ICON PLC
Form 6-K
May 03, 2019

FORM 6-K
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Report of Foreign Private Issuer
Pursuant to Rule 13a-16 under
the Securities Exchange Act of 1934

For
the month ended May, 2019

ICON plc
(Registrant's name)

333-08704
(Commission file number)

South County Business Park, Leopardstown, Dublin 18, Ireland
(Address of principal executive offices)

Brendan Brennan, CFO
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(Name, telephone number, email and/or facsimile number and address of Company contact person)

Indicate by check mark
whether the registrant files
or will file annual reports
under cover Form 20-F or
Form 40-F.
Yes___X___ No______

Indicate by check mark
whether the registrant is
submitting the Form 6-K in
paper as permitted by
Regulation S-T Rule
101(b)(1):

Yes______ No___X___

Indicate by check mark whether the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7):
Yes______ No___X___

Indicate by check mark whether the registrant by furnishing the information contained in this Form is also thereby furnishing the information to the Commission pursuant to Rule12g3-2(b) under the Securities Exchange Act of 1934.
Yes______ No___X___

If "Yes" is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b):82 N/A

ICON plc

Rider A

This report on Form 6-K is hereby incorporated by reference in the registration statement on Form F-3 (Registration No. 333-133371) of ICON plc and in the prospectus contained therein, and this report on Form 6-K shall be deemed a part of such registration statement from the date on which this report is filed, to the extent not superseded by documents or reports subsequently filed or furnished by ICON plc under the Securities Act of 1933 or the Securities Exchange Act of 1934.

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GENERAL

As used herein, “ICON”, the “Company” and “we” refer to ICON plc and its consolidated subsidiaries, unless the context requires otherwise.

Business

ICON public limited company (“ICON”) is a clinical research organization (“CRO”), providing outsourced development services on a global basis to the pharmaceutical, biotechnology and medical device industries. We specialize in the strategic development, management and analysis of programs that support all stages of the clinical development process - from compound selection to Phase I-IV clinical studies. Our vision is to be the global CRO partner of choice in drug development by delivering best in class information, solutions and performance in clinical and outcomes research.

We believe that we are one of a select group of CROs with the expertise and capability to conduct clinical trials in most major therapeutic areas on a global basis and have the operational flexibility to provide development services on a stand-alone basis or as part of an integrated “full service” solution. At March 31, 2019 we had approximately 13,920 employees, in 90 locations in 37 countries. During the three months ended March 31, 2019, we derived approximately 32.4%, 57.6% and 10% of our revenue in the United States, Europe and Rest of World respectively.

We began operations in 1990 and have expanded our business predominately through organic growth, together with a number of strategic acquisitions to enhance our capabilities and expertise in certain areas of the clinical development process. We are incorporated in Ireland and our principal executive office is located at: South County Business Park, Leopardstown, Dublin 18, Republic of Ireland. The contact telephone number of this office is +353-1-291-2000.

Recent Developments

Changes in Board composition and executive leadership transition

In January 2019, the Board approved the appointment of Mr. Ronan Murphy (Non-Executive Director) as Lead Independent Director of ICON plc with immediate effect.

Acquisition

On January 25, 2019 a subsidiary of the Company, ICON Laboratory Services Inc. acquired 100% of the share capital of MolecularMD Corp. The initial consideration on acquisition was $42.3 million. MolecularMD is a molecular diagnostic specialty laboratory that enables the development and commercialization of precision medicines in oncology. It is a recognized leader in the analytical development and clinical validation of molecular diagnostic assays. It offers a comprehensive test menu in immune oncology development and services also include companion diagnostic development services. The acquisition enhances ICON’s laboratory offering in molecular diagnostic testing and brings to ICON expanded testing platforms, including next generation sequencing, and immunohistochemistry (IHC).

Share repurchase program

A resolution was passed at the Company’s Annual General Meeting (“AGM”) on July 22, 2016, which authorizes the Directors to purchase (buyback) up to 10% of the outstanding shares in the Company. On October 3, 2016, the Company commenced the share buyback program of up to $400 million. At December 31, 2018, a total of 4,026,576 ordinary shares were redeemed by the Company under this buyback program for a total consideration of $372.1 million. On January 8, 2019, the Company commenced a further share buyback program of up to 1 million shares. At March 31, 2019 a total of 200,253 ordinary shares were redeemed by the Company under this buyback program for a total consideration of $25.0 million. All ordinary shares that were redeemed under the buyback program were canceled in accordance with the Constitution of the Company and the nominal value of these shares transferred to other undenominated capital as required by Irish Company law.

New accounting pronouncements

Recently adopted accounting standards

The new leasing standard (ASU No. 2016-02 ‘Leases’) was issued in February 2016. ASC 842 ‘Leases’ supersedes the requirements in ASC 840 'Leases' and requires that lessees recognize rights and obligations from virtually all leases (other than leases that meet the definition of a short-term lease) on their balance sheets as right-of-use assets with corresponding lease liabilities. The ASU also provides additional guidance on how to classify leases and how to determine the lease term for accounting purposes. In July 2018, the Financial Accounting Standards Board (FASB) issued ASU No. 2018-11 'Leases (Topic 842): Targeted Improvements', which provides the option to adopt the standard retrospectively for each prior period presented, as initially set out in ASU No.

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2016-02, or as of the adoption date with a cumulative-effect adjustment to the opening balance of retained earnings. ASC 842 became effective for ICON Plc with effect from January 1, 2019. ICON adopted the new standard as of January 1, 2019 under the cumulative effect adjustment approach. Under this transition method, the new standard is applied from January 1, 2019 without restatement of comparative period amounts. Results as at December 31, 2018 and for the three months ended March 31, 2018 are therefore presented under the previous leasing accounting principles, ASC 840: 'Leases'. A lease liability and right-of-use asset have been recorded on the Consolidated Balance Sheet as at January 1, 2019 of $106.5 million (see note 14 - Impact of change in accounting policies for further details). The net operating cost of leases recorded in the three months ended March 31, 2019 is $8.1 million (see note 8 - Operating leases for further details).

Recently issued accounting standards

In August 2018, the FASB issued ASU No. 2018-15 'Internal-Use Software (Subtopic 350-40)' which provides guidance on when to capitalize implementation costs incurred in hosting arrangements which are accounted for as service contracts. ICON is currently evaluating the impact of this ASU on its consolidated financial statements. This ASU will be effective for fiscal years beginning after December 15, 2020, and interim periods within those fiscal years, with early adoption permitted.

ICON plc
CONDENSED CONSOLIDATED BALANCE SHEETS
AS AT MARCH 31, 2019 AND DECEMBER 31, 2018

	(Unaudited) March 31, 2019	(Audited) December 31, 2018
ASSETS	(in thousands)	
Current Assets:		
Cash and cash equivalents	$417,638	$395,851
Available for sale investments	60,299	59,910
Accounts receivable, net	415,341	414,791
Unbilled revenue	440,583	362,926
Other receivables	40,079	40,459
Prepayments and other current assets	39,757	36,801
Income taxes receivable	26,828	19,445
Total current assets	1,440,525	1,330,183
Other Assets:		
Property, plant and equipment, net	154,753	158,669
Goodwill	787,393	756,260
Operating right-of-use assets	111,775	—
Other non-current assets	18,906	14,525
Non-current income taxes receivable	13,822	20,023
Non-current deferred tax asset	12,937	13,577
Investments in equity - long term	9,482	6,963
Intangible assets	57,665	54,055
Total Assets	$2,607,258	$2,354,255
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current Liabilities:		
Accounts payable	$19,304	$13,288
Payments on account	318,298	274,468
Other liabilities	363,787	317,143
Income taxes payable	10,885	5,724
Total current liabilities	712,274	610,623
Other Liabilities:		
Non-current bank credit lines and loan facilities	349,357	349,264
Non-current operating lease liabilities	83,165	—
Non-current other liabilities	14,128	13,446
Non-current government grants	847	877
Non-current income taxes payable	16,975	17,551
Non-current deferred tax liability	8,327	8,213
Commitments and contingencies	—	—
Total Liabilities	1,185,073	999,974
Shareholders' Equity:		
Ordinary shares, par value 6 euro cents per share; 100,000,000 shares authorized, 53,976,367 shares issued and outstanding at March 31, 2019 and 53,971,706 shares issued and outstanding at December 31, 2018	4,658	4,658
Additional paid in capital	540,020	529,642
Other undenominated capital	997	983

Accumulated other comprehensive income	(75,093)	(69,328)
Retained earnings	951,603	888,326
Total Shareholders' Equity	1,422,185	1,354,281
Total Liabilities and Shareholders' Equity	$2,607,258	$2,354,255

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

ICON plc
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
FOR THE THREE MONTHS ENDED MARCH 31, 2019 AND MARCH 31, 2018
(UNAUDITED)

	Three Months Ended	
	March 31, 2019	March 31, 2018
	(in thousands except share and per share data)	
Revenue	$674,852	$620,125
Costs and expenses:		
Direct costs	475,497	430,592
Selling, general and administrative expense	81,912	80,915
Depreciation and amortization	15,497	16,898
Total costs and expenses	572,906	528,405
Income from operations	101,946	91,720
Interest income	1,745	823
Interest expense	(3,354)	(3,795)
Income before provision for income taxes	100,337	88,748
Provision for income taxes	(12,040)	(10,650)
Net income	$88,297	$78,098
Net income per Ordinary Share:		
Basic	$1.64	$1.45
Diluted	$1.63	$1.42
Weighted average number of Ordinary Shares outstanding:		
Basic	53,845,407	53,925,560
Diluted	54,142,510	54,985,790

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

ICON plc
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE THREE MONTHS ENDED MARCH 31, 2019 AND MARCH 31, 2018 (UNAUDITED)

	Three Months Ended	
	March 31, 2019	March 31, 2018
	(in thousands)	
Cash flows from operating activities:		
Net income	$88,297	$78,098
Adjustments to reconcile net income to net cash provided by operating activities:		
Loss on disposal of property, plant and equipment	—	2
Depreciation expense	11,582	11,850
Amortization of operating right-of-use assets	7,446	—
Amortization of intangibles	3,915	5,048
Amortization of government grants	(11)	(12)
Interest on short term investments	(268)	(333)
Interest on non-current operating lease liability	689	—
Gain on re-measurement of financial assets	(500)	—
Stock compensation expense	7,079	9,392
Amortization of gain on interest rate hedge	(231)	(230)
Amortization of financing costs	137	390
Deferred taxes	740	(3,481)
Changes in assets and liabilities:		
Decrease/(increase) in accounts receivable	3,545	(12,979)
Increase in unbilled revenue	(79,478)	(65,904)
Decrease/(increase) in other receivables	398	(2,866)
Increase in prepayments and other current assets	(2,187)	(10,358)
Increase in other non-current assets	(4,421)	(179)
Increase in payments on account	43,957	92,350
Increase/(decrease) in other current liabilities	16,432	(56,787)
Decrease in operating lease liabilities	(8,688)	—
Decrease in other non-current liabilities	(13)	(1,165)
Increase in income taxes payable	2,907	4,300
Decrease in deferred tax liability	(2,096)	—
Increase/(decrease) in accounts payable	5,403	(6,668)
Net cash provided by operating activities	94,634	40,468
Cash flows from investing activities:		
Purchase of property, plant and equipment	(7,034)	(8,304)
Purchase of subsidiary undertakings	(42,349)	(1,645)
Cash acquired with subsidiary undertaking	686	—
Purchase of available for sale investments	(81)	(10,160)
Sale of available for sale investments	239	6,253
Purchase of investments in equity - long term	(2,019)	—
Net cash used in investing activities	(50,558)	(13,856)
Cash flows from financing activities:		
Financing costs	—	(823)
Proceeds from exercise of equity compensation	3,391	727
Share issue costs	(4)	(4)
Repurchase of ordinary shares	(25,000)	(38,208)

Share repurchase costs	(20)	(31)
Net cash used in financing activities	(21,633)	(38,339)
Effect of exchange rate movements on cash	(656)	869
Net increase/(decrease) in cash and cash equivalents	21,787	(10,858)
Cash and cash equivalents at beginning of period	395,851	282,859
Cash and cash equivalents at end of period	$417,638	$272,001

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

ICON plc
CONDENSED CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY AND COMPREHENSIVE INCOME
(UNAUDITED)

	Shares	Amount	Additional Paid-in Capital	Other Undenominated Capital	Accumulated Other Comprehensive Income	Retained Earnings	Total
	(dollars in thousands, except share data)						
Balance at December 31, 2018	53,971,706	$4,658	$529,642	$ 983	$ (69,328)	$888,326	$1,354,281
Comprehensive income:							
Net income	—	—	—	—	—	88,297	88,297
Currency translation adjustment	—	—	—	—	(4,522)	—	(4,522)
Currency impact of long term funding (net of tax)	—	—	—	—	(1,236)	—	(1,236)
Unrealized capital gain – investments	—	—	—	—	279	—	279
Amortization of interest rate hedge	—	—	—	—	(231)	—	(231)
Fair value of cash flow hedge (net of tax)	—	—	—	—	(55)	—	(55)
Total comprehensive income	—	—	—	—	(5,765)	88,297	82,532
Exercise of share options	62,015	4	3,377	—	—	—	3,381
Issue of restricted share units	142,899	10	—	—	—	—	10
Non-cash stock compensation expense	—	—	7,005	—	—	—	7,005
Share issuance costs	—	—	(4)	—	—	—	(4)
Share repurchase program	(200,253)	(14)	—	14	—	(25,000)	(25,000)
Share repurchase costs	—	—	—	—	—	(20)	(20)
Balance at March 31, 2019	53,976,367	$4,658	$540,020	$ 997	$ (75,093)	$951,603	$1,422,185

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

ICON plc
NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(UNAUDITED)
March 31, 2019
1. Basis of Presentation
These condensed consolidated financial statements which have been prepared in accordance with United States Generally Accepted Accounting Principles (“US GAAP”) have not been audited. The condensed consolidated financial statements reflect all adjustments, which are, in the opinion of management, necessary to present a fair statement of the operating results and financial position for the periods presented. The preparation of the condensed consolidated financial statements in conformity with US GAAP requires management to make estimates and assumptions that affect reported amounts and disclosures in the condensed consolidated financial statements. Actual results could differ from those estimates.
The condensed consolidated financial statements should be read in conjunction with the accounting policies and notes to the consolidated financial statements included in ICON’s Form 20-F for the year ended December 31, 2018 (see note 2 - Significant Accounting Policies for impact of adoption of ASC 842 'Leases'). Operating results for the three months ended March 31, 2019 are not necessarily indicative of the results that may be expected for the fiscal period ending December 31, 2019.
2. Significant accounting policies
The Company adopted Accounting Standards Codification (ASC) 842 'Leases', with a date of initial application of January 1, 2019. The lease accounting policy applied in preparation of the results for the three months ended March 31, 2019 therefore reflect application of ASC 842. ICON adopted the standard using the cumulative effect adjustment approach. Under this transition method, ICON has applied the new standard as at the date of initial application (i.e. January 1, 2019), without restatement of comparative period amounts. The cumulative effect of applying the new standard is recorded as an adjustment to the opening consolidated balance sheet as at the date of initial application (see note 14 Impact of change in accounting policies for further details). The comparative information has not been adjusted and therefore continues to be reported under ASC 840 ‘Leases’.
The new standard requires lessees to recognize the rights and obligations resulting from virtually all leases on the balance sheet as right-of-use (ROU) assets with corresponding lease liabilities.

The most significant impact of application of the new standard for ICON relates to the recognition of right-of-use assets and lease liabilities on the consolidated balance sheet for operating leases for certain property, vehicles and equipment. Prior to application of ASC 842, costs in respect of operating leases were charged to the consolidated statement of operations on a straight-line basis over the lease term.

Pursuant to certain practical expedients available as part of adopting ASC 842, ICON has not reassessed; whether existing or expired contracts are or contain leases, the classification of existing or expired leases, or whether unamortized initial direct costs meet the new definition of initial direct costs under ASC 842. Additionally, ICON has elected to use hindsight in determining the lease term and in assessing impairment of ROU assets, if any.

ICON determines if an arrangement is a lease at inception. Finance leases, if any, are depreciated on the same basis as property, plant and equipment. At March 31, 2019 and December 31, 2018, the Group did not account for any leases as finance leases.

Operating leases are included in ROU assets, other current liabilities and lease liabilities on our consolidated balance sheet with lease amortization recognized on a straight-line basis over the lease term. ROU assets and lease liabilities are recognized based on the present value of future minimum lease payments over the lease term at commencement date or date of transition. Our lease terms may also include options to extend or terminate. ICON actively reviews options to extend or terminate leases and adjusts the ROU asset and lease liability when it is reasonably certain the option will be exercised. The ROU asset is adjusted for any prepayments made at the date of commencement and any initial direct costs incurred. As most of ICON's leases do not provide an implicit rate, the discount rate used is based on the rate of traded corporate bonds available at the commencement date adjusted for country risk, liquidity and lease term.

Leasehold improvements are amortized over the shorter of the depreciable lives of the corresponding fixed assets or the lease term including any applicable renewals. Certain property leases include variable lease payments resulting from periodic rent increases based on an index which are recognized as incurred on the statements of operations.

ICON accounts for lease and non-lease components separately with lease components flowing through the consolidated balance sheet and non-lease components expensed directly to statement of operations.

3. Revenue

Revenue disaggregated by customer profile is as follows:

	Three Months Ended	
	March 31, 2019	March 31, 2018
	(in thousands)	
Top client	$99,994	$65,818
Clients 2-5	169,339	164,301
Clients 6-10	89,067	98,539
Clients 11-25	124,826	117,271
Other	191,626	174,196
Total	$674,852	$620,125

4. Trade accounts receivable, unbilled services (contract assets) and payments on account (contract liabilities)

Trade accounts receivables and unbilled revenue are as follows:

	March 31, 2019	December 31, 2018
	(in thousands)	
Contract assets:		
Billed services (accounts receivable)	$424,038	$ 423,680
Unbilled services (unbilled revenue)	440,583	362,926
Trade accounts receivable and unbilled revenue	864,621	786,606
Allowance for doubtful accounts	(8,697)	(8,889)
Trade accounts receivable and unbilled revenue, net	$855,924	$ 777,717

Unbilled services and payments on account (contract assets and liabilities) were as follows:

(in thousands, except percentages)	March 31, 2019	December 31, 2018	$ Change	% Change
Unbilled services (unbilled revenue)	$440,583	$ 362,926	$77,657	21.4 %
Unearned revenue (payments on account)	(318,298)	(274,468)	(43,830)	16.0 %
Net balance	$122,285	$ 88,458	$33,827	38.2 %

Timing may differ between the satisfaction of performance obligations and the invoicing and collection of amounts related to our contracts with customers. We record assets for amounts related to performance obligations that are satisfied but not yet billed and/or collected. These assets are recorded as unbilled receivables and therefore contract assets rather than accounts receivables when receipt of the consideration is conditional on something other than the passage of time. Liabilities are recorded for amounts that are collected in advance of the satisfaction of performance obligations.

Unbilled services/revenue balances arise where invoicing or billing is based on the timing of agreed milestones related to service contracts for clinical research. Contractual billing arrangements in respect of certain reimbursable expenses (principally investigators) require billing by the investigator to the Company prior to billing by the Company to the customer.

Unbilled services as at March 31, 2019 increased by $77.7 million as compared to December 31, 2018. Payments on account increased by $43.8 million over the same period resulting in an increase of $33.8 million in the net balance of unbilled services and payments on account between December 31, 2018 and March 31, 2019. These fluctuations are primarily due to timing of payments and invoicing related to the Group's clinical trial management contracts.

The bad debt expense recognized on the Group's receivables and unbilled services was de minimis for the three months ended March 31, 2019 and March 31, 2018.

As of March 31, 2019 approximately $5.5 billion of revenue is expected to be recognized in the future in respect of unsatisfied performance obligations. The Company expects to recognize revenue on approximately 40% of the unsatisfied performance obligation over the next 12 months, with the remainder recognized thereafter over the duration of the customer contracts.

5. Goodwill

	Three Months Ended March 31, 2019	Year Ended December 31, 2018
	(in thousands)	
Opening balance	$756,260	$ 769,058
Current period acquisitions (Note 6)	33,894	—
Prior period acquisitions (Note 6)	—	1,048
Foreign exchange movement	(2,761)	(13,846)
Closing balance	$787,393	$ 756,260

6. Business Combinations

Acquisitions – MolecularMD Corp

On January 25, 2019 a subsidiary of the Company, ICON Laboratory Services Inc. acquired 100% of the share capital of MolecularMD Corp. MolecularMD is a molecular diagnostic specialty laboratory that enables the development and commercialization of precision medicines in oncology. The consideration on acquisition was $42.3 million.

The acquisition of MolecularMD has been accounted for as a business combination in accordance with ASC 805 'Business Combinations'. The Company has made a provisional assessment of the fair value of assets acquired and liabilities assumed as at that date. The following table summarizes the Company's fair values of the assets acquired and liabilities assumed:

	January 25, 2019 (in thousands)
Cash	$ 686
Property, plant and equipment	1,769
Operating right-of-use assets	2,866
Goodwill*	33,894
Intangible asset**	8,061
Accounts receivable	3,100
Unbilled revenue	321
Prepayments and other current assets	916
Other receivables	43
Accounts payable	(650)
Payments on account	(1,437)
Other liabilities	(1,834)
Non-current lease liabilities	(2,167)
Non-current other liabilities	(1,123)
Non-current deferred tax liability	(2,096)
Net assets acquired	$ 42,349
Total consideration	$ 42,349

*Goodwill represents the acquisition of an established workforce with experience in molecular diagnostic specialty laboratory services and commercialization of precision medicines in oncology.
**The Company has made an initial estimate of separate intangible assets acquired of $8.1 million, being customer relationships and order book assets. This assessment is under review and will be finalized within 12 months of the date of acquisition.

7. Restructuring

Restructuring charges

No restructuring charge was recognized during the three months ended March 31, 2019 or March 31, 2018.

Prior Period Restructuring charges

A restructuring charge of $12.5 million was recognized during the year ended December 31, 2018 under a restructuring plan adopted following a review of operations. The restructuring plan reflected resource rationalization across the business to improve resource utilization, resulting in a charge of $9.7 million and office consolidation resulting in the recognition of an onerous lease obligation of $2.8 million.

	Workforce reductions	Onerous Lease	Total
	(in thousands)		
Initial restructuring charge recorded	$9,684	$ 2,806	$12,490
Utilization	(5,399)	(672)	(6,071)
Provision at December 31, 2018	$4,285	$ 2,134	$6,419
Utilization	(3,300)	(305)	(3,605)
Provision at March 31, 2019	$985	$ 1,829	$2,814

A restructuring charge of $7.8 million was recognized during the year ended December 31, 2017 under a restructuring plan adopted following a review of operations. The restructuring plan reflected resource rationalization across the business to improve resource utilization.

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(in thousands)	Workforce Reductions
Total provision recognized	$ 7,753
Utilized	(4,656)
Provision at December 31, 2017	$ 3,097
Utilized	(1,015)
December 31, 2018	$ 2,082
Utilized	—
Provision at March 31, 2019	$ 2,082

At March 31, 2019, $4.4 million is included within other liabilities and $0.5 million within non-current other liabilities.

8. Operating leases

Lease costs recorded under operating leases for the three months ended March 31, 2019 were as follows:

	Three Months Ended March 31, 2019 (in thousands)
Operating lease costs	$ 8,655
Income from sub-leases	(520)
Net operating lease costs	$ 8,135

Of the total cost of $8.1 million, $7.2 million is recorded within selling, general and administration costs and $0.9 million is recorded within direct costs.

During the three months ended March 31, 2019, the Group did not incur any costs related to variable lease payments.

The adoption of ASC 842 resulted in the recognition of operating right-of-use assets and lease liabilities of $106.5 million at January1, 2019. Additional right-of-use assets obtained in exchange for lease obligations during the three month ended March 31, 2019 totaled $13.0 million. The weighted average remaining lease term and weighted-average discount rate at March 31, 2019 were 5.51 years and 3.96%, respectively.

Future minimum lease payments under non-cancellable leases as of March 31, 2019 were as follows:

	Minimum rental payments (in thousands)
Due within 1 year	$ 29,453
Due between 1 and 5 years	67,499
Thereafter	18,660
Total future minimum lease payments	115,612
Lease imputed interest	(3,502)
Total	$ 112,110

Operating lease liabilities are presented as current and non-current. Operating lease liabilities of $28.1 million have been included in other liabilities as at March 31, 2019.

9. Income Taxes

Income taxes recognized during the three months ended March 31, 2019 and March 31, 2018, comprise:

	Three Months Ended	
	March 31, 2019	March 31, 2018
	(in thousands)	
Provision for income taxes	$12,040	$ 10,650

As at March 31, 2019 the Company maintains a $22.8 million liability (December 31, 2018: $22.5 million) for unrecognized tax benefit, which is comprised of $21.7 million (December 31, 2018: $21.4 million) related to items generating unrecognized tax benefits and $1.1 million (December 31, 2018: $1.1 million) for interest and related penalties to such items. The Company recognizes interest accrued on unrecognized tax benefits as an additional income tax expense.

The Company has analyzed the filing positions in all of the significant federal, state and foreign jurisdictions where it is required to file income tax returns, as well as open tax years in these jurisdictions. The only periods subject to examination by the major tax jurisdictions where the Company does business are 2014 through 2018 tax years. The Company does not believe that the outcome of any examination will have a material impact on its financial statements.

10. Net income per ordinary share

Basic net income per ordinary share has been computed by dividing net income available to ordinary shareholders by the weighted average number of ordinary shares outstanding during the period. Diluted net income per ordinary share is computed by adjusting the weighted average number of ordinary shares outstanding during the period for all potentially dilutive ordinary shares outstanding during the period and adjusting net income for any changes in income or loss that would result from the conversion of such potential ordinary shares. There is no difference in net income used for basic and diluted net income per ordinary share.

The reconciliation of the number of shares used in the computation of basic and diluted net income per ordinary share is as follows:

	Three Months Ended	
	March 31, 2019	March 31, 2018
Weighted average number of ordinary shares outstanding for basic net income per ordinary share	53,845,407	53,925,560
Effect of dilutive share options outstanding	297,103	1,060,230
Weighted average number of ordinary shares outstanding for diluted net income per ordinary share	54,142,510	54,985,790

11. Share-based Awards
Share Options
On July 21, 2008, the Company adopted the Employee Share Option Plan 2008 (the "2008 Employee Plan") pursuant to which the Compensation and Organization Committee of the Company's Board of Directors may grant options to any employee, or any Director holding a salaried office or employment with the Company or a Subsidiary for the purchase of ordinary shares. On the same date, the Company also adopted the Consultants Share Option Plan 2008 (the "2008 Consultants Plan"), pursuant to which the Compensation and Organization Committee of the Company's Board of Directors may grant options to any consultant, adviser or non-executive Director retained by the Company or any Subsidiary for the purchase of ordinary shares.
On February 14, 2017, both the 2008 Employee Plan and the 2008 Consultants Plan (together the "2008 Option Plans") were amended and restated in order to increase the number of options that can be issued under the 2008 Consultants Plan from 400,000 to 1.0 million and to extend the date for options to be granted under the 2008 Option Plans.
An aggregate of 6.0 million ordinary shares have been reserved under the 2008 Employee Plan, as reduced by any shares issued or to be issued pursuant to options granted under the 2008 Consultants Plan, under which a limit of 1.0 million shares applies. Further, the maximum number of ordinary shares with respect to which options may be granted under the 2008 Employee Option Plan, during any calendar year to any employee shall be 400,000 ordinary shares. There is no individual limit under the 2008 Consultants Plan. No options may be granted under the 2008 Option Plans after February 14, 2027.
Each option granted under the 2008 Option Plans will be an employee stock option, or NSO, as described in Section 422 or 423 of the Internal Revenue Code. Each grant of an option under the 2008 Options Plans will be evidenced by a Stock Option Agreement between the optionee and the Company. The exercise price will be specified in each Stock Option Agreement, however option prices will not be less than 100% of the fair market value of an ordinary share on the date the option is granted.
On January 17, 2003, the Company adopted the Share Option Plan 2003 (the "2003 Share Option Plan") pursuant to which the Compensation and Organization Committee of the Board could grant options to officers and other employees of the Company or its subsidiaries for the purchase of ordinary shares. An aggregate of 6.0 million ordinary shares were reserved under the 2003 Share Option Plan; and, in no event could the number of ordinary shares issued pursuant to options awarded under this plan exceed 10% of the outstanding shares, as defined in the 2003 Share Option Plan, at the time of the grant, unless the Board expressly determined otherwise. Further, the maximum number of ordinary shares with respect to which options could be granted under the 2003 Share Option Plan during any calendar year to any employee was 400,000 ordinary shares. The 2003 Share Option Plan expired on January 17, 2013. No new options may be granted under this plan.
Share option awards are granted with an exercise price equal to the market price of the Company's shares at date of grant. Prior to 2018, share options typically vest over a period of five years from date of grant and expire eight years from date of grant. Share options granted to non-executive directors since 2018 vest over 12 months and expire eight years from the date of grant. The maximum contractual term of options outstanding at March 31, 2019 is eight years.
The following table summarizes option activity for the three months ended March 31, 2019:

	Options Outstanding Number of Shares	Weighted Average Exercise Price	Weighted Average Grant Date Fair Value	Weighted Average Remaining Contractual Life
Outstanding at December 31, 2018	920,746	$ 74.32	$ 22.39	
Granted	88,734	$ 140.38	$ 43.59	
Exercised	(62,015)	$ 54.52	$ 16.77	
Forfeited	(18,696)	$ 79.71	$ 24.22	
Outstanding at March 31, 2019	928,769	$ 81.84	$ 24.75	5.17

Exercisable at March 31, 2019	448,235	$ 61.79	$ 18.65	3.98

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The Company has outstanding options with fair values ranging from $9.72 to $43.59 per option or a weighted average fair value of $17.83 per option. The Company issues ordinary shares for all options exercised. The total amount of fully vested share options which remained outstanding at March 31, 2019 was 448,235. Fully vested share options at March 31, 2019 have an average remaining contractual term of 3.98 years, an average exercise price of $61.79 and a total intrinsic value of $33.5 million. The total intrinsic value of options exercised during the three months ended March 31, 2019 was $5.4 million (March 31, 2018: $1.8 million).

The following table summarizes the movement in non-vested share options for the three months ended March 31, 2019:

	Options Outstanding Number of Shares	Weighted Average Exercise Price	Weighted Average Grant Date Fair Value
Non-vested outstanding at December 31, 2018	522,823	$ 88.18	$ 26.41
Granted	88,734	$ 140.38	$ 43.59
Vested	(115,564)	$ 76.30	$ 22.69
Forfeited	(15,459)	$ 92.16	$ 27.51
Non-vested outstanding at March 31, 2019	480,534	$ 100.55	$ 30.44

Fair value of Stock Options Assumptions

The weighted average fair value of options granted during the three months ended March 31, 2019 and March 31, 2018 was calculated using the Black-Scholes option pricing model. The weighted average grant date fair values and assumptions used were as follows:

	Three Months Ended	
	March 31, 2019	March 31, 2018
Weighted average grant date fair value	$43.59	$ 35.10
Assumptions:		
Expected volatility	30 %	29 %
Dividend yield	— %	— %
Risk-free interest rate	2.59 %	2.63 %
Expected life	5 years	5 years

Expected volatility is based on the historical volatility of our common stock over a period equal to the expected term of the options; the expected life represents the weighted average period of time that options granted are expected to be outstanding given consideration to vesting schedules and our historical experience of past vesting and termination patterns. The risk-free rate is based on the U.S. government zero-coupon bonds yield curve in effect at time of the grant for periods corresponding with the expected life of the option.

Restricted Share Units and Performance Share Units

On July 21, 2008, the Company adopted the 2008 Employees Restricted Share Unit Plan (the “2008 RSU Plan”) pursuant to which the Compensation and Organization Committee of the Company’s Board of Directors may select any employee, or any Director holding a salaried office or employment with the Company, or a Subsidiary to receive an award under the plan. An aggregate of 1.0 million ordinary shares have been reserved for issuance under the 2008 RSU Plan.

On April 23, 2013, the Company adopted the 2013 Employees Restricted Share Unit and Performance Share Unit Plan (the “2013 RSU Plan”) pursuant to which the Compensation and Organization Committee of the Company’s Board of Directors may select any employee, or any Director holding a salaried office or employment with the Company, or a Subsidiary to receive an award under the plan. On May 11, 2015, the 2013 RSU Plan was amended and restated in order to increase the number of shares that can be issued under the RSU Plan by 2.5 million shares. Accordingly, an aggregate of 4.1 million ordinary shares have been reserved for issuance under the 2013 RSU Plan. The shares are awarded at par value and vest over a service period. Awards under the 2013 RSU Plan may be settled in cash or shares at the option of the Company.

The Company has awarded RSUs and PSUs to certain key individuals of the Group. The following table summarizes RSU and PSU activity for the three months ended March 31, 2019:

	PSU Outstanding Number of Shares	PSU Weighted Average Grant Date Fair Value	PSU Weighted Average Remaining Contractual Life	RSU Outstanding Number of Shares	RSU Weighted Average Grant Date Fair Value	RSU Weighted Average Remaining Contractual Life
Outstanding at December 31, 2018	251,053	$ 89.95	0.96	534,677	$ 89.50	1.22
Granted	55,102	$ 140.38		27,697	$ 140.38	
Shares vested	(109,359)	$ 71.95		(33,540)	$ 86.91	
Forfeited	(5,807)	$ 84.65		(17,856)	$ 90.18	
Outstanding at March 31, 2019	190,989	$ 106.20	1.67	510,978	$ 92.40	1.10

The fair value of PSUs vested for the three months ended March 31, 2019 totaled $7.9 million (full year 2018: $14.7 million).

The fair value of RSUs vested for the three months ended March 31, 2019 totaled $2.9 million (full year 2018: $18.8 million).

The PSUs vest based on service and specified EPS targets over the period 2016 – 2019, 2017 – 2020, 2018 – 2021 and 2019 – 2022. Depending on the amount of EPS from 2016 to 2022, up to an additional 79,384 PSUs may also be granted.

Non-cash stock compensation expense

Non-cash stock compensation expense for the three months ended March 31, 2019 and March 31, 2018 has been allocated as follows:

	Three Months Ended March 31, 2019	Three Months Ended March 31, 2018
	(in thousands)	
Direct costs	$3,901	$ 5,175
Selling, general and administrative	3,178	4,217
	$7,079	$ 9,392

Total non-cash stock compensation expense not yet recognized at March 31, 2019 amounted to $49.6 million. The weighted average period over which this is expected to be recognized is 2.48 years.

The amendments required by Accounting Standards Update (‘ASU’) 2016-09 ‘Improvements to Employee Share-Based Payment Accounting’ require the Company to record all tax effects related to share-based payments through the income statement rather than additional paid in capital. The Company applied the updated standard prospectively during the year ended December 31, 2017.

12. Share Capital

On January 8, 2019, the Company commenced a share buyback program of up to $1 million shares. The Company can acquire up to 10% of its outstanding ordinary shares (by way of redemption), in accordance with Irish law, the United States securities laws, and the Company's constitutional documents through open market share acquisitions. The buyback program gives a broker authority to acquire the Company's ordinary shares from time to time on the open market in accordance with agreed terms and limitations. The acquisition of shares pursuant to the buyback program was effected by way of redemption and cancellation of the shares, in accordance with the Constitution of the Company.

During the three months ended March 31, 2019 200,253 ordinary shares were redeemed by the Company under this buyback program for a total consideration of $25.0 million. All ordinary shares that were redeemed under the buyback program were canceled in accordance with the Constitution of the Company and the nominal value of these shares transferred to an other undenominated capital reserve as required under Irish Company Law.

13. Business Segment Information

The Company determines and presents operating segments based on the information that is internally provided to the chief operating decision maker, together the ('CODM') in accordance with FASB ASC 280-10 Disclosures about Segments of an Enterprises and Related Information. The Company determined that the CODM was comprised of the Chief Executive Officer and the Chief Financial Officer.

The Company determines and presents operating segments based on the information that is provided to the CODM. The Company operates as one single business segment, which is the provision of outsourced development services on a global basis to the pharmaceutical, biotechnology and medical devices industries. There have been no changes to the basis of segmentation or the measurement basis for the segment results in the period.

The Company is a clinical research organization ("CRO"), providing outsourced development services on a global basis to the pharmaceutical, biotechnology and medical device industries. It specializes in the strategic development, management and analysis of programs that support all stages of the clinical development process - from compound selection to Phase I-IV clinical studies. The Company has the expertise and capability to conduct clinical trials in most major therapeutic areas on a global basis and has the operational flexibility to provide development services on a stand-alone basis or as part of an integrated "full service" solution. The Company has expanded predominately through internal growth together with a number of strategic acquisitions to enhance its expertise and capabilities in certain areas of the clinical development process.

The Company is generally awarded projects based upon responses to requests for proposals received from companies in the pharmaceutical, biotechnology and medical device industries or work orders executed under our strategic partnership arrangements. Contracts with customers are generally entered into centrally, in most cases with ICON Clinical Research Limited ("ICON Ireland"), the Company's principal operating subsidiary in Ireland. Revenues, which consist primarily of fees earned under these contracts, are allocated to individual entities within the Group, based on where the work is performed in accordance with the Company's global transfer pricing model.

ICON Ireland acts as the group entrepreneur under the Company's global transfer pricing model given its role in the development and management of the group, its ownership of key intellectual property and customer relationships, its key role in the mitigation of risks faced by the group and its responsibility for maintaining the Company's global network. ICON Ireland enters into the majority of the Company's customer contracts.

ICON Ireland remunerates other operating entities in the ICON Group on the basis of a guaranteed cost plus mark up for the services they perform in each of their local territories. The cost plus mark up for each ICON entity is established to ensure that each of ICON Ireland and the ICON entities that are involved in the conduct of services for customers, earn an appropriate arms-length return having regard to the assets owned, risks borne, and functions performed by each entity from these intercompany transactions. The cost plus mark up policy is reviewed annually to ensure that it is market appropriate.

The geographic split of revenue disclosed for each region outside Ireland is the cost plus revenue attributable to these entities. The residual revenues of the Group, once each ICON entity has been paid its respective intercompany service fee, generally fall to be retained by ICON Ireland. As such revenues and income from operations in Ireland are a function of this global transfer pricing model and comprise revenues of the Group after deducting the cost plus

revenues attributable to the activities performed outside Ireland.
The Company's areas of operation outside of Ireland include the United States, United Kingdom, Belgium, France, Germany, Italy, Spain, The Netherlands, Sweden, Turkey, Poland, Czech Republic, Latvia, Russia, Ukraine, Hungary, Israel, Romania,

Canada, Mexico, Brazil, Colombia, Argentina, Chile, Peru, India, China (including Hong Kong), South Korea, Japan, Thailand, Taiwan, Singapore, The Philippines, Australia, New Zealand, and South Africa.

The geographical distribution of the Company's segment measures as at March 31, 2019 and December 31, 2018 and for the three months ended March 31, 2019 and March 31, 2018 is as follows:

a) The distribution of revenue by geographical area was as follows:

	Three Months Ended	
	March 31, 2019	March 31, 2018
	(in thousands)	
Ireland	$298,483	$235,110
Rest of Europe	90,445	95,040
U.S.	218,540	225,670
Rest of World	67,384	64,305
Total	$674,852	$620,125

* All sales shown for Ireland are export sales.

b) The distribution of income from operations by geographical area was as follows:

	Three Months Ended	
	March 31, 2019	March 31, 2018
	(in thousands)	
Ireland	$70,621	$ 69,810
Rest of Europe	5,850	5,168
U.S.	17,107	11,802
Rest of World	8,368	4,940
Total	$101,946	$ 91,720

c) The distribution of property, plant and equipment, net, by geographical area was as follows:

	March 31, 2019	December 31, 2018
	(in thousands)	
Ireland	$100,915	$106,206
Rest of Europe	9,450	9,807
U.S.	26,340	25,535
Rest of World	18,048	17,121
Total	$154,753	$158,669

d) The distribution of depreciation and amortization by geographical area was as follows:

	Three Months Ended	
	March 31, 2019	March 31, 2018
	(in thousands)	
Ireland	$7,732	$ 7,885
Rest of Europe	1,204	1,539
U.S.	5,412	6,299
Rest of World	1,149	1,175
Total	$15,497	$ 16,898

e) The distribution of total assets by geographical area was as follows:

	March 31, 2019	December 31, 2018
	(in thousands)	
Ireland	$1,171,368	$ 1,073,411
Rest of Europe	564,312	514,010
U.S.	727,520	646,512
Rest of World	144,058	120,322
Total	$2,607,258	$ 2,354,255

14. Impact of change in accounting policies

The new leasing standard (ASU No. 2016-02 ‘Leases’) was issued in February 2016. ASC 842 ‘Leases’ supersedes the current requirements in ASC 840 'Leases' and requires that lessees recognize rights and obligations from virtually all leases (other than leases that meet the definition of a short-term lease) on their balance sheets as right-of-use assets with corresponding lease liabilities. The ASU also provides additional guidance on how to classify leases and how to determine the lease term for accounting purposes. In July 2018, the Financial Accounting Standards Board (FASB) issued ASU No. 2018-11 'Leases (Topic 842): Targeted Improvements', which provides the option to adopt the standard retrospectively for each prior period presented, as initially set out in ASU No. 2016-02, or as of the adoption date with a cumulative-effect adjustment to the opening balance of retained earnings.

ASC 842 became effective for ICON Plc with effect from January 1, 2019. ICON adopted the new standard as of January 1, 2019 under the cumulative effect adjustment approach. Under this transition method, the new standard is applied from January 1, 2019 without restatement of comparative period amounts. Results for the three months ended March 31, 2018 are therefore presented under the previous leasing accounting principles, ASC 840: 'Leases'.

Operating lease liabilities and right-of-use assets have been recorded on the consolidated balance sheet as at January 1, 2019 of $106.5 million.

There is no impact of adopting ASC 842 on opening retained earnings at January 1, 2019.

ICON plc
Management's Discussion and Analysis of Financial Condition and Results of Operations
The following discussion and analysis should be read in conjunction with the unaudited Condensed Consolidated Financial Statements and accompanying notes included elsewhere herein and the Consolidated Financial Statements and related notes thereto included in our Form 20-F for the year ended December 31, 2018. The Consolidated Financial Statements have been prepared in accordance with accounting principles generally accepted in the United States.
Overview
We are a CRO providing outsourced development services on a global basis to the pharmaceutical, biotechnology and medical device industries. We specialize in the strategic development, management and analysis of programs that support all stages of the clinical development process - from compound selection to Phase I-IV clinical studies. Our vision is to be the Global CRO partner of choice, delivering best in class information, solutions and performance in clinical and outcomes research.
We believe that we are one of a select group of CROs with the expertise and capability to conduct clinical trials in most major therapeutic areas on a global basis and have the operational flexibility to provide development services on a stand-alone basis or as part of an integrated "full service" solution. At March 31, 2019 we employed approximately 13,920 employees, in 90 locations in 37 countries. During the three months ended March 31, 2019 we derived approximately 32.4%, 57.6% and 10% of our revenue in the United States, Europe and Rest of World respectively.
As the nature of our business involves the management of projects having a typical duration of a few weeks to several years, the commencement or completion of projects in a fiscal year can have a material impact on revenues earned with the relevant clients in such years. In addition, as we typically work with some, but not all, divisions of a client, fluctuations in the number and status of available projects within such divisions can also have a material impact on revenues earned from clients from year to year.
Termination or delay in the performance of an individual contract may occur for various reasons, including, but not limited to, unexpected or undesired results, production problems resulting in shortages of the drug, adverse patient reactions to the drug, the client's decision to de-emphasize a particular trial or inadequate patient enrolment or investigator recruitment. In the event of termination the Company is usually entitled to all sums owed for work performed through the notice of termination and certain costs associated with the termination of the study. In addition, contracts generally contain provisions for renegotiation in the event of changes in the scope, nature, duration, or volume of services of the contract.
Our backlog consists of potential revenue yet to be earned from projects awarded by clients. At March 31, 2019 we had unsatisfied performance obligations of approximately $5.2 billion (see note 4 Trade accounts receivable, unbilled services (contract assets) and payments on account (contract liabilities) for further details). We believe that our remaining or unrealized performance obligations as of any date is not necessarily a meaningful predictor of future results, due to the potential for cancellation or delay of revenue.
Although we are domiciled in Ireland, we report our results in U.S. dollars. As a consequence the results of our non-U.S. based operations, when translated into U.S. dollars, could be materially affected by fluctuations in exchange rates between the U.S. dollar and the currencies of those operations.
In addition to translation exposures, we are also subject to transaction exposures when the currency in which contracts are priced can be different from the currencies in which costs relating to those contracts are incurred. Our operations in the United States are not materially exposed to such currency differences as the majority of our revenues and costs are in U.S. dollars. However, outside of the United States the multinational nature of our activities means that contracts are usually priced in a single currency, most often U.S. dollars or euro, while costs arise in a number of currencies, depending, among other things, on which of our offices provide staff for the contract and the location of investigator sites. Although many such contracts benefit from some degree of natural hedging, due to the matching of contract revenues and costs in the same currency, where costs are incurred in currencies other than those in which contracts are priced, fluctuations in the relative value of those currencies could have a material effect on our results of operations.

As we conduct operations on a global basis, our effective tax rate depends on the geographic distribution of our revenue and earnings among locations with varying tax rates. Our results therefore may be affected by changes in the tax rates of the various jurisdictions. In particular, as the geographic mix of our results of operations among various tax jurisdictions changes, our effective tax rate may vary significantly from period to period.

Results of Operations

Three Months Ended March 31, 2019 compared with Three Months Ended March 31, 2018

The following table sets forth for the periods indicated certain financial data as a percentage of revenue and the percentage change in these items compared to the prior comparable period. The trends illustrated in the following table may not be indicative of future results.

	Three Months Ended					
	March 31, 2019		March 31, 2018		2019 to 2018	
	Percentage of Revenue				Percentage Increase/ (Decrease)	
Revenue	100.0	%	100.0	%	8.8	%
Costs and expenses:						
Direct costs	70.5	%	69.4	%	10.4	%
Selling, general and administrative	12.1	%	13.1	%	1.2	%
Depreciation	1.7	%	1.9	%	(2.3	)%
Amortization	0.6	%	0.8	%	(22.4	)%
Income from operations	15.1	%	14.8	%	11.1	%

Revenue for the period increased by $54.7 million, or 8.8%, from $620.1 million for the three months ended March 31, 2018 to $674.9 million for the three months ended March 31, 2019. Revenue increased by 11.1% in constant currency and increased by 10.6% in constant dollar organic terms. The increase in revenues in the three months ended March 31, 2019 can be explained by both continued organic growth and additional revenues from the acquisition of MMD on January 25, 2019.

During the three months ended March 31, 2019 we derived approximately 32.4%, 57.6% and 10.0% of our revenue in the United States, Europe and Rest of World respectively. During the three months ended March 31, 2019, $269.3 million or 39.9% of our revenues were derived from our top 5 customers. The largest of these customers related to a Strategic Partnership with a large global pharmaceutical company. Revenue from this customer contributed 14.8% of revenue for the quarter. Revenue from our second largest customer contributed 10.6% for the quarter. The addition of new customer accounts, particularly mid-tier pharma customers and biotech customers continues to result in a reduction in concentration of revenues from our top 5 customers.

Revenue in Ireland increased from $235.1 million for the three months ended March 31, 2018 to $298.5 million for the three months ended March 31, 2019. Revenue in Ireland is principally a function of the Company’s global transfer pricing model (see note 13 - Business Segmental Information for further details). Revenue in our Rest of Europe region decreased from $95.0 million for the three months ended March 31, 2018 to $90.4 million for the three months ended March 31, 2019. Revenue in the Rest of World region increased from $64.3 million for the three months ended March 31, 2018 to $67.4 million for the three months ended March 31, 2019. Revenue in the U.S. region decreased from $225.7 million for the three months ended March 31, 2018 to $218.5 million for the three months ended March 31, 2019.

Direct costs for the period increased by $44.9 million, or 10.4%, from $430.6 million for the three months ended March 31, 2018 to $475.5 million for the three months ended March 31, 2019. Direct costs consist primarily of investigator and other reimbursable costs, compensation, associated fringe benefits and share based compensation expense for project-related employees and other direct project driven costs. The increase in direct costs during the period relates to increases in third party investigator and other reimbursable costs, an increase in direct project related costs and personnel related expenditure, which was partly offset by a decrease in laboratory costs during the period. As a percentage of revenue, direct costs have increased from 69.4% for the three months ended March 31, 2018 to 70.5% for the three months ended March 31, 2019.

Selling, general and administrative expenses for the period increased by $1.0 million, or 1.2%, from $80.9 million for the three months ended March 31, 2018 to $81.9 million for the three months ended March 31, 2019. Selling, general and administrative expenses comprise primarily of compensation, related fringe benefits and share based compensation expense for non-project-related employees, recruitment expenditure, professional service costs, advertising costs and all costs related to facilities and information systems. As a percentage of revenue, selling, general and administrative expenses, decreased from 13.1% for the three months ended March 31, 2018 to 12.1% for the three months ended March 31, 2019. This decrease reflects a continued focus on personnel related expenditure and facilities and related costs.

Depreciation expense for the period decreased by $0.3 million, or 2.3%, from $11.9 million for three months ended March 31, 2018 to $11.6 million for three months ended March 31, 2019. Depreciation expense arises principally from continued investment in facilities, information systems and equipment to support the Company's growth. As a percentage of revenue the depreciation expense decreased from 1.9% for the three months ended March 31, 2018 to 1.7% for the three months ended March 31, 2019. Amortization on intangibles for the period decreased by $1.1 million, or 22.4%, from $5.0 million for the three months ended March 31, 2018 to $3.9 million for the three months ended March 31, 2019. Amortization expense represents the amortization of intangible assets acquired on business combinations. The decrease in the amortization expense for the period was driven by some intangibles being fully amortized during 2018. As a percentage of revenue, amortization expense for the three months ended March 31, 2019 decreased by 22.4% from 0.8% to 0.6% for the three months ended March 31, 2018.

As a result of the above, income from operations for the period increased by $10.2 million, or 11.1%, from $91.7 million for the three months ended March 31, 2018 to $101.9 million for the three months ended March 31, 2019. As a percentage of revenue, income from operations for the three months ended March 31, 2019 increased from 14.8% of revenues for the three months ended March 31, 2018 to 15.1% of revenues for the three months ended March 31, 2019.

Income from operations in Ireland increased from a profit of $69.8 million for the three months ended March 31, 2018 to a profit of $70.6 million for the three months ended March 31, 2019. Income from operations in Ireland is impacted by the Group's global transfer pricing model (see note 13 Business Segmental Information for further details). Income from operations in our Rest of Europe region increased from $5.2 million for the three months ended March 31, 2018 to $5.9 million for the three months ended March 31, 2019, while income from operations in our Rest of World region increased from $4.9 million for the three months ended March 31, 2018 to $8.4 million for the three months ended March 31, 2019. Income from operations in the U.S. region increased from $11.8 million for the three months ended March 31, 2018 to $17.1 million for the three months ended March 31, 2019.

Interest expense for the period decreased by $0.4 million, or 11.6%, from $3.8 million for the three months ended March 31, 2018 to $3.4 million for the three months ended March 31, 2019. Interest income increased by $0.9 million or 112% from $0.8 million for the three months ended March 31, 2018 to $1.7 million for the three months ended March 31, 2019.

Provision for income taxes increased from $10.7 million for the three months ended March 31, 2018 to $12.0 million for the three months ended March 31, 2019. The Company's effective tax rate for the three months ended March 31, 2019 was 12% which is consistent with the three months ended March 31, 2018. The Company's effective tax rate remains principally a function of the distribution of pre-tax profits amongst the territories in which it operates.

Liquidity and Capital Resources

The CRO industry is generally not capital intensive. The Group's principal operating cash needs are payment of salaries, office rents, travel expenditures and payments to investigators. Investing activities primarily reflect capital expenditures for facilities and information systems enhancements, the purchase and sale of short term investments and acquisitions.

Our clinical research and development contracts are generally fixed price with some variable components and range in duration from a few weeks to several years. Revenue from contracts is generally recognized as income on the basis of the relationship between time incurred and the total estimated contract duration or on a fee-for-service basis. The cash flow from contracts typically consists of a small down payment at the time the contract is entered into, with the balance paid in installments over the contract's duration, in some cases on the achievement of certain milestones. Accordingly, cash receipts do not correspond to costs incurred or revenue recognized on contracts.

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Cash and cash equivalents and net borrowings

	Balance December 31, 2018	Drawn down/ (repaid)	Net cash inflow/ (outflow)	Other non-cash adjustments	Effect of exchange rates	Balance March 31, 2019
	$ (in thousands)					
Cash and cash equivalents	395,851	—	22,443	—	(656)	417,638
Available for sale investments	59,910	—	(158)	547	—	60,299
Private placement notes	(349,264)	—	—	(93)	—	(349,357)
	106,497	—	22,285	454	(656)	128,580

The Company's cash and short term investment balances at March 31, 2019 amounted to $477.9 million compared with cash and short term investment balances of $455.8 million at December 31, 2018. The Company's cash and short term investment balances at March 31, 2019 comprised of cash and cash equivalents of $417.6 million and short-term investments of $60.3 million. The Company's cash and short term investment balances at December 31, 2018 comprised of cash and cash equivalents of $395.9 million and short-term investments of $59.9 million.

On December 15, 2015, ICON Investments Five Unlimited Company issued Senior Notes for aggregate gross proceeds of $350.0 million in a private placement. The Senior Notes will mature on December 15, 2020. Interest payable is fixed at 3.64%, and is payable semi-annually on the Senior Notes on each June 15 and December 15, commencing June 15, 2016. The Senior Notes are guaranteed by ICON plc.

On March 12, 2018, the Company entered into a five year committed multi-currency Revolving Credit Facility for $150.0 million with Citibank, JP Morgan, Santander, HSBC Bank and Morgan Stanley International ("Revolving Credit Facility"). Each bank subject to the agreement has committed $30.0 million to the facility, with equal terms and conditions in place with all institutions. The facility is guaranteed by ICON plc. The facility replaces the $100.0 million facility which was entered into in June 2014 due to mature in June 2019. The facility bears interest at LIBOR plus a margin. No amounts were drawn at March 31, 2019, or at December 31, 2018, in respect of the Revolving Credit Facility. Amounts available to the Group under the facility at March 31, 2019 and at December 31, 2018 were $150.0 million.

Net cash provided by operating activities was $94.6 million million for the three months ended March 31, 2019 compared with cash provided by operating activities of $40.5 million for the three months ended March 31, 2018. This reflects the impact of the increase in revenues and underlying profitability of the Company offset by movements in working capital balances in the period. The dollar value of these balances and the related number of days revenue outstanding (i.e. revenue outstanding as a percentage of revenue for the period, multiplied by the number of days in the period) can vary over a study or trial duration. Contract fees are generally payable in instalments based on the delivery of certain performance targets or "milestones" (e.g. target patient enrolment rates, clinical testing sites initiated or case report forms completed), such milestones being specific to the terms of each individual contract, while revenues on contracts are recognized as contractual obligations are performed. Days revenue outstanding can vary therefore due to, amongst others, the scheduling of contractual milestones over a study or trial duration, the delivery of a particular milestone during the period or the timing of cash receipts from customers. A decrease in the number of days revenue outstanding during a period will result in cash inflows to the Company while an increase in days revenue outstanding will lead to cash outflows. The number of days revenue outstanding at March 31, 2019 was 72 days compared with 67 days at December 31, 2018. This reflects both extended credit terms provided to a number of key accounts and the timing of cash collections.

Net cash used in investing activities was $50.6 million for the three months ended March 31, 2019 compared to net cash used in investing activities of $13.9 million for the three months ended March 31, 2018. Net cash used in the three months ended March 31, 2019 was largely attributable to the acquisition of MolecularMD Corp. of $42.3 million. During the three months ended March 31, 2019, capital expenditure of $7.0 million was made mainly relating to investment in facilities and IT infrastructure. In addition, $2.0 million was used for the purchase of investments in equity. Net cash used in investing activities during the three months ended March 31, 2018 relates to capital expenditure of $8.3 million, which was mainly comprised of investment in facilities and IT infrastructure. During the three months ended March 31, 2018 $10.2 million was used for the purchase of short term investments, a final consideration payment of $1.6 million was made in respect of the purchase of Mapi and $6.3 million was generated by the sale of short t