 31, 2019.

On November 12, 2019, we completed a public offering of 13,800,000 newly issued ordinary shares at a price of $7.00 per share, which raised $96.6 million of gross proceeds before underwriting discounts and other offering expenses.

As of December 31, 2019, we had available cash, cash equivalents and short-term investments of $138.0 million and $9.0 million of restricted cash held as part of the arrangements relating to our Secured Notes and the lease of our property in Eysins, Switzerland.

Regulatory and Commercial Milestones

You should read the following regulatory and commercial milestones update in conjunction with the discussion included under the sections "Item 1. Business" and "Item 1A. Risk Factors" of our Annual Report on Form 10-K for the year ended March 31, 2019 filed with the SEC on May 29, 2019.

- *Initial European Regulatory Approval* – we filed for European regulatory approval for our initial MosaiQ Immunohematology, or "IH", microarray in late September 2018 and were notified of its approval on April 30, 2019.
- *European Hyper-Care Launch* – following the CE mark for our initial IH microarray, we have commenced a hyper-care launch with four of ten selected customers.
- *Ongoing Microarray Menu Development* – our activities for the expansion of our IH and Serological Disease Screening, or "SDS", testing menus included the completion of the validation and verification, or "V&V", concordance study for the expanded IH microarray menu, which we announced in October 2019. The V&V study for the expanded SDS microarray is planned for the second quarter of calendar year 2020.
- *Field Trials* – we commenced the European field trial activities with our expanded IH microarray menu in the first quarter of calendar year 2020, with U.S. field trial activity expected to follow thereafter. We have completed U.S. field trial activity for our initial SDS microarray and expect to commence European and U.S. field trial activities for our expanded SDS microarray in the second half of calendar year 2020.
- *Ongoing Regulatory Approval Process* – we completed a CE mark submission for the initial SDS microarray on June 30, 2019. We filed for U.S. regulatory approval for our initial SDS microarray on December 23, 2019. Initial European regulatory submissions for our expanded IH microarray are expected during the first half of calendar year 2020 with US regulatory submissions following later in the calendar year 2020. European regulatory submission for the expanded SDS microarray is expected in the second half of calendar year 2020.

Ortho Distribution and Supply Agreement

You should read the following update regarding our distribution and supply agreement with Ortho Clinical Diagnostics, Inc. (or Ortho) in conjunction with the discussion included under the sections "Item 1. Business" and "Item 1A. Risk Factors" of our Annual Report on Form 10-K for the year ended March 31, 2019 filed with the SEC on May 29, 2019.

We were party to a distribution and supply agreement with Ortho to sell and distribute MosaiQ Microarrays in certain markets, which we refer to as the Ortho Agreement. On November 27, 2019, we delivered a notice to Ortho that we had terminated the Ortho Agreement, effective as of December 27, 2019. We had not realized any revenue under the Ortho Agreement prior to its termination.

Ortho has initiated an arbitration proceeding in which it seeks a declaration that we do not have the right to terminate the Ortho Agreement, specific performance of certain provisions of the Ortho Agreement, and damages. We are pursuing counterclaims against Ortho, including for damages. In addition, on December 20, 2019, we entered into an agreement, or the Ortho Dispute Agreement, with Ortho pursuant to which we agreed, while the arbitration is pending, not to enter into any commercialization agreement in respect of products that overlap with Ortho's rights under the Ortho Agreement without prior written notice to Ortho. We believe that Ortho's allegations are without merit and we intend to defend ourselves vigorously against Ortho's claims. However, because of the uncertainties inherent in all dispute resolution proceedings, we cannot predict with certainty whether we will prevail on our defenses and counterclaims or the impact this arbitration may have on our business, results of operations or financial condition, including our conventional reagent business with Ortho.

Our initial MosaiQ IH Microarray and our second, expanded MosaiQ IH Microarray are being developed for the donor testing market, with our initial focus being on Europe and the United States, while our third MosaiQ IH Microarray is being developed for the patient testing market. Under the Ortho Agreement, Ortho had rights to distribute the MosaiQ IH Microarrays in the patient testing market in Europe and the United States. While our dispute with Ortho has been ongoing, we have not pursued alternatives for commercializing our MosaiQ IH Microarrays in the patient testing market.

Revenue

We generate product sales revenue from the sale of conventional reagent products directly to hospitals, donor collection agencies and independent testing laboratories in the United States, the United Kingdom and to distributors in Europe and the rest of the world, and indirectly through sales to our original equipment manufacturer (or OEM) customers. We recognize revenues in the form of product sales when the goods are shipped. Products sold by standing purchase orders as a percentage of product sales revenue were 71% and 67% for the nine month periods ended December 31, 2019 and December 31, 2018, respectively. We also provide product development services to our OEM customers. We recognize revenue from these contractual relationships in the form of product development fees, which are included in other revenues. For a description of our revenue recognition policies, see "—Critical Accounting Policies and Significant Judgments and Estimates—Revenue Recognition and Accounts Receivable."

Our revenue is denominated in multiple currencies. Sales in the United States and to certain of our OEM customers are denominated in U.S. Dollars. Sales in Europe and the rest of the world are denominated primarily in U.S. Dollars, Pounds Sterling or Euros. Our expenses are generally denominated in the currencies in which our operations are located, which are primarily in the United Kingdom, Switzerland and the United States. We operate globally and therefore changes in foreign currency exchange rates may become material to us in the future due to factors beyond our control. See "—Quantitative and Qualitative Disclosure About Market Risk—Foreign Currency Exchange Risk."

Cost of revenue and operating expenses

Cost of revenue consists of direct labor expenses, including employee benefits, overhead expenses, material costs and freight costs, along with the depreciation of manufacturing equipment and leasehold improvements. Our gross profit represents total revenue less the cost of revenue, gross margin represents gross profit expressed as a percentage of total revenue, and gross margin on product sales represents gross margin excluding other revenues as a percentage of revenues excluding other revenues. We expect our overall cost of revenue to increase in absolute U.S. Dollars as we continue to increase our product sales volumes. However, we also believe that we can achieve efficiencies in our manufacturing operations, primarily through increasing production volumes.

Our sales and marketing expenses include costs associated with our sales organization for conventional reagent products, including our direct sales force, as well as our marketing and customer service personnel and the costs of the MosaiQ commercial team. These expenses consist principally of salaries, commissions, bonuses and employee benefits, as well as travel and other costs related to our sales and product marketing activities. We expense all sales and marketing costs as incurred. We expect sales and marketing expense to increase in absolute U.S. Dollars, primarily as a result of commissions on increased product sales in the United States and as we grow the MosaiQ commercial team.

Our research and development expenses include costs associated with performing research, development, field trials and our regulatory activities, as well as production costs incurred in advance of the commercial launch of MosaiQ. Research and development expenses include research personnel-related expenses, fees for contractual and consulting services, travel costs, laboratory supplies and depreciation of laboratory equipment.

We expense all research and development costs as incurred, net of government grants received and tax credits. Our UK subsidiary claims certain tax credits on its research and development expenditures and these are included as an offset to our research and development expenses. Our research and development efforts are focused on developing new products and technologies for the global transfusion diagnostics market. We segregate research and development expenses for the MosaiQ project from expenses for other research and development projects. We do not maintain detailed records of these other costs by activity. We are nearing completion of the initial development of MosaiQ and expect our costs associated with field trials and regulatory approvals will increase at the same time as our development costs decrease. As we move to commercialization, we expect our overall research and development expense to decrease.

Our general and administrative expenses include costs for our executive, accounting and finance, legal, corporate development, information technology and human resources functions. We expense all general and administrative expenses as incurred. These expenses consist principally of salaries, bonuses and employee benefits for the personnel performing these functions, including travel costs. These expenses also include share-based compensation, professional service fees (such as audit, tax and legal fees), costs related to our Board of Directors, and general corporate overhead costs, which include depreciation and amortization. We expect our general and administrative expenses to increase as our business develops and also due to the costs of operating as a public company, such as additional legal, accounting and corporate governance expenses, including expenses related to compliance with the Sarbanes-Oxley Act, directors' and officers' insurance premiums and investor relations expenses.

Net interest expense consists primarily of interest charges on our Secured Notes and the amortization of debt issuance costs (which includes amortization of the one-time consent payment of $3.9 million paid to holders of our Secured Notes in December 2018), as well as accrued dividends on the 7% cumulative redeemable preference shares issued in January 2015. We amortize debt issuance costs over the life of the Secured Notes and report them as interest expense in our statements of operations. Net interest also includes the expected costs of the royalty rights agreements we entered into in October 2016, June 2018, December 2018 and May 2019 with the purchasers and consenting note holders, as applicable, of our Secured Notes. See Note 4 "Debt" and Note 7 "Ordinary and Preference Shares – Preference shares" to our condensed consolidated financial statements included in this Quarterly Report for additional information.

Other income (expense), net consists primarily of exchange fluctuations. These include realized exchange fluctuations resulting from the settlement of transactions in currencies other than the functional currencies of our businesses. Monetary assets and liabilities that are denominated in foreign currencies are measured at the period-end closing rate with resulting unrealized exchange fluctuations. The functional currencies of our businesses are Pounds Sterling, Swiss Francs and U.S. Dollars depending on the entity.

Provision for income taxes in the nine month period ended December 31, 2019 reflects a reduction in the net operating losses available to be carried forward in a subsidiary as a result of the offset of historic tax losses against the profits of this subsidiary.

Results of Operations

Comparison of the Quarters ended December 31, 2019 and 2018

The following table sets forth, for the periods indicated, the amounts of certain components of our statements of operations and the percentage of total revenue represented by these items, showing period-to-period changes.

	Quarter ended December 31,					
	2019		2018		Change	
	Amount	% of revenue	Amount	% of revenue	Amount	%
	(in thousands, except percentages)					
Revenue:						
Product sales	$ 7,636	96%	$ 6,723	100%	$ 913	14%
Other revenues	305	4%	—	0%	305	—
Total revenue	7,941	100%	6,723	100%	1,218	18%
Cost of revenue	4,532	57%	4,186	62%	346	8%
Gross profit	3,409	43%	2,537	38%	872	34%
Operating expenses:						
Sales and marketing	2,290	29%	2,233	33%	57	3%
Research and development	14,160	178%	11,788	175%	2,372	20%
General and administrative	9,316	117%	7,544	112%	1,772	23%
Total operating expenses	25,766	324%	21,565	321%	4,201	19%
Operating loss	(22,357)	-282%	(19,028)	-283%	(3,329)	17%
Other income (expense):						
Interest expense, net	(7,008)	-88%	(5,679)	-84%	(1,329)	23%
Other, net	1,894	24%	(1,536)	-23%	3,430	-223%
Total other expense, net	(5,114)	-64%	(7,215)	-107%	2,101	-29%
Loss before income taxes	(27,471)	-346%	(26,243)	-390%	(1,228)	5%
Provision for income taxes	(14)	—	(11)	—	(3)	—
Net loss	$ (27,485)	-346%	$ (26,254)	-391%	$ (1,231)	5%

Revenue

Total revenue and product sales for the quarter ended December 31, 2019 increased by 18% to $7.9 million, compared with $6.7 million for the quarter ended December 31, 2018. The increase in total revenue was due to $0.3 million of other revenues arising from the achievement of product development milestones in the quarter ended December 31, 2019 and an increase of 14% in product sales. The increase in product sales was primarily attributable to growth in product sales to OEM customers and incremental direct sales of conventional reagent products to customers in the United States. Products sold by standing purchase order were 72% of product sales for the quarter ended December 31, 2019, compared with 67% for the quarter ended December 31, 2018.

The table below sets forth revenue by product group:

	Quarter ended December 31,					
	2019		2018		Change	
	Amount	% of revenue	Amount	% of revenue	Amount	%
	(in thousands, except percentages)					
Revenue:						
Product sales - OEM customers	$ 5,071	64%	$ 4,719	70%	$ 352	7%
Product sales - direct customers and distributors	$ 2,565	32%	2,004	30%	561	28%
Other revenues	305	4%	—	0%	305	—
Total revenue	$ 7,941	100%	$ 6,723	100%	$ 1,218	18%

OEM Sales. Product sales to OEM customers increased 7% to $5.1 million for the quarter ended December 31, 2019, compared with $4.7 million for the quarter ended December 31, 2018. The increase was due to increased sales to existing customers and the impact of recently launched new products.

Direct Sales to Customers and Distributors. Product sales directly to customers and distributors of $2.6 million for the quarter ended December 31, 2019 increased by $0.6 million compared with $2.0 million for the quarter ended December 31, 2018. This increase was due to increased direct sales in the United States which increased by $0.4 million in the quarter ended December 31, 2019 from $1.9 million in the quarter ended December 31, 2018 as a result of recent product launches and the expansion of our customer base.

Other Revenues. Other revenues in the quarter ended December 31, 2019 consisted of product development fees which arose as a result of the achievement of product development milestones under the terms of our umbrella supply agreement with Ortho. See Note 2 "Summary of Significant Accounting Policies — Revenue Recognition" to our condensed consolidated financial statements included in this Quarterly Report for additional information. There were no other revenues in the quarter ended December 31, 2018.

Cost of revenue and gross margin

Cost of revenue increased by 8% to $4.5 million for the quarter ended December 31, 2019, compared with $4.2 million for the quarter ended December 31, 2018. This increase in cost of revenue was primarily related to incremental costs associated with the 14% increase in product sales in the quarter ended December 31, 2019. In addition, in the quarter ended December 31, 2018, we were in the process of moving our conventional reagents manufacturing operations to our new Biocampus facility in Edinburgh, Scotland and we incurred additional expenditure as a result of operating two facilities. We completed the relocation at the start of 2019 and we no longer bear any costs related to our previous facility in Edinburgh.

Gross profit on total revenue for the quarter ended December 31, 2019 was $3.4 million, compared with $2.5 million for the quarter ended December 31, 2018. The increase was attributable to $0.3 million of other revenue in the quarter ended December 31, 2019 and the increase in gross margin on product sales described below.

Gross profit on product sales, which excludes other revenues, was $3.1 million for the quarter ended December 31, 2019 compared with $2.5 million for the quarter ended December 31, 2018. This increase was due to the gross profit on increased sales to existing customers and the impact of recently launched new products. In addition, as described above, in the quarter ended December 31, 2018, we were in the process of moving our conventional reagents manufacturing operations to our new Biocampus facility in Edinburgh, Scotland and we incurred additional expenditure as a result of operating two facilities. Gross margin on product sales, which excludes other revenues, was 41% for the quarter ended December 31, 2019 compared with 38% for the quarter ended December 31, 2018.

Sales and marketing expenses

Sales and marketing expenses were $2.3 million for the quarter ended December 31, 2019, compared with $2.2 million for the quarter ended December 31, 2018. This increase was attributable to greater personnel and other expenses related to the planned commercial launch of MosaiQ. As a percentage of total revenue, sales and marketing expenses were 29% for the quarter ended December 31, 2019 compared to 33% for the quarter ended December 31, 2018.

Research and development expenses

	Quarter ended December 31,					
	2019		2018		Change	
	Amount	% of revenue	Amount	% of revenue	Amount	%
	(in thousands, except percentages)					
Research and development expenses:						
MosaiQ research and development	$ 13,770	173%	$ 11,464	171%	$ 2,306	20%
Other research and development	473	6%	411	6%	62	15%
Tax credits	(84)	-1%	(87)	-1%	3	-4%
Total research and development expenses	$ 14,160	178%	$ 11,788	175%	$ 2,372	20%

Research and development expenses increased by 20% to $14.2 million for the quarter ended December 31, 2019, compared with $11.8 million for the quarter ended December 31, 2018. This increase was attributable to higher MosaiQ instrument development expenditures, the costs associated with our recently completed U.S. field trial for the initial SDS microarray and higher material and labor costs associated with development work on the expanded SDS microarray. Termination benefit costs of $0.4 million were also included in quarter ended December 31, 2019. There were no termination benefit costs in the quarter ended December 31, 2018.

General and administrative expenses

General and administrative expenses increased by 23% to $9.3 million for the quarter ended December 31, 2019, compared with $7.5 million for the quarter ended December 31, 2018. Our general and administrative expenses included termination and transition benefit costs of $0.9 million in the quarter ended December 31, 2019. We also incurred additional legal and advisory expenses in the quarter ended December 31, 2019 compared to the quarter ended December 31, 2018 related to our dispute with Ortho and the termination of the Ortho Agreement, as well as other incremental costs associated with operating as a public company. In the quarter ended December 31, 2018 we incurred approximately $0.5 million of costs associated with the relocation of our conventional reagents manufacturing operations to our new Biocampus facility, which did not recur in the quarter ended December 31, 2019.We recognized $1.2 million of stock compensation expense in the quarter ended December 31, 2019 compared with $1.1 million in the quarter ended December 31, 2018. As a percentage of total revenue, general and administrative expenses were 117% for the quarter ended December 31, 2019 and 112% for the quarter ended December 31, 2018.

Other income (expense)

Net interest expense was $7.0 million for the quarter ended December 31, 2019, compared with $5.7 million for the quarter ended December 31, 2018. Interest expense in the quarter ended December 31, 2019 included $4.4 million of interest charges on our Secured Notes compared with $3.6 million in the quarter ended December 31, 2018. The increase was due to the additional issuance of $25 million of Secured Notes on May 15, 2019. Interest expense in the quarters ended December 31, 2019 and December 31, 2018 included amortization of deferred debt issue costs of $2.7 million and $1.9 million, respectively, which included, in the 2019 period, the amortization of the expected costs of the royalty rights agreements entered into in October 2016, June 2018, December 2018 and May 2019 in connection with the issuances of the Secured Notes and the amendment of the indenture relating to the Secured Notes and, in the 2018 period, amortization of the expected costs of the royalty rights agreements entered into in October 2016, June 2018 and December 2018. The additional royalty rights agreements entered into in May 2019 increased in aggregate the amount of royalties payable pursuant to royalty rights agreements from 3% to 3.4% of net sales of MosaiQ instruments and consumables made in the donor testing market in the United States and the European Union. Net interest expense also included $0.3 million of dividends accrued on the 7% cumulative redeemable preference shares in each of the quarters ended December 31, 2019 and December 31, 2018. In addition, in the quarter ended December 31, 2019, we realized interest income of $0.3 million on our short-term money market investments.

Other, net in the quarter ended December 31, 2019 was comprised of $1.9 million of foreign exchange gains arising on monetary assets and liabilities denominated in foreign currencies compared to $0.6 million of foreign exchange losses for the quarter ended December 31, 2018. In the quarter ended December 31, 2018, other expense also included $0.9 million of fees related to the amendment of the indenture related to the Secured Notes in December 2018.

Provision for income taxes

Provision for income taxes in the quarter ended December 31, 2019 reflects a reduction in the net operating losses available to be carried forward in a subsidiary as a result of the offset of historic tax losses against the profits of this subsidiary.

Comparison of the Nine month Periods ended December 31, 2019 and 2018

The following table sets forth, for the periods indicated, the amounts of certain components of our statements of operations and the percentage of total revenue represented by these items, showing period-to-period changes.

	Nine months ended December 31,				Change	
	2019		2018			
	Amount	% of revenue	Amount	% of revenue	Amount	%
	(in thousands, except percentages)					
Revenue:						
Product sales	$ 22,901	96%	$ 20,834	100%	$ 2,067	10%
Other revenues	1,055	4%	19	0%	1,036	5453%
Total revenue	23,956	100%	20,853	100%	3,103	15%
Cost of revenue	13,067	55%	12,803	61%	264	2%
Gross profit	10,889	45%	8,050	39%	2,839	35%
Operating expenses:						
Sales and marketing	7,123	30%	6,359	30%	764	12%
Research and development	38,895	162%	37,356	179%	1,539	4%
General and administrative	24,092	101%	22,964	110%	1,128	5%
Total operating expenses	70,110	293%	66,679	320%	3,431	5%
Operating (loss)	(59,221)	-247%	(58,629)	-281%	(592)	1%
Other income (expense):						
Interest expense, net	(20,384)	-85%	(14,614)	-70%	(5,770)	39%
Other, net	1,600	7%	(5,516)	-26%	7,116	-129%
Total other expense, net	(18,784)	-78%	(20,130)	-97%	1,346	-7%
Loss before income taxes	(78,005)	-326%	(78,759)	-378%	754	-1%
Provision for income taxes	(41)	0%	(33)	—	(8)	100%
Net loss	$ (78,046)	-326%	$ (78,792)	-378%	$ 746	-1%

Revenue

Total revenue and product sales for the nine month period ended December 31, 2019 increased by 15% to 24.0 million, compared with $20.9 million for the nine month period ended December 31, 2018. The increase in total revenue was due to $1.1 million of other revenues arising from the achievement of product development milestones in the nine month period ended December 31, 2019 and an increase of 10% in product sales. Products sold by standing purchase order were 71% of product sales for the nine month period ended December 31, 2019, compared with 67% for the nine month period ended December 31, 2018.

The table below sets forth revenue by product group:

	Nine months ended December 31,				Change	
	2019		2018			
	Amount	% of revenue	Amount	% of revenue	Amount	%
	(in thousands, except percentages)					
Revenue:						
Product sales - OEM customers	$ 15,354	64%	$ 14,744	71%	$ 610	4%
Product sales - direct customers and distributors	7,547	32%	6,090	29%	1,457	24%
Other revenues	1,055	4%	19	0%	1,036	5453%
Total revenue	$ 23,956	100%	$ 20,853	100%	$ 3,103	15%

OEM Sales. Product sales to OEM customers increased 4% to $15.4 million for the nine month period ended December 31, 2019, compared with $14.7 million for the nine month period ended December 31, 2018. The increase was due to increased sales to existing customers and the impact of recently launched new products.

Direct Sales to Customers and Distributors. Product sales directly to customers and distributors of $7.5 million for the nine month period ended December 31, 2019 increased by $1.4 million compared with $6.1 million for the nine month period ended December 31, 2018. This increase was due to increased direct sales in the United States which increased to $6.7 million in the nine month period ended December 31, 2019 from $5.5 million in the nine month period ended December 31, 2018 as a result of recent product launches and the expansion of our customer base.

Other Revenues. Other revenues in the nine month period ended December 31, 2019 consisted of product development fees, which arose as a result of the achievement of product development milestones under the terms of our umbrella supply agreement with Ortho. See Note 2 "Summary of Significant Accounting Policies — Revenue Recognition" to our condensed consolidated financial statements included in this Quarterly Report for additional information. Other revenues in the nine month period ended December 31, 2018 consisted of sales of ancillary products related to the MosaiQ instruments, which we sold to a development partner in the year ended March 31, 2018, and sales of licenses to use our conventional reagents products.

Cost of revenue and gross margin

Cost of revenue increased by 2% to $13.1 million for the nine month period ended December 31, 2019, compared with $12.8 million for the nine month period ended December 31, 2018. This increase in the cost of revenue was primarily related to incremental costs associated with the 10% increase in product sales in the nine month period ended December 31, 2019. In addition, in the nine month period ended December 31, 2018, we were in the process of moving our conventional reagents manufacturing operations to our new Biocampus facility in Edinburgh, Scotland and we incurred additional expenditure as a result of operating two facilities. We completed the relocation at the start of 2019 and we no longer bear any costs related to our previous facility in Edinburgh.

Gross profit on total revenue for the nine month period ended December 31, 2019 was $10.9 million, compared with $8.1 million for the nine month period ended December 31, 2018. The increase was attributable to $1.1 million of other revenues in the nine month period ended December 31, 2019 and the increase in gross margin on product sales described below.

Gross profit on product sales, which excludes other revenues, was $9.8 million for the nine month period ended December 31, 2019 compared with $8.0 million for the nine month period ended December 31, 2018. This increase was due to the gross profit on increased sales to existing customers and the impact of recently launched new products. In addition, as described above, in the nine month period ended December 31, 2018, we were in the process of moving our conventional reagents manufacturing operations to our new Biocampus facility in Edinburgh, Scotland and we incurred additional expenditure as a result of operating two facilities. Gross margin on product sales, which excludes other revenues, was 43% for the nine month period ended December 31, 2019 compared with 39% for the nine month period ended December 31, 2018.

Sales and marketing expenses

Sales and marketing expenses were $7.1 million for the nine month period ended December 31, 2019, compared with $6.4 million for the nine month period ended December 31, 2018. This increase was attributable to greater personnel and other expenses related to the planned commercial launch of MosaiQ. As a percentage of total revenue, sales and marketing expenses were 30% for both the nine month period ended December 31, 2019 and for the nine month period ended December 31, 2018.

Research and development expenses

	Nine months ended December 31,				Change	
	2019		2018			
	Amount	% of revenue	Amount	% of revenue	Amount	%
	(in thousands, except percentages)					
Research and development expenses:						
MosaiQ research and development	$ 37,536	157%	$ 36,406	175%	$ 1,130	3%
Other research and development	1,609	7%	1,158	6%	451	39%
Tax credits	(250)	-1%	(208)	-1%	(42)	20%
Total research and development expenses	$ 38,895	162%	$ 37,356	179%	$ 1,539	4%

Research and development expenses increased by 3% to $38.9 million for the nine month period ended December 31, 2019, compared with $37.4 million for the nine month period ended December 31, 2018. Our research and development expenses included an expense of $1.0 million in the nine month period ended December 31, 2019 and an expense of $0.5 million in the nine month period ended December 31, 2018 related to the costs of our intellectual property license with TTP for MosaiQ.

Additional research and development expenses related to our recently completed U.S. field trial for the initial SDS microarray. Termination benefit costs of $0.4 million were also included in the nine month period ended December 31, 2019. There were no termination benefit costs in the nine month period ended December 31, 2018.

General and administrative expenses

General and administrative expenses increased by 5% to $24.1 million for the nine month period ended December 31, 2019, compared with $23.0 million for the nine month period ended December 31, 2018. Our general and administrative expenses included termination and transition benefit costs of $0.9 million in the nine month period ended December 31, 2019. We also incurred additional legal and advisory expenses in the nine month period ended December 31, 2019 compared to the nine month period ended December 31, 2018 related to our dispute with Ortho and the termination of the Ortho Agreement, as well as incremental costs associated with operating as a public company. In the nine month period ended December 31, 2018 we incurred approximately $1.3 million of costs associated with the relocation of our conventional reagents manufacturing operations to our new Biocampus facility, which did not recur in the nine month period ended December 31, 2019. We recognized $3.4 million of stock compensation expense in the nine month period ended December 31, 2019 compared with $3.6 million in the nine month period ended December 31, 2018. As a percentage of total revenue, general and administrative expenses were 101% for the nine month period ended December 31, 2019 and 110% for the nine month period ended December 31, 2018.

Other income (expense)

Net interest expense was $20.4 million for the nine month period ended December 31, 2019, compared with $14.6 million for the nine month period ended December 31, 2018. Interest expense in the nine month period ended December 31, 2019 included $12.8 million of interest charges on our Secured Notes compared with $9.7 million in the nine month period ended December 31, 2018. The increase was due to the additional issuances of $36 million of Secured Notes on June 29, 2018 and $25 million of Secured Notes on May 15, 2019. Interest expense in the nine month periods ended December 31, 2019 and December 31, 2018 included amortization of deferred debt issue costs of $7.7 million and $4.1 million, respectively, which included, in the 2019 period, the amortization of the expected costs of the royalty rights agreements entered into in October 2016, June 2018, December 2018 and May 2019 in connection with the issuances of the Secured Notes and the amendment of the indenture relating to the Secured Notes and, in the 2018 period, amortization of the expected costs of the royalty rights agreements entered into in October 2016, June 2018 and December 2018. The additional royalty rights agreements entered into in May 2019 increased in aggregate the amount of royalties payable pursuant to royalty rights agreements from 3% to 3.4% of net sales of MosaiQ instruments and consumables made in the donor testing market in the United States and the European Union. Net interest expense also included $0.8 million of dividends accrued on the 7% cumulative redeemable preference shares in each of the nine month periods ended December 31, 2019 and December 31, 2018. In addition, in the nine month period ended December 31, 2019, we realized interest income of $0.9 million on our short-term money market investments.

Other, net in the nine month period ended December 31, 2019 was comprised of $1.6 million of foreign exchange gains arising on monetary assets and liabilities denominated in foreign currencies compared to $4.6 million of foreign exchange losses for the nine month period ended December 31, 2018. In the nine month period ended December 31, 2018, other expense also included $0.9 million of fees related to the amendment of the indenture related to the Secured Notes in December 2018.

Provision for income taxes

Provision for income taxes in the nine month period ended December 31, 2019 reflects a reduction in the net operating losses available to be carried forward in a subsidiary as a result of the offset of historic tax losses against the profits of this subsidiary.

Quarterly Results of Operations

Our quarterly product sales can fluctuate depending upon the shipment cycles for our red blood cell based products, which account for approximately two-thirds of our current product sales. For these products, we typically experience 13 shipping cycles per year. This equates to three shipments of each product per quarter, except for one quarter per year when four shipments occur. In fiscal 2019, the greatest impact of extra product shipments occurred in our first quarter and the greatest impact thus far in fiscal 2020 has also occurred in the first quarter. The timing of shipment of bulk antisera products to our OEM customers may also impact revenues from quarter to quarter. We also experience some seasonality in demand around holiday periods in both Europe and the United States. As a result of these factors, we expect to continue to see seasonality and quarter-to-quarter variations in our product sales. The timing of product development fees included in other revenues is mostly dependent upon the achievement of pre-negotiated project or revenue milestones.

Liquidity and Capital Resources

Since our commencement of operations in 2007, we have incurred net losses and negative cash flows from operations. As of December 31, 2019, we had an accumulated deficit of $458.7 million. During the nine month period ended December 31, 2019, we incurred a net loss of $78.0 million and used $64.8 million of cash in operating activities. As described under results of operations, our use of cash during the nine month period ended December 31, 2019 was primarily attributable to our investment in the development of MosaiQ and corporate costs, including costs related to being a public company.

From our incorporation in 2012 to March 31, 2019, we have raised $160.0 million of gross proceeds through the private placement of our ordinary and preference shares and warrants, $250.1 million of gross proceeds from public offerings of our shares and issuances of ordinary shares upon exercise of warrants and $120.0 million of gross proceeds from the issuance of the Secured Notes.

On May 15, 2019, we issued an additional $25.0 million aggregate principal amount of the Secured Notes. On May 15, 2019, we paid $1.5 million of the net proceeds of the issuance into the cash reserve account maintained with the collateral agent under the terms of the indenture governing the Secured Notes, which together with the $7.2 million paid into the cash reserve account in respect of previous issuances, brought the total in the cash reserve account to $8.7 million at December 31, 2019.

On November 12, 2019, we completed a public offering of 13,800,000 newly issued ordinary shares at a price of $7.00 per share, which raised $96.6 million of gross proceeds before underwriting discounts and other offering expenses.

As of December 31, 2019, we had available cash, cash equivalents and short-term investments of $138.0 million and $9.0 million of restricted cash held as part of the arrangements relating to our Secured Notes and the lease of our property in Eysins, Switzerland.

Cash Flows for the Nine month Periods ended December 31, 2019 and 2018

Operating activities

Net cash used in operating activities was $64.8 million during the nine month period ended December 31, 2019, which included net losses of $78.0 million offset by non-cash items of $21.7 million. Non-cash items were depreciation and amortization expense of $9.0 million, share-based compensation expense of $3.4 million, Swiss pension costs of $0.6 million, amortization of deferred debt issue costs of $7.7 million, and accrued preference share dividends of $0.8 million and deferred lease rentals of $0.2 million. We also experienced a net cash outflow of $8.5 million from changes in operating assets and liabilities during the period, consisting of a $2.3 million reduction in accounts payable and accrued liabilities, a $0.3 million reduction in accrued compensation and benefits, a $1.6 million increase in accounts receivable, a $3.9 million increase in inventories and a $0.4 million increase in other assets.

Net cash used in operating activities was $61.5 million during the nine month period ended December 31, 2018, which included net losses of $78.8 million offset by non-cash items of $18.7 million. Non-cash items were depreciation and amortization expense of $9.5 million, share-based compensation expense of $3.6 million, Swiss pension costs of $0.5 million, amortization of deferred debt issue costs of $4.1 million, accrued preference share dividends of $0.8 million and an increase in the deferred lease rental benefit of $0.3 million. We also experienced a net cash outflow of $1.4 million from changes in operating assets and liabilities during the period, consisting of a $5.1 million reduction in accounts payable and accrued liabilities and a $0.7 million reduction in accrued compensation and benefits, offset by a $0.3 million decrease in accounts receivable, a $0.1 million decrease in inventories and a $3.8 million decrease in other assets.

Investing activities

Net cash used in investing activities was $46.2 million for the nine month period ended December 31, 2019 compared to $100.2 million for the nine month period ended December 31, 2018. We spent $3.9 million on purchases of property and equipment in the nine month ended December 31, 2019, which was mainly related to payments for an additional assembly unit for our MosaiQ manufacturing facility. Purchases of property and equipment in the nine month ended December 31, 2018 were $3.0 million, which was mainly related to the payment of final costs related to the construction of our new Biocampus conventional reagents manufacturing facility. We also increased our short-term money market investments by $42.3 million net in the nine month period ended December 31, 2019 compared with an increase of $97.1 million net in the nine month period ended December 31, 2018.

Financing activities

Net cash provided by financing activities was $114.5 million during the nine month ended December 31, 2019, consisting of $24.1 million of net proceeds from the issuance of additional Secured Notes on May 15, 2019, $90.4 million of net proceeds from the issuance of ordinary shares on November 12, 2019 and $0.3 million from the exercise of share options, offset by $0.3 million of repayments on finance leases. Net cash provided by financing activities was $144.3 million during the nine month period ended December 31, 2018, consisting of $34.8 million of net proceeds from the issuance of additional Secured Notes on June 29, 2018, payment of $3.9 million of consent fees in December 2018 related to the amendment of the indenture relating to the Secured Notes in December 2018 and $113.7 million of proceeds from the issuance of ordinary shares (including $49.2 million in connection with the exercise of warrants and share options), offset by $0.4 million of repayments on finance leases.

Operating and Capital Expenditure Requirements

We have not achieved profitability on an annual basis since we commenced operations in 2007 and we expect to incur net losses for at least the next fiscal year. As we move towards the commercial launch of MosaiQ, we expect our operating expenses during the year ended March 31, 2020 to be similar to those of the year ended March 31, 2019, as we continue to invest in growing our customer base, expanding our marketing and distribution channels, hiring additional employees and investing in other product development opportunities while our development expenditures on MosaiQ decrease.

As of December 31, 2019, we had available cash, cash equivalents and short-term investments of $138.0 million and $9.0 million of restricted cash held as part of the arrangements relating to our Secured Notes and the lease of our property in Eysins, Switzerland.

Our future capital requirements will depend on many factors, including:

- our progress in developing and commercializing MosaiQ and the cost required to complete development, obtain regulatory approvals and complete our manufacturing scale up;
- our ability to pursue successful alternatives for commercializing MosaiQ in the patient market;
- our ability to manufacture and sell our conventional reagent products, including the costs and timing of further expansion of our sales and marketing efforts;
- our ability to collect our accounts receivable;
- our ability to generate cash from operations;
- any acquisition of businesses or technologies that we may undertake; and
- our ability to penetrate our existing market and new markets.

We expect to fund our operations, including the ongoing development of MosaiQ through successful field trial completion, achievement of required regulatory authorizations and commercialization from the use of existing available cash and short-term investment balances and the issuance of new equity or debt. Our existing available cash and short-term investment balances are adequate to meet our forecasted cash requirements for the next twelve months and accordingly we have prepared the financial statements on the going concern basis.

Contractual Obligations

Our contractual obligations and commitments were summarized in our Annual Report on Form 10-K for the year ended March 31, 2019.

On May 15, 2019, we issued an additional $25 million aggregate principal amount of the Secured Notes and entered into additional royalty rights agreements with the purchasers of the Secured Notes. As a result of these transactions, the aggregate amounts payable under the Secured Notes is $145.0 million, with zero due in less than a year, $66.5 million due in 1-3 years and $78.5 million due in 3-5 years. Interest payments due on the Secured Notes total $57.3 million with $17.4 million due in less than a year, $30.1 million due in 1-3 years and $9.8 million due in 3-5 years. The aggregate estimated amount payable in connection with the royalty rights agreements is $103.2 million, with zero due in less than a year, $4.5 million due in 1-3 years, $20.5 million due in 3-5 years and $78.2 million due in more than 5 years.

We note that the capital leases referred to in the summary of our contractual obligations in our Annual Report on Form 10-K are now accounted for as finance leases under current GAAP; however, the nature of these obligations has not changed. There were no other major changes in the nature of our contractual obligations and commitments between March 31, 2019 and December 31, 2019.

Critical Accounting Policies and Significant Judgments and Estimates

We have prepared our condensed consolidated financial statements in accordance with U.S. GAAP. Our preparation of these condensed consolidated financial statements requires us to make estimates, assumptions and judgments that affect the reported amounts of assets, liabilities, expenses and related disclosures at the date of the consolidated financial statements, as well as revenue and expenses during the reporting periods. We evaluate our estimates and judgments on an ongoing basis. We base our estimates on historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results could therefore differ materially from these estimates under different assumptions or conditions.

While our significant accounting policies are described in more detail in Note 2 to our condensed consolidated financial statements included in this Quarterly Report, we believe the following accounting policies to be critical to the judgments and estimates used in the preparation of our financial statements.

Revenue recognition and accounts receivable

Revenue is recognized in accordance with Accounting Standards Update, or ASU, 2014-09,*Revenue from Contracts with Customers.* Product revenue is recognized at a point in time upon transfer of control of a product to a customer, which is generally at the time of delivery at an amount based on the transaction price. Customers have no right of return except in the case of damaged goods and we have not experienced any significant returns of our products.

We also earn revenue from the provision of development services to a small number of OEM customers. These development service contracts are reviewed individually to determine the nature of the performance obligations and the associated transaction prices. In recent years, our product development revenues have been commensurate with achieving milestones specified in the respective development agreements relating to those products. These milestones may include the approval of new products by the European or U.S. regulatory authorities, which are not within our control. While there can be no assurance that this will continue to be the case, the nature of the milestones has been such that they effectively represent completion of our performance obligations under a particular part of a development program. Should we fail to achieve these milestones, we are not entitled under the terms of the development agreements to any compensation related to the work undertaken to date. As a result, we typically fully recognize milestone-related revenues as the contractual milestones are achieved.

Under certain development contracts, we also manufacture and supply the customer with finished products once they have been approved for use by relevant regulatory agencies. These agreements reflect both arrangements for product development and the sales prices and other contractual terms for subsequent supply of the product to the customer. Under these development contracts, we view the development service revenue as distinct from subsequent product sales revenue, and we recognize each separately as described above.

Accounts receivable consist primarily of amounts due from OEM customers, hospitals, donor testing laboratories, and distributors. Accounts receivable are reported net of an allowance for uncollectible accounts, which we also refer to as doubtful accounts. The allowance for doubtful accounts represents a reserve for estimated losses resulting from our inability to collect amounts due from our customers. Direct sales, where we may make many low value sales to a large number of customers, represents a larger risk of doubtful accounts, as opposed to OEM customer sales consisting primarily of a small number of well established businesses with whom we have a long trading history. The collectability of our trade receivables balances is regularly evaluated based on a combination of factors such as the ageing profile of our receivables, past history with our customers, changes in customer payment patterns, customer credit-worthiness and any other relevant factors. Based on these assessments, we adjust the reserve for doubtful accounts recorded in our financial statements.

Inventories

We record inventories at the lower of cost (first-in, first-out basis) or market (net realizable value), net of reserves. We record adjustments to inventory based upon historic usage, expected future demand and shelf life of the products held in inventory. We also calculate our inventory value based on the standard cost of each product. This approach requires us to analyze variances arising in the production process to determine whether they reflect part of the normal cost of production, and should therefore be reflected as inventory value, or whether they are a period cost and should thus not be included in inventory.

Intangible assets

The intangible assets included in our financial statements include intangible assets identified as at the time of the acquisition of the business of Alba Bioscience on August 31, 2007. At the time of this acquisition, we identified intangible assets related to customer relationships, master cell lines and certain other items, which include domain names and product trademarks. The customer relationships have been amortized over a five-year period, which resulted in them becoming fully amortized at August 31, 2012. The other items were amortized over a seven-year period from August 31, 2007, which resulted in them becoming fully amortized at August 31, 2014.

The intangible assets related to master cell lines reflect the know-how and market recognition associated with the cell lines, which are used as the source material of certain of our products. These cell lines are maintained by us and have an indefinite life. We have nevertheless decided to amortize the intangible assets over a forty-year period to reflect the possibility of market changes or other events resulting in the lines becoming technically obsolete at some future date. In the event that any of the lines cease to be used, we would record additional amortization at that point.

We also include in intangible assets the costs of obtaining product licenses for our products. These include external costs such as regulatory agency fees associated with the approval and bringing to market of our products once the development is complete. We amortize these over an expected product life of ten years, although if any such product ceased to be produced, we would record additional amortization at that point.

Income taxes

We account for income taxes under the asset and liability method, which requires, among other things, that deferred income taxes be provided for temporary differences between the tax basis of our assets and liabilities and their financial statement reported amounts. In addition, deferred tax assets are recorded for the future benefit of utilizing NOLs and research and development credit carry forwards. A valuation allowance is established when necessary to reduce deferred tax assets to the amount expected to be realized.

We follow the accounting guidance for uncertainties in income taxes, which prescribes a recognition threshold and measurement process for recording uncertain tax positions taken, or expected to be taken, in a tax return in the financial statements. Additionally, the guidance also prescribes the derecognition, classification, accounting in interim periods and disclosure requirements for uncertain tax positions. We accrue for the estimated amount of taxes for uncertain tax positions if it is more likely than not that we would be required to pay such additional taxes. An uncertain tax position will not be recognized if it has less than a 50% likelihood of being sustained.

We did not have any accrued interest or penalties associated with any unrecognized tax positions, and there were no such interest or penalties recognized during the nine month period ended December 31, 2019 or in the year ended March 31, 2019.

Stock compensation expense

Stock compensation expense is measured at the grant date based on the fair value of the award and is recognized as an expense in the income statement over the vesting period of the award. The calculation of the stock compensation expense is sensitive to the fair value of the underlying ordinary shares. The fair value of option awards and multi-year performance based restricted share units or MRSUs at the grant date is calculated using the Black-Scholes model or other valuation models, which use a number of assumptions to determine the fair value. Details of the assumptions used are set out in the notes to the condensed consolidated financial statements included in this Quarterly Report.

Defined Benefit Pension Obligations

We account for the pension obligations of our Swiss subsidiary as a defined benefit plan under Accounting Standards Codification Topic 715 *Compensation – Retirement Benefits*, or ASC 715. This requires that an actuarial valuation be performed to determine the funded status of the pension arrangements. The actuarial valuation is based on a number of assumptions, details of which are set out in the notes to the audited consolidated financial statements included in our Annual Report on Form 10-K for the fiscal year ended March 31, 2019.

Royalty Liability

The royalty rights agreements entered into in connection with the issuances of our Secured Notes and the amendment of the related indenture are treated as sales of future revenues that meet the requirements of Accounting Standards Codification Topic 470 "*Debt*" to be treated as debt. The estimated future cash outflows under the royalty rights agreements have been combined with the Secured Notes issuance costs and interest payable to calculate the effective interest rate of the Secured Notes and will be expensed through interest expenses using the effective interest rate method over the term of the Secured Notes and royalty rights agreements. Estimating the future cash outflows under the royalty rights agreements requires us to make certain estimates and assumptions about future sales of MosaiQ products. These estimates of the magnitude and timing of MosaiQ sales are subject to significant variability due to the current status of development of MosaiQ products, and thus are subject to significant uncertainty. Therefore, the estimates are likely to change as we gain experience of marketing MosaiQ, which may result in future adjustments to the accretion of the interest expense and the amortized cost based carrying value of the Secured Notes.

Leases

In February 2016, the Financial Accounting Standards Board, or FASB, issued Accounting Standard Update or ASU 2016-02, *Leases,* or ASU 2016-02, to enhance the transparency and comparability of financial reporting related to leasing arrangements. We adopted ASU 2016-02 on April 1, 2019, or the effective date, and used the effective date as our date of initial application.

At the inception of an arrangement, we determine whether the arrangement is or contains a lease based on the unique facts and circumstances present. We also review the terms of the lease in accordance with ASU 2016-02 in order to determine whether the lease concerned is a finance or an operating lease. Most leases with a term greater than one year are recognized on the balance sheet as right-of-use assets, lease liabilities and, if applicable, long-term lease liabilities. We have elected not to recognize on the balance sheet leases with terms of one year or less.

For finance leases, an asset is included within property and equipment and a lease liability equal to the present value of the minimum lease payments is included in current or long-term liabilities. Interest expense is recorded over the life of the lease at a constant rate.

Operating lease liabilities and their corresponding right-of-use assets are recorded based on the present value of lease payments over the expected remaining lease term. The operating lease right-of-use assets also include any lease payments made prior to the commencement date and any initial direct costs incurred, less any lease incentives received. The interest rate implicit in lease contracts is typically not readily determinable. As a result, we utilize our incremental borrowing rates, which are the rates incurred to borrow on a collateralized basis over a similar term an amount equal to the lease payments in a similar economic environment. The incremental borrowing rate is determined at lease commencement, or as of April 1, 2019 for operating leases existing upon the adoption of ASU 2016-02. The incremental borrowing rate is subsequently reassessed upon modification to the lease arrangement. Operating lease expense is recognized on a straight-line basis over the lease term.

In accordance with the guidance in ASU 2016-02, components of a lease should besplit into three categories: lease components (e.g., land, building, etc.), non-lease components (e.g., common area maintenance, maintenance, consumables, etc.), and non-components (e.g., property taxes, insurance, etc.). Although separation of lease and non-lease components is required, certain practical expedients are available. In particular, entities may elect a practical expedient to not separate lease and non-lease components and instead account for each lease component and the related non-lease component together as a single component. We have elected to account for the lease and non-lease components of each of its operating leases as a single lease component and allocate all of the contract consideration to the lease component only. The lease component results in an operating lease right-of-use asset being recorded on the balance sheet and amortized on a straight-line basis as lease expense.

The finance lease assets and operating lease right-of-use assets are assessed for impairment in accordance with the Company's accounting policy for long-lived assets.

Off-Balance Sheet Arrangements

We do not have any relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, which would have been established for the purpose of facilitating off-balance sheet arrangements or for any other contractually narrow or limited purpose.

Recent Accounting Pronouncements

Refer to Note 2 to our accompanying unaudited condensed consolidated financial statements included elsewhere in this report for a discussion of recently issued accounting pronouncements.

JOBS Act

Under the Jumpstart Our Business Startups Act of 2012, emerging growth companies that become public can delay adopting new or revised accounting standards until such time as those standards apply to private companies. We have irrevocably elected not to avail ourselves of this exemption from new or revised accounting standards and, therefore, we will be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

We are exposed to market risks in the ordinary course of our business. These market risks are principally limited to interest rate fluctuations and foreign currency exchange rate fluctuations.

Interest rate sensitivity

We are exposed to market risk related to changes in interest rates as it impacts our interest income and expense.

Cash, cash equivalents and cash reserve account. At December 31, 2019, we had cash and cash equivalents of $138.0 million and we also held $9.0 million of restricted cash. Our exposure to market risk includes interest income sensitivity, which is impacted by changes in the general level of U.S. and European interest rates. Our cash and cash equivalents and the restricted cash are held in interest-bearing savings accounts and bank accounts. We do not enter into investments for trading or speculative purposes. Due to the current levels of interest rates, we do not believe an immediate one percentage point change in interest rates would have a material effect on the fair market value of our holdings, and therefore we do not expect our operating results or cash flows to be significantly affected by changes in market interest rates.

Senior secured notes. At December 31, 2019, we had term debt of $145 million outstanding under the Secured Notes. The Secured Notes are fixed-rate instruments and, as a result, a change in market interest rates has no impact on our interest expense incurred or cash flows.

Foreign currency exchange risk

The main currencies that we use for our trading operations are the U.S. Dollar, the Pound Sterling, the Swiss Franc and, to a lesser extent, the Euro. Our meaningful cash balances are held in a mixture of U.S. Dollars, Euros, Pounds Sterling and Swiss Francs. These cash balances may not be the same as the functional currencies of the Quotient entities in which they are held and, as a result, exchange rate fluctuations may result in foreign exchange gains and losses on our income statement.

We are subject to market risks arising from changes in foreign currency exchange rates between the U.S. Dollar and the Pound Sterling and the U.S. Dollar and the Swiss Franc. Accordingly, fluctuations in the U.S. Dollar versus Pounds Sterling and U.S. Dollar versus the Swiss Franc exchange rate give rise to exchange gains and losses. These gains and losses arise from the conversion of U.S. Dollars and Euros to Pounds Sterling and the retranslation of cash, accounts receivable, intercompany indebtedness and other asset and liability balances. Based on our assets and liabilities held in Pounds Sterling at December 31, 2019, we estimate that a 5% strengthening of the Pound Sterling against the U.S. Dollar would give rise to a gain of approximately $0.7 million and a 5% weakening of the Pound Sterling against the U.S. Dollar would give rise to loss of approximately $0.7 million. Based on our assets and liabilities held in Swiss Francs at December 31, 2019, we estimate that a 5% strengthening of the Swiss Franc against the U.S. Dollar would give rise to a gain of approximately $1.2 million and a 5% weakening of the Swiss Franc against the U.S. Dollar would give rise to loss of approximately $1.2 million.

Most of our revenues are earned in U.S. Dollars, but the costs of our conventional reagent manufacturing operations are payable mainly in Pounds Sterling. We therefore closely monitor the results of our UK operations to address this difference. During the year ended March 31, 2019, the net operating expenses arising in Pounds Sterling from our UK conventional reagent manufacturing operations amounted to $27.0 million. This expenditure was offset by revenues arising in U.S. Dollars and other currencies. We have entered into forward contracts to hedge against the effects of fluctuations in the U.S. Dollar versus the Pounds Sterling exchange rate. The principal value of the hedges related to the results of fiscal year 2020 is $6.0 million and, based on this, a hypothetical instantaneous 5% strengthening of the Pound Sterling against the U.S. Dollar would reduce our net income by $1.1 million in the year ending March 31, 2020 after taking account of the shelter provided by our existing hedging arrangements through March 31, 2020. Similarly, a hypothetical instantaneous 5% weakening of the Pound Sterling against the U.S. Dollar would increase group net income by $1.1 million over the same period.

We do not use financial instruments for trading or other speculative purposes.

Our management does not believe that inflation in past years has had a significant impact on our results from operations. In the event inflation affects our costs in the future, we will offset the effect of inflation and maintain appropriate margins through increased selling prices.

Item 4. Controls and Procedures

Evaluation of disclosure controls and procedures

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of our disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) as of the end of the period covered by this Quarterly Report on Form 10-Q. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on such evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that, as of December 31, 2019, our disclosure controls and procedures were effective to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms, and is accumulated and communicated to our management, including our Chief Executive and Chief Financial Officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

Changes in internal control over financial reporting

There were no material changes to our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the period covered by this Quarterly Report on Form 10-Q that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. We did implement internal controls to ensure we properly assess the impact of the new accounting standard related to leases on our financial statements to facilitate its adoption on April 1, 2019. However, there were no material changes to our internal control over financial reporting due to the adoption of the new accounting standard.

PART II – OTHER INFORMATION

Item 1. Legal Proceedings

We are not currently a party to any pending legal proceedings that we believe could have a material adverse effect on our business or financial condition. However, we may be subject to various claims and legal actions arising in the ordinary course of business from time to time.

Item 1A. Risk Factors

Except as set forth below, there have been no material changes in the risk factors described in Item 1A "Risk Factors" of our Annual Report on Form 10-K for the year ended March 31, 2019 and Part II, Item 1A "Risk Factors" of our Quarterly Report on Form 10-Q for the quarter ended September 30, 2019.

Recent global economic and political conditions could result in significant changes to legislation, government policies, rules and regulations, which may have a material adverse effect on our business.

The impact of recent political and economic developments in the United States, the United Kingdom and Europe, including the legislative and trade policy agenda of President Donald Trump and the United Kingdom's exit from the European Union, commonly referred to as "Brexit," are uncertain. These political and economic developments could result in changes to legislation or reformation of government policies, rules and regulations pertaining to the U.S. healthcare system, tax and trade. Such changes could have a significant impact on our business by increasing the cost of doing business, affecting our ability to sell our products and negatively impacting our profitability. In addition, these developments, or continuing uncertainty surrounding these developments, could result in significant financial market volatility, and could also exacerbate, or result in, a slow-down of growth in global, local and U.S. economies, which could have a material adverse effect on our operating performance and the market price of our ordinary shares.

Efforts to repeal and replace the U.S. Patient Protection and Affordable Care Act, or the PPACA, have been ongoing since the 2016 election, but it is unclear if these efforts will be successful. Since January 2017, President Trump has signed two Executive Orders to delay, circumvent or loosen the implementation of certain requirements mandated by the PPACA or otherwise circumvent some of the requirements for health insurance mandated by the PPACA. In addition, as part of the December 2017 Tax Cuts and Jobs Act, the "individual mandate," which required individuals to purchase insurance, was repealed. The PPACA significantly impacts the pharmaceutical and medical device industries and clinical laboratories, and the repeal, replacement or modification of the PPACA, or other legislative or regulatory actions, could meaningfully further change the way healthcare services are delivered and may materially impact aspects of our business. We cannot predict whether future healthcare initiatives will be implemented at the federal or state level or in countries outside of the United States in which we may do business, or the effect any future legislation or regulation will have on us.

Our conventional reagent products are manufactured in Scotland and our MosaiQ Instruments and Microarrays are manufactured in Germany and Switzerland, respectively. In the United States, President Trump's administration has discussed, and in some cases implemented, changes with respect to certain tax and trade policies, tariffs and other government regulations affecting trade between the United States and other countries. For example, trade relations between the United States and China were, at times, significantly strained during calendar 2019, as both countries imposed increased tariffs on the importation of certain product categories. While it is not possible to predict whether or when any additional changes will occur or what form they may take, the implementation of a border tax, tariff or higher customs duties on our products imported into the United States, or any potential corresponding actions by other countries in which we do business, could negatively impact our financial performance. In addition, other countries may change their business and trade policies in anticipation of or in response to increased import tariffs and other changes in United States' trade policy and regulations, which could also negatively impact our financial performance.

Furthermore, on January 31, 2020, the United Kingdom ceased to be a member state of the European Union. As of that date, the United Kingdom entered a transitional period with the European Union, which is expected to continue through December 31, 2020. During this transitional period, the United Kingdom retains access to the E.U. single market and customs union and the United Kingdom and the European Union are expected to attempt to negotiate various aspects of their future relationship following the transitional period, including a free trade deal. The long-term effects of Brexit will depend on the agreements or arrangements between the United Kingdom and the European Union, and the extent to which the United Kingdom retains access to the E.U. markets both during and after the transitional period. The longer term economic, legal, political and social framework to be put in place between the United Kingdom and the European Union is unclear at this stage and is likely to lead to ongoing political and economic uncertainty and periods of exacerbated volatility in both the United Kingdom and in wider European markets for some time.

While we believe we have developed plans to manage the Brexit-related risks to our business and operations, including in the event that the United Kingdom and the European Union fail to finalize an agreement on the United Kingdom's future relationship with the

European Union before the end of the transitional period, it is unknown what the final terms of the relationship will be. If no agreement can be reached before the end of the transitional period, there will be a period of considerable uncertainty, particularly in relation to the U.K. financial and banking markets, the regulatory process in Europe and movement of goods and people between the United Kingdom and European Union. It is also possible that, even if there is an agreement, there will be greater restrictions and transportation delays on imports and exports between the United Kingdom and European Union countries and increased regulatory complexities, which could result in delays and increased expenses relating to the regulatory approval of our products. In addition, depending on the terms of the agreement, the United Kingdom could lose the benefits of global trade agreements negotiated by the European Union on behalf of its members, which may result in increased trade barriers which could make our doing business worldwide more difficult. Furthermore, currency exchange rates in the pound sterling and the euro with respect to each other and the U.S. dollar have already been adversely affected by Brexit. Should this foreign exchange volatility continue, it could cause volatility in our financial results.

The outcome of any current or future disputes, claims, arbitration and litigation could have a material adverse effect on our business, financial condition and results of operations.

We are currently involved in an arbitration dispute with Ortho regarding the Ortho Agreement. See "Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations – Our Business –Ortho Distribution and Supply Agreement." In addition, we may, from time to time, be party to arbitration or litigation in the normal course of business, including class action and product liability lawsuits. Due to the inherent uncertainties of litigation and arbitration, it is not possible to predict the final outcome of these arbitrations, lawsuits and proceedings or determine the amount of any potential losses we may incur. In the event we are required or determine to pay amounts in connection with any such arbitrations, lawsuits or other proceedings, such amounts could be significant and could have a material adverse impact on our liquidity, business, financial condition and results of operations. Furthermore, Ortho is a significant customer of our conventional reagent business and accounts for a substantial percentage of our product sales and total revenues. We cannot predict the impact our dispute with Ortho may have on our conventional reagent business.

Our commercialization plan for MosaiQ in the patient testing market may depend on entering into arrangements with one or more commercial partners.

Our initial MosaiQ IH Microarray and our second, expanded MosaiQ IH Microarray are being developed for the donor testing market, with our initial focus being on Europe and the United States, while our third MosaiQ IH Microarray is being developed for the patient testing market. We had previously contracted with Ortho to commercialize the MosaiQ IH Microarray in the patient testing market. However, as a result of the termination of the Ortho Agreement, we are currently not party to a commercialization arrangement for the MosaiQ IH Microarray in the patient testing market, and, while our dispute with Ortho has been ongoing, we have not pursued alternatives for commercializing our MosaiQ IH Microarray in this market.

Commercializing MosaiQ in the patient testing market, which is highly fragmented, will require a global sales and support infrastructure. Our future commercialization plan for this market may include identifying and engaging one or more partners with an existing global commercial infrastructure. Unless we engage such a partner to assist us, we do not believe we would choose to commercialize MosaiQ ourselves without significant additional funds to build our own global sales and support team. Even if we successfully establish new commercialization arrangements, these relationships may never result in the successful commercialization of MosaiQ in the patient testing market.

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

The following is a list of exhibits filed as part of this Quarterly Report on Form 10-Q:

Exhibit No.	Description
4.1	Registration Rights Agreement, dated December 13, 2019 among the Company, Heino von Prondzynski, Franz Walt and Christopher Lindop (filed as exhibit 4.1 to our Current Report on Form 8-K filed on December 13, 2019 and incorporated herein by reference).
10.1	Lease extension agreement dated October 2, 2019 among Quotient Limited, FidFund Management SA and Quotient Suisse SA, amending the lease agreement dated March 10, 2010 to extend the Company's lease on its facility in Eysins, Switzerland to March 14, 2025.
10.2	Transition Agreement, dated December 10, 2019, between the Company and Roland Boyd (filed as exhibit 10.1 to our Current Report on Form 8-K on December 13, 2019 and incorporated herein by reference).
10.3	Employment Agreement, dated September 3, 2018, between the Company and Ernest Larnach (filed as exhibit 10.2 to our Current Report on Form 8-K on December 13, 2019 and incorporated herein by reference).
10.4	Amendment No. 1 to Employment Agreement, dated December 12, 2019, between the Company and Ernest Larnach (filed as exhibit 10.3 to our Current Report on Form 8-K on December 13, 2019 and incorporated herein by reference).
10.5	Change of Control Agreement, dated November 8, 2019, between the Company and Ernest Larnach (filed as exhibit 10.4 to our Current Report on Form 8-K on December 13, 2019 and incorporated herein by reference).
10.6	Agreement among Ortho-Clinical Diagnostics Inc., Quotient Suisse SA and QBD (QSIP) Limited (filed as exhibit 10.1 to our Current Report of Form 8-K filed on December 27, 2019 and incorporated herein by reference).
10.7†	Second Amendment to STRATEC Supply and Manufacturing Agreement, dated November 4, 2019, between STRATEC SE and QBD (QSIP) Limited.
31.1	Certification of Franz Walt, Chief Executive pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification of Christopher Lindop, Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1	Certification of Franz Walt, Chief Executive pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2	Certification of Christopher Lindop, Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101*	The following financial statements from the Company's Quarterly Report on Form 10-Q for the quarter ended December 31, 2019, formatted in XBRL (eXtensible Business Reporting Language): (i) Condensed Consolidated Balance Sheets (unaudited), (ii) Condensed Consolidated Statements of Comprehensive Loss (unaudited), (iii) Condensed Consolidated Statements of Changes in Shareholders' Deficit (unaudited), (iv) Condensed Consolidated Statements of Cash Flows (unaudited) and (v) Notes to Condensed Consolidated Financial Statements, tagged as blocks of text and including detailed tags.

* XBRL information is furnished and not filed for purposes of Section 11 and 12 of the Securities Act of 1933 and Section 18 of the Securities Exchange Act of 1934, and is not subject to liability under those sections, is not part of any registration statement, prospectus or other document to which it relates and is not incorporated or deemed to be incorporated by reference into any registration statement, prospectus or other document.

† Portions of this exhibit (indicated by asterisks) have been omitted in accordance with the rules of the Securities and Exchange Commission.

SIGNATURES

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

QUOTIENT LIMITED

Date: February 4, 2020

/s/ Franz Walt
Franz Walt
Chief Executive Officer

Amendment·No.2

renewing
lease for commercial premises

March 10, 2010

between

Nemaco Fléchères B.V., a Dutch company based in Amsterdam

and

Nemaco Switzerland SA, a Swiss company with headquarters in Eysins,

on the one hand

and

Cadbury Europe SA, on the other hand and covering a building on Chemin de Terre-Bonne, Building B1 at 1262 Eysins,

on the other hand,

covering part of building B1 on Chemin de Terre-Bonne at 1262 Eysins

concluded between

FidFund Management SA, Route de Signy 35, 1260 Nyon,

acting for and on behalf of

Procimmo Swiss Commercial Fund**,** a contractual investment fund under the Federal Capital Collective Investments Act

(hereafter the "Landlord"),

on the one hand

and

Quotient Suisse SA, Route de Crassier 13, Business Park Terre Bonne, Building B 1, 1262 Eysin

hereafter separately designated: the "Tenant"

and

Quotient Limited, Elizabeth House, 9 Castle Street, St. Helier JE4 2QP, Jersey, Channel Islands

Company jointly responsible for the Tenant,

on the other hand

(hereafter, together, the "Tenants").

* * * *

PREAMBLE

This contract renews and amends the lease agreement between Nemaco Fléchères B.V. and Nemaco Suisse SA as a lender on the one hand and Cadbury Europe SA as tenant (hereafter: the "Initial Tenant"), on the other hand, signed on March 10, 2010 (hereafter the 'Lease Contract').

The contract covers the premises set out in Appendix 2 and 3 of the contract, as well as 35 parking spaces.

FidFund Management SA acquired the building in which the rented premises are located on 2 August 2010. It has thus resumed its status as a lessor in accordance with Article 261 of the Code of Obligations, on behalf of Procimmo Swiss Commercial Fund.

Cadbury Europe SA transferred its headquarters to Opfikon on 3 September 2010. It was then transferred by way of universal succession following its merger with Kraft Food Europe GmbH on 29 July 2011. The latter then changed its name on 23 April 2013 and is now called Mondelez Europe Sàrl. Since 4 July 2016, the company no longer has a branch in Eysins.

By lease transfer agreement of 9 December 2013, the rights and obligations of the original tenant were transferred to the Tenant, with effect from 1st January 2014 (hereafter the "Lease Assignment Agreement").

The initial tenant's obligations will expire at the end of the first ten-year lease period resulting from the Lease Contract, on 14 March 2020.

For all intents and purposes, the contract for sale between the Initial Tenant and the Tenants concerning the takeover of certain developments in the following premises is referred to hereafter as the "Asset Disposal".

Furthermore, it is specified that, following a division of the land on 29 July 2010, the parcel on which the rented premises are located took the number 442 from the Eysins Land Registry.

In addition, the Tenant has leased, as part of an endorsement N o. 1 of 14 January 2015, an additional 329 m^2 on the 2nd floor of the premises covered by this Contract for a rent of
CHF 98,042.- + CHF 2,361.- payment of expenses. This rental is subject to VAT.

Whereas:

- the lease provides in its articles 4.1.and 4.2. an initial term of 10 years from 1 st March 2010;
- the contract therefore expires on 14 March 2020;
- the contract also provides for article 4.3.1.that the tenant is entitled to extend the lease for two successive periods of 5 years each by written notice notified at least 12 months before the expiry of the lease, subject to the possibility of adjusting the amount of rent under the article 6.4.
- that the initial rent of the Lease Agreement is CHF 1,220,000.-;
- that the VAT option has been exercised on the whole building;
- as Article 6.4.provides for the ability to adjust the rent based on the Swiss Consumer Price Index (CPI);
- furthermore, under Article 6.4.3., the parties must renegotiate the rent in order to adjust it to the market, with a maximum margin of 5% above or below the original rent being set at least 18 months before the lease expires
- that, following informal discussions between the parties, they have agreed to extend this deadline;
- that the Parties have agreed on the new rent.

In view of the above, by this Endorsement, the Parties agree on the following:

ARTICLE 1 THE SUBJECT OF THE CONTRACT

For the purpose of clarifying the details of the rented premises, it is recalled in this Endorsement that the agreed lease relates to the B1 building located on parcel 442 of the Commune of Eysins.

Industrial premises are rented without any additional features.

Warehouses are rented without any additional features.

The premises are intended exclusively for commercial use (office and industrial).

The premises thus designated are rented in full, so that all the elements that compose it form a single lease.

ARTICLE 2 LEASE TERM, TERMINATION AND RENEWAL

1. In accordance with Article 4.3.1. of the Lease agreement, this lease is renewed for a first five-year term. It begins on March 15, 2020 and expires on March 14, 2025.

2. Under Article 4.3.1., the parties must provide notification in writing, at least 18 months before the end of the lease, of their intentions regarding its termination or renewal.

ARTICLE 3 RENT

1. The annual rent for all the premises, including the parking spaces, is CHF 1'256,950.- (hereafter: **the Rent).**

2. The agreed rent is subject to VAT.

3. The Rent is deemed to be suitable for the official Swiss consumer price index on the day of the signing of this Amendment.

4. As agreed in Article 6.4.2., the Rent may, during the lease and without prior notice, be modified by the change in the official Swiss consumer price index, with a written notice of at least thirty days from the end of a month.

5. During the term of the lease, if it carries out renovations in the leased premises at its own expense, the Landlord may, in addition to passing on the cost of the renovations through the rent during the contract period, notify the Tenant of its claim to adjust the rent based on an official formula, with a written notice of at least 30 days from the end of a month. The quantity of the increase will be calculated in accordance with Articles 269a let. bCO and 14 OBLF or any other new legal provision replacing the above standards.

ARTICLE 4 ANCILLARY EXPENSES

In accordance with Article 6.2.1,the total heating and hot water costs mentioned in articles 4-8 OBLF and related maintenance costs, waste, sewage and sewer taxes and waste removal and disposal costs, as well as the usual incidental costs of the building, will be paid by the tenant, in addition to the Rent attached to Article 2 of this Amendment.

2. Common incidental costs include:

- the costs of providing water;
- electricity costs;
- the cost of janitorial, snow removal, subscription and maintenance of elevators, the costs associated with ventilation or air conditioning of the premises and the costs of security or monitoring of the premises.

3. In accordance with custom, all direct charges related to the operation of the Premises, such as telephone, internet, etc. are paid directly by the Tenant.

4. When not paid directly by the Tenant, incidental costs will be rebilled to the Tenant.

ARTICLE 5 ANNOTATION TO THE LAND REGISTRY

Since the Tenant did not require the annotation of the lease under section 11.1 of the Lease Agreement, the annotation of this Amendment is not justified.

ARTICLE 6 OTHER

The other terms and conditions of the lease remain unchanged.

Completed in two copies,

Date:_ 02.10.2019__________ Date: 24th September 2019

FidFund Management SA:Quotient SA

_/s/ Christophe Audousset_____/s/ Roland Boyd_________

____

_/s/ Selda Karaca ______________________________________

Date: 24th September 2019

Quotient Limited:

_/s/ Christopher Lindop_____

__CHRISTOPHER LINDOP_

Exhibit 10.7

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY [***], HAS BEEN OMITTED BECAUSE IT IS NOT MATERIAL AND WOULD LIKELY CAUSE COMPETITIVE HARM TO THE COMPANY IF PUBLICLY DISCLOSED.

5th AMENDMENT TO DEVELOPMENT and 2nd AMENDMENT TO SUPPLY AND MANUFACTURING AGREEMENT

This Amendment (the "**5th and 2nd Amendment**") is made and entered into effective as of Nov 4th,2019, by and between **QBD (QS IP) Ltd**, PO Box 1075, Elizabeth House, 9 Castle Street, St Helier JE4 2QP,Jersey, Channel Islands ("**QUOTIENT**"), and **STRATEC SE**, a stock corporation formed under the laws of the Federal Republic of Germany, having its principal place of business at Gewerbestrasse 37, D-75217 Birkenfeld-Graefenhausen, Germany ("**STRATEC**"). QUOTIENT and STRATEC each may be referred to herein individually as a "**Party**", or collectively as the '**Parties**".

RECITALS

A. The Parties have entered into that certain Development Agreement, dated as of January 7th, 2014 (the **"Development Agreement"**), pursuant to which STRATEC has agreed to develop and manufacture for QUOTIENT a Production Instrument (as defined in the Development Agreement and as amended from time to time with the **1., 2., 3. and 4. Amendment to the Development Agreement**).

B. The Parties have entered into that certain Supply and Manufacturing Agreement, dated as of December 19th, 2014 (the **"Supply Agreement**"), pursuant to which STRATEC has agreed to manufacture and supply QUOTIENT with quantities of the Production Instrument (as defined in the Supply Agreement and as amended from time to time with the **1. Amendment to the Supply Agreement**).

C. The Parties now desire to amend certain subjects of the Development Agreement and of the Supply Agreement (including all Amendments) to reflect certain changes relating to the Parties' rights and obligations under the Development Agreement and Supply Agreement.

AGREEMENT

NOW, THEREFORE, for and in consideration of the mutual promises and covenants set forth herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereby agree as follows:

1. **Defined Terms.** Capitalized terms used herein without definition will have the meanings given to such terms in the Development Agreement.

2. **Changes.** Per request of both Parties, QUOTIENT and STRATEC hereby agree that this **5th and 2nd Amendment** shall amend the Development Agreement and the Supply Agreement (including all Amendments) with the following issues:

    a. Existing PDR version 3.0 items status is as per agreement, confirmed by STRATEC on August 28th 2019 and STRATEC's development obligations are fulfilled according to Development Agreement and any relevant Amendments thereto and closure of relevant items per the PDR status document. Remaining

open topics as mutually agreed upon in good faith and listed in **Exhibit 1** shall be implemented by STRATEC.

b. Parties agree to a one-time payment of [***] EUR by Quotient to STRATEC for the outstanding and ongoing development tasks undergone by STRATEC until October 2019. Such payment shall be due with signature under this **5th and 2nd Amendment.**

c. Beginning November 2019 Quotient shall pay STRATEC a monthly fee of [***] EUR to cover ongoing agreed upon development activities in the future. Both Parties acknowledge that resource numbers and monthly fee may need adjustment according to development progresses (to meet timeline) and such need will be reviewed in good faith between the Parties. This agreed upon monthly payment will cover (i) costs for all on-going development activities, (ii) will cover all costs associated with new development activities and (iii) Quotient's acceptance to pay all cost associated with the ongoing topics of washing- and carry-over- investigation, redesign (as/if needed) and implementation.

d. Quotient's obligations to take [***] Production Instruments and [***] sets of Spare Parts according to the **1. Amendment to the Supply Agreement** effective as of December 19th, 2016 shall become null and void.

e. Quotient will purchase Production Instruments for a transfer price of [***] EUR ("Transfer Price") ([***]% premium) until the run rate per year reaches [***] Production Instruments or more. Such [***]% premium shall be off-set against the Minimum Purchase Commitment set out in Section 5.3 of the Supply Agreement. For the sake of clarity, with effect of such new Transfer Price the Minimum Purchase Commitment shall be reduced by [***] Production Instruments for every [***] taken and paid.

Such Transfer Price shall include (i) rework of Spare Parts sourced according to the **1. Amendment to the Supply Agreement**, (ii) increased cost for sourcing of material due to reduced quantities and (iii) increased manufacturing cost due to a run-rate beyond the mutually expected series level run-rate.

3. **Counterparts.** This **5th and 2nd Amendment** may be executed in two or more counterparts, each of which will be deemed an original, but all of which together will constitute one and the same instrument.

4. **Effectiveness.** This Amendment will become effective upon the execution hereof by both Parties.

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY [***],
HAS BEEN OMITTED BECAUSE IT IS NOT MATERIAL AND WOULD LIKELY CAUSE COMPETITIVE HARM TO THE COMPANY IF PUBLICLY DISCLOSED.

5. **Continuing Effect.** Other than as set forth in this**5th and 2nd Amendment**, all of the terms and conditions of the Development and Supply Agreement, along with any valid Amendments in effect will continue in full force and effect.

Exhibits:
Exhibit 1

IN WITNESS WHEREOF, the Parties have executed this Amendment as of the date first written above.

QUOTIENT Corporation		**STRATEC SE**	
By:	/s/ Ed Farrell	By:	/s/ Dr Robert Siegle
Name:	Ed Farrell	Name:	Dr Robert Siegle
Title:	President	Title:	CFO

Exhibit 31.1

CERTIFICATION

I, Franz Walt, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Quotient Limited;

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

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

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

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

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

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

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

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

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

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

Date: February 4, 2020

/s/ Franz Walt
Franz Walt
Chief Executive Officer

Exhibit 31.2

CERTIFICATION

I, Christopher Lindop, certify that:

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

Date: February 4, 2020

/s/ Christopher Lindop
Christopher Lindop
Chief Financial Officer

Exhibit 32.1

CERTIFICATION

Pursuant to section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of section 1350, chapter 63 of title 18, United States Code), the undersigned officer of Quotient Limited, a company incorporated under the laws of Jersey, Channel Islands (the "Company"), does hereby certify, to such officer's knowledge, that:

The Quarterly Report for the quarter ended December 31, 2019 (the "Form 10-Q") of the Company fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, and the information contained in the Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 4, 2020

/s/ Franz Walt
Franz Walt
Chief Executive Officer

This certification is being furnished and not filed, and shall not be incorporated into any document for any purpose, under the Securities Exchange Act of 1934 or the Securities Act of 1933.

Exhibit 32.2

CERTIFICATION

Pursuant to section 906 of the Sarbanes-Oxley Act of 2002 (subsections (a) and (b) of section 1350, chapter 63 of title 18, United States Code), the undersigned officer of Quotient Limited, a company incorporated under the laws of Jersey, Channel Islands (the "Company"), does hereby certify, to such officer's knowledge, that:

The Quarterly Report for the quarter ended December 31, 2019 (the "Form 10-Q") of the Company fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, and the information contained in the Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 4, 2020

/s/ Christopher Lindop
Christopher Lindop
Chief Financial Officer

This certification is being furnished and not filed, and shall not be incorporated into any document for any purpose, under the Securities Exchange Act of 1934 or the Securities Act of 1933.