

2019 Preliminary Results

- Vectura reports 2019 financial performance ahead of expectations, with strong operational delivery -
- *Executing the strategy to become an industry-leading specialist inhalation CDMO* -

Chippenham, UK – 17 March 2020: Vectura Group plc (LSE: VEC) ("Vectura" or "the Group") today announces its preliminary results for the year ended 31 December 2019.

Financial highlights

	2019	2018	% change
Revenue	£178.3m	£160.5m	11.1%
Gross profit	£95.3m	£98.9m	(3.6%)
R&D	(£50.2m)	(£55.5m)	(9.5%)
Adjusted EBITDA¹	£43.4m	£39.0m	11.3%
Operating loss	(£27.0m)	(£105.4m)	(74.4%)
Basic loss per share	(3.4p)	(13.2p)	(74.2%)
Cash from operating activities	£19.3m	£35.1m	(45.0%)
Cash and cash equivalents	£74.1m	£108.2m	(31.5%)

Commenting on the results, Will Downie, Chief Executive Officer of Vectura, said:

"I am pleased to report a solid set of results for 2019 which were ahead of expectations, underpinned by continued flutiform[®] revenue growth. We have begun to execute on our new strategy to become an industry-leading specialist inhalation services company, as well as adding two very experienced CDMO executives to our leadership team and driving extensive activities to diversify our customer base.

"We enter 2020 with a strong, cash generative business with several near-term catalysts expected, including VR315 (US) and QVM149 approvals, and the framework in place to deliver on our service focused business strategy, which fits well within an attractive inhaled market opportunity."

Business highlights

- Executing on new strategy to become an industry-leading specialist inhalation CDMO
- Total revenue of £178.3m, up 11.1% (FY18: £160.5m)
 - Product supply revenue of £115.0m, up 34.3% (FY18: £85.6m), driven by growth in flutiform[®] product supply revenues of £101.4m, up 36.7% (FY18: £74.2m)
 - As expected, royalty and other marketed revenue of £51.9m, down 11.1% (FY18: £58.4m), following Q3 2018 expiry of EXPAREL[®] patents and a one-off milestone in prior year
 - Following receipt of generic Ellipta[®] upfront licence fee from Hikma in 2018, Development revenues fell back to £11.4m, down 30.9% (FY18: £16.5m)
- Gross profit of £95.3m down 3.6% (FY18: £98.9m), impacted by normalisation of flutiform[®] supply chain margins and reduction in royalty and development services revenues
- R&D costs of £50.2m down 9.5% (FY18: £55.5m) in line with guidance, with approximately 50% of R&D spend focused on partnered programmes (FY18: 37.1%)
- Significant reduction in operating loss to £27.0m (FY18: £105.4m) as a result of a lower charge for amortisation and impairment of intangible assets, despite VR647 impairment of £8.2m
- Adjusted EBITDA¹ of £43.4m, up 11.3% (FY18: £39.0m), with revenue mix effects more than offset by a reduction in expenditure
- Strong liquidity maintained with closing cash and cash equivalents of £74.1m (FY18: £108.2m), following a capital return of approximately £43.4m in 2H 2019
- Submission of FDA response by partner Hikma in respect of generic Advair[®] (VR315 (US)) in Q4 2019 following completion of Clinical Endpoint study

- Vectura awarded damages and on-going royalties amounting to an estimated \$200m in total, following US Jury verdict in patent litigation against GSK in the US, subject to appeal

Leadership changes

- Will Downie joined Vectura as Chief Executive Officer and Executive Director in November 2019 from Catalent, a world-leading CDMO
- Post period, Vectura appointed two key leadership roles to support the Group's transition to a specialist CDMO organisation. Sharon Johnson joined Vectura as EVP – Delivery Management, and Mark Bridgewater joined as Chief Commercial Officer

Analyst webcast and conference call today

Vectura will present its Preliminary Results via live webcast today from 9.30am to 10.30am GMT. There will be a simultaneous live conference call.

The live webcast and the presentation slides can be accessed on Vectura's website: <https://www.vectura.com/investors/presentations-and-webcasts>

Dial-in details are:

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About Vectura

Vectura is a provider of innovative inhaled drug delivery solutions that enable partners to bring their medicines to patients. With differentiated proprietary technology and pharmaceutical development expertise, Vectura is one of the few companies globally with the device, formulation and development capabilities to deliver a broad range of complex inhaled therapies.

Vectura has eleven key inhaled and eleven non-inhaled products marketed by partners with global royalty streams, and a diverse partnered portfolio of drugs in clinical development. Our partners include Hikma, Novartis, Sandoz (a division of Novartis AG), Mundipharma, Kyorin, GSK, Bayer, Chiesi, Almirall, and Tianjin KingYork.

For further information, please visit Vectura's website at www.vectura.com

Forward-looking statements

This press release contains forward-looking statements, including statements about the commercialisation of products. Various risks may cause Vectura's actual results to differ materially from those expressed or implied by the forward looking statements, including: commercial limitations imposed by patents owned or controlled by third parties; dependence upon strategic alliance partners to develop and commercialise products and services; difficulties or delays in obtaining regulatory approvals to market products and services resulting from development efforts; the requirement for substantial funding to conduct research and development and to

expand commercialisation activities; and product initiatives by competitors. As a result of these factors, prospective investors are cautioned not to rely on any forward-looking statements. We disclaim any intention or obligation to update or revise any forward looking statements, whether as a result of new information, future events or otherwise.

Operational Review

Becoming an industry-leading specialist inhalation CDMO

Vectura is executing on its strategy to become an industry-leading specialist inhalation contract development and manufacturing organisation (CDMO). The global CDMO market is large and growing at an annual growth rate of c. 7%. This growth rate slightly outpaces the growth of the pharmaceutical sector as a whole, reflecting the ongoing shift toward increased outsourcing.² The operational focus of the business in 2020 will be on the execution of this services based strategy, accelerated by the recent key leadership appointments, and investment in a strong business development and marketing engine.

The focus on growing CDMO revenues is underpinned by a strong base business, which performed ahead of expectations in 2019. Overall reported revenue of £178.3m for the year ended 31 December 2019 grew by 11.1% compared to the prior year, and this was driven by a strong performance from *flutiform*[®] product supply.

As expected, royalty and other marketed revenues declined following EXPAREL[®] patent expiry in Q3 2018 and a one-off sales milestone in the prior period. In 2020 this revenue stream is expected to benefit from royalties earned from VR315 (US) and QVM149, both having been filed in 2019.

Following receipt of a generic Ellipta[®] upfront licence fee from Hikma in 2018, development revenues fell back to £11.4m in 2019 (FY18: £16.5m). With continued progress across our existing partnered development portfolio in 2020, revenues from these programmes are expected to be broadly in-line with 2019. New CDMO revenues are also expected to begin to compliment these revenues from 2020.

Following the termination of investment in VR475, VR647 and the broader Vectura enhanced therapies pipeline, R&D has continued to decline in 2019 to £50.2m, down 9.5% versus last year, and 17% versus 2017. Almost half of the R&D spend in 2019 was related to revenue generating partnered programmes, up from 37% in 2018. This re-shaping of R&D towards partner programmes will continue into 2020 as we pivot the business model.

The 2019 revenue mix of greater product supply revenues, and lower royalties and milestones, alongside some one-off margin benefits in 2018, has reduced gross margin to 53.4% (FY18: 61.6%). However, through continued strong cost management, our operational leverage has been maintained, with the 2019 Adjusted EBITDA¹ margin in line with the prior year (24.3%).

***flutiform*[®] (Mundipharma, Europe and Rest of world (excl. North America) / Kyorin, Japan) for the treatment of asthma** had a very strong year in 2019, growing product supply revenues by 36.7% and combined revenues, including *flutiform*[®] royalties from Japan, by 35.3%. This increase was driven partially by a low 2018 comparator, where 1H18 revenues were depressed following partner de-stocking in late 2017 and early 2018. However, *flutiform*[®] also continued to perform well in the competitive asthma ICS/LABA market ex US, generating total in-market sales of €254.5m (at constant exchange rates 'CER') during 2019, up 10.4% in value (CER) and up 12.1% in volume compared to the prior year. Both partners also adopted more conservative supply chain management policies, which also supported higher shipped volumes in 2019.

- In Europe *flutiform*[®] in-market sales grew by 3.6% in value (CER), and volume up 5.3% in a competitive and genericised ICS/LABA market, which declined by 2.0% in value (CER) compared to the prior year.³
- In Japan *flutiform*[®] in-market sales grew by 11.3% (CER) and volumes by 13.6% compared to 2018. Japan sales also contributed royalty revenue of £6.3m, an increase of 18.9% compared to the prior year.³
- In the rest of the world territories *flutiform*[®] remains at an early stage of its lifecycle and has continued to grow strongly, with in-market sales of €29.3m (CER) up 46.4% compared to the prior year.³

Ultibro® Breezhaler®, Seebri® Breezhaler® Utibron™ Neohaler® Inhalation Powder and Seebri™ Neohaler® (Novartis/Sunovion, US) for the treatment of COPD

- Ultibro® Breezhaler® continues its class-leadership of the dual bronchodilator LAMA/LABA class (ex. US). Novartis full year 2019 results reported a decline in Ultibro® sales of 1.3% (CER) to \$424.3m, mainly due to competition.
- Seebri® Breezhaler® reported sales declined by 10.3% to \$122.1m (CER) again mainly due to competition.
- Vectura recognised royalties of £18.4m in respect of sales of Ultibro® and Seebri® (2018: £17.8m), but declined by 1.1% on a CER basis.

Partnered development portfolio

VR315 (US), partnered with Hikma: Generic Advair® programme for the treatment of asthma and COPD

- On 27 November 2019, Hikma Pharmaceuticals PLC ("Hikma"), confirmed that it had submitted responses to the US Food and Drug Administration ("FDA") for review, which includes data from a further Clinical Endpoint study requested by the FDA in a Complete Response Letter ("CRL").
- The Group expects to see approval of VR315 (US) in H2 2020. Vectura would earn milestones of \$11m upon approval of VR315 (US) and a mid-teen royalty on net sales of the product.

QVM149 (Europe & ROW), partnered with Novartis: LAMA/LABA/ICS for the treatment of asthma

- As announced on 24 May 2019, Vectura has recognised milestone revenue of \$2.5m following the acceptance of a Marketing Authorisation Application (MAA) filing made by Novartis to the EU Regulatory Authorities for QVM149.
- EU launch is expected in H2 2020, subject to regulatory approval. Vectura will receive a \$5m milestone payment upon approval of the product in Europe and a low-single digit royalty on net sales.

VR354, partnered with Hikma: Generic Breo® Ellipta® programme for the treatment of asthma and COPD

- GSK continue to report strong growth of the Ellipta® franchise, which supports the longer-term potential for the range of Ellipta® AB-rated substitutable generics that Vectura is developing in partnership with Hikma.
- Work on the development of generic Breo® Ellipta® is progressing in-line with management's expectations.

VR506 (US), partnered with Hikma: Generic fluticasone propionate for the treatment of asthma

- As previously announced, Hikma and Vectura have mutually agreed to terminate development of the VR506 programme, reflecting portfolio prioritisation of other key generic programmes partnered with Hikma, including VR730, a generic pMDI for the treatment of asthma and COPD.

VR2081 (US), partnered with Sandoz: Undisclosed generic pMDI programme for the treatment of asthma and COPD

- Development is ongoing, building on recent encouraging pharmacokinetics (PK) data for VR2081.

VR632 (EU), partnered with Sandoz: Generic ICS/LABA combination for the treatment of asthma and COPD

- VR632 was launched in Europe during July 2019. Marketed by Sandoz as Airbufo® Forspiro®, this product utilises Vectura's GyroPLUS® device and is a further example of the Group's ability to combine device technology with formulation expertise to develop a treatment that meets European bioequivalence requirements, and is ultimately commercialised.

Pre-partnered development portfolio

- **Vectura enhanced therapies pipeline** - In-line with the Group's R&D investment priorities announced in July 2019, the Group will not make further investments in proprietary assets in the absence of a partner.
- **VR647** - As previously communicated, given the status of these partnering discussions and in consideration of the Group's R&D investment priorities announced in July 2019, the Board concluded on 9 September 2019, that it was appropriate to impair the intangible asset in full, resulting in an impairment charge in of £8.2m offset by the release of deferred tax liabilities of £2.2m. The Group will not make any further investment in the VR647 asset.

Return of capital

In light of the Group's reducing R&D risk profile, future cash generation expectations and strong cash balance, the Board announced a capital return to shareholders of approximately £60m in September 2019.

A special dividend of approximately £40m in aggregate, representing 6 pence per ordinary share, was paid out to shareholders on 25 October 2019.

In addition, the Group entered into arrangements with J.P. Morgan Securities to execute a £10m on-market buyback of shares, with approximately £3.5m of the buyback completed by 31 December 2019. As at 16 March 2020, £9.8m of the share buyback had been completed. The Board intends to undertake a further on-market buyback of £10m, to be announced in due course.

The Board recognises that considerable financial upsides remain in the outlook for the Group, and, in the absence of future inorganic growth opportunities, would make additional future 'special' returns of excess capital arising from operations or from material one-off events, by the most appropriate mechanism.

GSK Litigation

Following a US Jury trial in May 2019, Vectura was awarded damages and estimated ongoing royalties amounting to approximately \$200m, based upon the application of a 3% royalty rate to US sales of GSK infringing products for the period August 2016 to the expiration of Vectura's patent in mid-2021. Interest will also accrue on damages at the Treasury bill rate, compounded annually. As explained in note 16, no amounts have been recognised in the 2019 Financial Statements in respect of these damages.

GSK has initiated an appeal in the US and, based on the present appeal briefing schedule, a decision is likely to be received before the end of Q1 2021.

In order to concentrate on the US litigation, Vectura has taken the decision not to pursue its appeal of the decision of the UK High Court in the proceedings initiated by GSK relating to the Ellipta® products. The US action involves different patent claims to those in the UK and interprets the patents under US law.

Leadership and Board changes

Will Downie joined Vectura as Chief Executive Officer and Board member on 7 November 2019, bringing highly relevant CDMO experience and leadership to the Group. Prior to joining Vectura, Will spent 10 years as the senior vice president, global sales and marketing at Catalent, a leading CDMO. In his role at Catalent, Will led the commercial effort and had responsibility for global sales, marketing and commercial operations activities. During his tenure, he developed an outstanding track record in helping drive the long-term growth of the company as well as positioning Catalent as one of the leading brands in the pharmaceutical services space. He has a deep understanding of the development and advanced drug delivery market and has amassed significant experience in driving sustained long-term results, as well as building performance-focused organisations and meeting customer needs on a global scale.

On 10 June 2019, Vectura announced that James Ward-Lilley would be stepping down from the Board and his position as Chief Executive Officer. Paul Fry, Chief Financial Officer, assumed the role of CEO in an interim capacity until Will's appointment in November.

The Board was also pleased to announce the appointment of Dr Kevin Matthews as an Independent Non-Executive Director of the Company with effect from the 29 March 2019. Kevin has highly relevant experience from senior management roles in the chemical, technology and pharmaceutical sectors, alongside significant strategy and business management expertise. Dr Susan Foden retired as Independent Non-Executive Director of the Board on 30 September 2019.

Post period, Vectura appointed two key leadership roles to support the Group's transition to a specialist CDMO organisation. Sharon Johnson joined Vectura as EVP – Delivery Management, and Mark Bridgewater joined as Chief Commercial Officer.

Brexit

The Group has closely reviewed the potential risks associated with Brexit. The Board believes Vectura has undertaken a robust approach to ensuring any impact within the Group's control is mitigated as far as possible.

Mitigating activities have included continued close working with our supply chain network and partners, establishing a new EU legal entity and transferring our notified regulatory body for our device assets.

COVID-19 outbreak

Events in relation to the COVID-19 outbreak continue to evolve rapidly, and the Group is monitoring the situation closely as it develops. At this time, Vectura has not seen any impact to its business.

Vectura's first priority remains the health and safety of its employees and visitors to its sites. Vigilance on hygiene has been increased across all sites and the Group encourages home working and digital communications where possible. Protocols are in place should the situation deteriorate.

Product supply and development services activities continue to progress normally and no signals of diminished demand for these services have been noted at this time. The outbreak has the potential to cause disruption to business development activities as trade shows are cancelled and travel limits are put in place.

Vectura is monitoring key suppliers regarding potential supply chain interruptions, and, so far, no immediate risks to supply have been identified. Vectura will continue to monitor stock levels and put in place risk mitigation plans where appropriate.

Vectura has a strong balance sheet, an undrawn £50m Revolving Credit Facility and minimal corporate debt and is a resilient business in the face of the risks posed by COVID-19.

Guidance and outlook

The operational focus of the business in 2020 will be on the execution of our services based strategy. Revenues from existing development contracts are expected to be broadly similar to 2019. New development services business is expected to begin to complement these revenues from 2020, alongside a focus on building momentum in the business development funnel to support revenue growth over the medium term.

In the base business, royalties and marketed revenues are expected to show mid-single digit percentage growth in 2020, despite the loss of the annual GSK royalty (£9m in 2019). This growth is dependent on the expected approval of both VR315 (US) and QVM149 by its partners in H2 2020. Vectura would earn milestones of \$11m upon approval of VR315 (US) and would earn a mid-teen royalty on net sales of the product. Vectura would earn \$5m upon approval of QVM149 in Europe and would earn a low-single digit royalty on net sales of the product.

Whilst continued growth of *flutiform*[®] in-market partner sales is expected in 2020, Vectura product supply revenues are expected to be broadly similar to the 1H 2019 run-rate. The Group expects *flutiform*[®] underlying gross margin to be in the range of 30-32% for 2020 and in the medium term, as a result of regional mix changes, pricing pressure in Japan and rest of world, and an expectation of additional compliance costs following the UK's exit from the European Union.

Overall R&D is expected to progressively reduce as capacity is released from its proprietary pipeline, and deployed towards revenue generating partner business. At the same time, the Group will continue to invest in a prioritised technology roadmap that will meet the future needs of our customers to enable them to

address the complex treatment requirements of their patients. The Group expects R&D investment for 2020 to be within the range of £40m to £45m.

Reflecting the Group's transition towards a development services model, the Group also expects to incur mid-single digit £'millions of exceptional cash costs in 2020.

Improvements in the gross margin mix of revenues, good cost management, and a focus on simplifying the Group's operating model, are expected to have a positive impact on the Group's operational leverage over the medium term.

Financial Review

Summary financial information for the year ended 31st December 2019

	2019 £m	2018 £m	% change
Product supply revenues	115.0	85.6	34.3%
Royalty and other marketed revenues	51.9	58.4	(11.1%)
Development revenues	11.4	16.5	(30.9%)
Revenue	178.3	160.5	11.1%
Cost of sales	(83.0)	(61.6)	34.7%
Gross profit	95.3	98.9	(3.6%)
<i>Gross profit margin</i>	53.4%	61.6%	(8.2) ppts
Research and development (R&D) expenditure	(50.2)	(55.5)	(9.5%)
Other operating expenditure and income	(15.0)	(12.8)	17.2%
Exceptional items	(3.5)	(9.0)	(61.1%)
Amortisation and impairment	(53.6)	(127.0)	(57.8%)
Operating loss	(27.0)	(105.4)	(74.4%)
Adjusted EBITDA ¹	43.4	39.0	11.3%
<i>Adjusted EBITDA¹ margin %</i>	24.3%	24.3%	n/a
Loss per share (basic and diluted)	(3.4p)	(13.2p)	(74.2%)

Revenue growth of 11.1% reflects strong growth in product supply revenues. *flutiform*[®] in-market demand and partner supply chain management drove a 34.3% increase in product supply revenues to £115.0m. *flutiform*[®] product supply delivered a gross margin of 35.8% contributing £36.3m to gross profit (2018: 39.2% gross margin, £29.1m gross profit).

Overall gross profit declined by 3.6% as the increased contribution from *flutiform*[®] product supply was offset by the loss of the share of net sales of EXPAREL[®] following patent expiry in 2018 (2018: £5.1m) and licensing revenue recognised in 2018 following the signing of the generic Ellipta[®] agreement with Hikma (2018: £4.2m).

The decline in gross margin was more than offset by cost reductions. R&D expenditure declined 9.5% due mainly to the reduction in clinical costs associated with VR475 following termination of the programme in 2018. As a result, adjusted EBITDA¹, a measure of underlying performance, increased by 11.3% to £43.4m (2018: £39.0m). The Group ended the year with a considerably reduced operating loss of £27.0m (2018: loss of £105.4m) following significant impairments in 2018.

1. Revenue

1.1 Product supply revenue

The Group generates significant revenues from the supply of finished or semi-finished products, largely manufactured by third party suppliers, to commercial distribution partners. The costs incurred to deliver these revenues are reported under cost of sales. These revenues grew by 34.3% in 2019, driven by strong volume demand from partners for *flutiform*[®].

Total Product supply revenues and gross margin

	2019	2018	%
	£m	£m	change
<i>flutiform</i> [®]	101.4	74.2	36.7%
Other inhaled products	3.2	3.1	3.2%
Non-inhaled products	10.4	8.3	25.3%
Revenue	115.0	85.6	34.3%
Cost of sales	(83.0)	(61.6)	34.7%
Gross profit	32.0	24.0	33.3%
<i>Gross profit margin %</i>	27.8%	28.0%	(0.2) ppts

***flutiform*[®]**

Vectura earned 56.9% (2018: 46.2%) of the Group's total reported revenue from the supply of finished *flutiform*[®] products to Mundipharma (Europe and Rest of World) and Kyorin (Japan).

flutiform[®] product supply revenues grew to £101.4m, a 36.7% increase versus the prior period, driven primarily by three factors. Firstly, a low 2018 comparator, where first half 2018 revenues were depressed following partner de-stocking in late 2017 and early 2018. Secondly, in 2019, both partners adopted more conservative supply chain management policies which supported higher shipped volumes in 2019. Lastly, *flutiform*[®] continued to perform well in the competitive asthma ICS/LABA market ex US, with total in-market sales up 10.4% on a constant exchange rate 'CER' basis, compared to the prior period, with volume growth of 12.1%³.

***flutiform*[®] revenues**

	2019	2018	%
	€m	€m	change
In-market <i>flutiform</i>[®] sales¹ (CER)			
<i>Territory</i>			
Europe	121.5	117.2	3.6%
Japan	103.8	93.2	11.3%
RoW (ex. North America)	29.3	20.0	46.4%
Total in-market sales	254.5	230.4	10.4%

	2019	2018	%
	£m	£m	change
Vectura product supply revenues and gross profit			
<i>flutiform</i> [®] product supply revenue	101.4	74.2	36.7%
Cost of sales	(65.1)	(47.4)	37.3%
One-off margin credit	-	2.3	n/a
Gross profit	36.3	29.1	24.7%
<i>Gross profit margin %</i>	35.8%	39.2%	(3.4) ppts
<i>Gross profit margin % (ex. 2018 one-off credits/(debits))</i>	35.8%	36.1%	(0.3) ppts

flutiform[®] gross margin was down 3.4 percentage points compared to 2018 as the prior year benefited from the release of a £1.1m supplier provision and a £1.2m credit from Sanofi in settlement of historic claims prior to the sale of the Holmes Chapel manufacturing facility to Recipharm. Despite market price reductions in Japan in April 2018, which impacted the Group's supply prices in 2019, the gross margin earned for product supply sales, excluding one-off items, was 35.8% (2018: 36.1%), slightly ahead of guidance. The gross margin in 2019 benefited from a positive geographical mix effect with an unusually high proportion of product supply sales to high margin territories. This geographical mix effect contributed approximately 1.1% to the margin in 2019.

In 2020 we expect continued growth of *flutiform*[®] partner in-market sales, with Vectura product supply revenues expected to be broadly similar to the 1H 2019 run-rate. Underlying gross profit margin expectations for 2020 and in the medium term are approximately 30-32% as a result of regional mix changes, pricing pressure in Japan and rest of world, and an expectation of additional compliance costs following the UK's exit from the European Union.

The Group also earns royalties on *flutiform*[®] sales made by Kyorin in Japan. Including these royalties, total revenues for *flutiform*[®] were £107.7m (2018: £79.6m).

Other inhaled products

Vectura also earns revenue from the supply of devices to partners including the GyroHaler[®] device for the AirFluSal[®] Forspiro[®] product to Sandoz and the FOX[®] device to Bayer for use in their Breelib[™] product. In total this revenue stream contributed £3.2m, an increase of 3.2% compared to the prior period.

Non-inhaled products

The Group's oral manufacturing facility in Lyon, France, generates product supply revenues from sales of oral products to partners. In 2019, product supply revenues from Lyon were £10.4m, a 25.3% increase compared to the prior period (2018: £8.3m).

The operational focus of the Lyon site continues to be on improving profitability by replacing steady volume declines in mature and off-patent products, with growing new manufacturing volumes, supply revenues and associated development fees through new agreements.

Some of the products manufactured at the Lyon site also earn the Group royalties, reported separately.

1.2 Royalty and other marketed revenues

The Group also generates revenues from products marketed by partners which incorporate Vectura's intellectual property. These revenues typically comprise royalties, sales-based milestones, and product approval and launch milestones. These revenues reflect financial returns from historic R&D investments in partnered programmes. These revenues are earned without further material costs being incurred by the Group.

Total royalty and other marketed revenues

	2019 £m	2018 £m	% change
Ultibro [®] and Seebri [®]	18.4	17.8	3.4%
Ellipta [®]	9.0	9.0	n/a
<i>flutiform</i> [®]	6.3	5.4	16.7%
AirFluSal [®] Forspiro [®]	2.3	2.9	(20.7%)
Other inhaled royalties	0.3	-	n/a
Non-inhaled royalties	14.2	14.5	(2.1%)
Royalty revenue	50.5	49.6	1.8%
Share of net sales of EXPAREL [®]	-	5.1	n/a
Other marketed revenues	1.4	3.7	(62.2%)
Royalty and other marketed revenues	51.9	58.4	(11.1%)

Ultibro[®] Breezhaler[®] and Seebri[®] Breezhaler[®] are established products in Europe and Ultibro[®] continues to be the leading LAMA/LABA combination treatment for COPD ex-US.

Vectura revenues for Ultibro[®] and Seebri[®] Breezhaler[®] are derived from a royalty percentage of net sales reported by Novartis. Royalties from Ultibro[®] and Seebri[®] Breezhaler[®] remained virtually flat in 2019, although declined by 1.1% on a CER basis.

In respect of **GSK's Ellipta[®] products** Vectura has recognised the capped annual royalty of £9.0m during 2019. This royalty is not expected to recur in 2020.

flutiform[®] royalties for Europe and most of the RoW territories are subject to the terms of the agreement with Mundipharma, which limits the aggregate amount of royalties that can be earned by Vectura. As a result of this cap, royalties from Mundipharma were virtually nil in 2019 (2018: £0.1m).

Strong in-market performance by Kyorin drove value and volume growth in Japan, up 11.4% (CER) and 13.6% respectively. As a result royalties from Japan grew by 18.9% (CER 12.3%), to £6.3m (2018: £5.3m). Vectura is entitled to continue to receive royalties from Japan in addition to any product supply revenues.

New product launches, VR315 (US) and QVM149 are expected to contribute royalties in H2 2020. Vectura will earn an \$11m milestone upon approval of VR315 (US) plus a mid-teen royalty on net sales of the product. Vectura will earn a \$5m milestone upon European approval of QVM149 plus a low single-digit royalty on net sales.

Non-inhaled royalties comprise royalties earned on oral and other non-inhaled products which benefit from the Group's historical intellectual property. Many of these products are manufactured at the Group's production facility in Lyon.

Total non-inhaled royalties remained virtually flat due to strong RAYOS® royalty growth, up 27.3% to £9.8m, offsetting the decline in other royalties which are coming to the end of their lifecycle. The increase in RAYOS® royalties is attributable to continued promotional activity. The Licence Agreement for RAYOS®/LODOTRA® was amended with effect from 1 January 2019 and Vectura is now eligible for a minimum \$8.0m annual royalty for RAYOS® for the calendar years 2019 to 2022.

Following patent expiry in September 2018 the Group did not receive a share of net sales of EXPAREL® revenue in 2019, a reduction of £5.1m versus 2018. The Group remains eligible to receive a non-patent dependent \$32m sales milestone when twelve-month net sales of EXPAREL® reach \$500m on a cash received basis. On 9 January 2020, Pacira reported 2019 full-year EXPAREL® net product sales of \$407.9 million, up 23.2% compared to 2018.

Other marketed revenues are made up of primarily a £1.3m milestone received on the anniversary of the first European launch of Breelib™. Under the terms of its agreement with Bayer, Vectura is eligible to receive a further €2.75m in milestones spread over the next four years, paid annually.

In 2018, the Group also recognised revenues of £2.4m during the period as part of an agreement with Sandoz regarding revised territory rights for AirFluSal® Forspiro®.

1.3 Development revenues

The Group also earns revenue from agreements with partners, which draw on Vectura's device, formulation and development capabilities to deliver commercially attractive inhalation products. Under these agreements, during the development phase Vectura typically receives a series of cash flows in consideration for a variety of activities, which may comprise an upfront fee as consideration for the licence to access intellectual property, milestone payments for specific clinical or other development-based outcomes, or fees billed directly for work performed. Together these revenues have been categorised as development revenues. Revenues are recognised when contractual performance obligations are deemed to have been met, with the profile of these revenues varying by programme and over time.

As a consequence of the Group's shift towards more service based agreements, it is expected that development revenues for new agreements will increasingly be derived from fees billed directly for work performed, rather than milestone payments which are contingent on specific clinical or development-based outcomes. The Group will continue to earn licence fees and royalties where partners have accessed Vectura intellectual property.

Costs to deliver these revenues have been reported under research and development (R&D) expenditure in the Consolidated income statement.

Development revenues by programme

	2019 £m	2018 £m	% change
<i>Licensing of intellectual property</i>			
QVM149 (Novartis)	1.9	—	n/a
Generic Ellipta® portfolio (Hikma)	—	4.2	n/a
Other inhaled programmes	0.5	0.4	25.0%
Total licensing revenues	2.4	4.6	(47.8%)
<i>Development services</i>			
Inhaled development services	6.9	10.4	(33.7%)
Non-inhaled development services	2.1	1.5	40.0%
Total development services	9.0	11.9	(24.4%)
Total development revenues	11.4	16.5	(30.9%)

Licensing revenues

QVM149

In May 2019, Vectura recognised a \$2.5m (£1.9m) milestone under an exclusive licensing agreement with Novartis AG following EU Regulatory Authorities acceptance of a valid Marketing Authorisation Application (MAA) made by Novartis for its QVM149 product. European launch is expected in H2 2020, subject to regulatory approval.

Vectura is due to receive a further milestone payment of \$5.0m on European regulatory approval of the product and thereafter royalties on net sales from launch.

Generic Ellipta® portfolio

In November 2018, Vectura signed a global development and commercialisation agreement with Hikma for the development of an AB-rated substitutable drug-device combination of generic versions of the GSK Ellipta® portfolio. Upon signing of the deal, Vectura received an upfront cash payment of \$15m (£11.4m). Of this total, £6.6m was recognised in 2018, split between licensing revenues (£4.2m) and inhaled development services revenue (£2.4m).

Inhaled development services

Overall inhaled development services revenue has decreased primarily due to lower activity for Mundipharma's k-haler® following product launch in September 2018 and the final balance of £1.7m recognised for the VR2076 project in 2018. Work has continued on the generic Ellipta® programme with Hikma, the revenue is broadly flat at £2.8m (2018: £2.4m).

Non-inhaled development services

The Group earned £2.1m in 2019 (2018: £1.5m) from the provision of development services related to products which are or will be manufactured at its oral tablet production facility in Lyon, France.

2. Research and development (R&D) expenditure

The Group's R&D expenditure has historically been presented under two distinct categories:

- Partnered** – this category represents R&D expenditure to progress partnered programmes. This expenditure is principally funded by development revenues earned from the partner, which may be contingent upon the achievement of certain future milestones;
- Pre-Partnered** – this category of R&D expenditure reflects investments funded by the Group on programmes yet to be partnered, as well as investments in its own innovative proprietary technology platforms. These investments are the basis for generating future partnering and licensing revenue opportunities.

Total R&D expenditure by category

	2019	2018	%
	£m	£m	change
Partnered R&D	24.5	20.6	18.9%
Pre-partnered R&D	25.7	34.9	(26.4%)
Total R&D	50.2	55.5	(9.5%)

Partnered R&D

Partnered R&D expenditure in 2019 represented 49% of total R&D expenditure (2018: 37%). Within this total, 79% of the Group's partnered R&D spend was focused on generic programmes (2018: 70%).

Pre-partnered R&D

Pre-partnered R&D expenditure in 2019 represented 51% of total R&D expenditure (2018: 63%). Vectura will continue to invest in proprietary platform technologies as stated above, however following the shift in strategy Vectura will no longer invest in its own proprietary pipeline of programmes. In line with this, further work on VR647 and the three VEnT pipeline projects announced in 2018 ceased in the second half of 2019.

Overall R&D in 2020 is expected to progressively reduce as capacity is released from its proprietary pipeline, and deployed towards revenue generating partner business. At the same time, the Group will continue to invest in a prioritised technology roadmap, creating intellectual property to drive future licensing and royalty income. The Group expects R&D investment for 2020 to be within the range of £40m to £45m.

3. Other operating expenditure and income

Other operating expenditure comprises a £2.7m non-cash charge for share-based compensation (2018: £2.6m) as well as corporate, administrative and selling and marketing costs of £14.0m (2018: £12.8m).

The increase in corporate, administrative, and marketing costs is driven by the costs relating to consultancy costs, and to the departure of Vectura's previous CEO at the end of June 2019.

4. Amortisation and impairment

The Group recognised a £53.6m charge for amortisation and impairment of intangible assets, compared to £127.0m in the prior period. The significantly lower charge in 2019 is largely the result of the full impairment (£39.8m) of the VR475 intangible asset in 2018 following confirmation that the Phase III study did not meet its primary endpoint. In addition *flutiform*[®] amortisation is lower following an extension to certain Japanese patents. In 2019 the Group recognised an impairment charge of £8.2m following the decision to cancel further development of VR647 in September 2019.

In addition, the EXPAREL[®] intangible asset of £11.7m was fully amortised in 2018, further reducing the carrying value of intangible assets to be amortised.

5. Exceptional items

Exceptional items of £3.5m in 2019 (2018: £9.0m) include £3.0m of legal fees from proceedings against GSK for the enforcement of Vectura's patents in respect of the Ellipta[®] products.

6. Adjusted EBITDA

Adjusted EBITDA is a non-statutory measure that demonstrates the Group's underlying performance, excluding exceptional items and material non-cash accounting charges, as shown below. It is used by management and the Board to monitor the Group's performance over time.

As shown in note 5 to the consolidated financial statements, adjusted EBITDA is calculated by adjusting the statutory operating loss for non-cash items such as depreciation, amortisation and share-based compensation and for items that are exceptional in nature and do not represent the underlying trends of business performance.

Adjusted EBITDA of £43.4m increased by 11.3% compared to the prior period benefiting from strong growth in product supply gross profit, offset by a reduction in higher margin royalties and other marketed revenues. A reduction in R&D costs has enabled the Group to maintain operational leverage, with the 2019 adjusted EBITDA margin in line with the prior year (24.3%).

7. Net finance income

Net finance income of £0.9m in 2019 has remained virtually flat compared to 2018.

8. Loss before tax

The Group's statutory loss before tax of £26.1m has reduced by 75.1% from £104.8m in 2018 largely as the result of a £73.4m decrease in amortisation and impairment of intangible asset charges.

9. Taxation

The Group's effective tax rate (ETR) is a 15.3% credit (2018: 15.8% credit). The reduction in the credit arises from a lower deferred tax credit driven by a decrease in amortisation and impairment charges as explained above and the partial de-recognition of deferred tax assets.

10. Loss per share

Despite the share consolidation implemented in October 2019, the loss per share in 2019 has reduced markedly from 13.2p to 3.4p largely due to lower amortisation and exceptional charges, as well as continued growth in adjusted EBITDA.

11. Foreign exchange exposure

The Group receives revenue and incurs expenses in a number of foreign currencies and, as such, movements in foreign exchange rates can materially impact the Group's financial results. Had foreign currency rates in 2019 remained constant with those of 2018, the Group's reported adjusted EBITDA would have been approximately £1.2m lower.

As an indication, a 5% strengthening or weakening of sterling against the euro, US dollar and Swiss franc would have had an impact of between £3.3m and £3.7m on the Group's adjusted EBITDA in 2019.

Balance sheet

Goodwill

The decrease of £1.2m in goodwill to £162.2m at 31 December 2019 arises from foreign exchange losses upon revaluation of goodwill denominated in foreign currencies, primarily the Swiss Franc.

Intangible assets

The £55.8m decrease in the carrying value of intangible assets is due to amortisation of £45.4m and an impairment charge of £8.2m relating to the VR647 programme following cancellation of the programme. Other movements primarily relate to foreign exchange losses partially offset by £1.3m of software additions.

Property, plant and equipment

The net book value of property, plant and equipment is £55.1m, £2.7m lower than at 31 December 2018. The key movements are £10.7m of depreciation and impairment and £1.2m of foreign exchange losses partially offset by £6.1m of additions and £3.6m non-cash additions relating to the recognition of right-to-use property assets on adoption of the IFRS 16 Leases standard.

Inventory

Inventory is £1.0m higher with approximately 90% of the £27.7m carrying value at 31 December 2019 attributable to *flutiform*[®]. The increase in inventories is driven by continued growth in *flutiform*[®] volumes and the need to build strategic stocks for Brexit related risks, partially offset by a foreign exchange loss.

Swiss defined benefit retirement liability

The Swiss defined benefit retirement liability has increased by £1.4m to £4.5m (31 December 2018: £3.1m) due to a decrease in the discount rate used to value the defined benefit obligation.

Cash and liquidity

Vectura ended the year with cash and cash equivalents of £74.1m (2018: £108.2m) following the pay out of a special dividend of approximately £40.0m and the completion of £3.5m of an approved £10.0m share buyback programme. Directly attributable execution costs associated with these capital returns were £0.3m.

Cash generated from operating activities was £19.3m in 2019 (2018: £35.1m). The difference between adjusted EBITDA of £43.4m and cash generated from operating activities is primarily driven by the reduction in payables since 2018. The key movements in payables are the payment in 2019 of £3.1m GSK legal fees accrued in 2018; payment of £2.0m for contractual *flutiform*[®] liabilities; and the payment in 2019 of £3.0m for VR475 liabilities accrued at 31 December 2018. In addition, £3.5m of revenue was recognised in 2019 for which the cash was received in 2018; this primarily relates to the upfront payment of £11.4m for the generic Ellipta[®] agreement with Hikma received in 2018. The remaining £2.0m of the £11.4m upfront cash payment is expected to be recognised as revenue in 2020.

The table below shows the reconciliation of adjusted EBITDA to cash generated from operating activities.

	2019	2018
	£m	£m
Adjusted EBITDA	43.4	39.0
<i>Presentational</i>		
- Exceptionals cash outflow - GSK litigation	(3.0)	(7.1)
- Research and development tax credit income presented outside of operating cash	(1.7)	(1.5)
<i>Working capital</i>		
- Generic Ellipta [®] (Hikma) and VR2081 revenue recognition timing	(3.5)	6.5
- (Decrease) / Increase in payables	(11.1)	0.6
- Increase in receivables	(3.5)	(0.4)
- Increase in <i>flutiform</i> [®] inventory	(1.3)	(2.0)
Cash generated from operating activities	19.3	35.1

The Group received research and development tax credits of £2.4m (2018: £1.0m), which were partially offset by scheduled corporation tax payments relating to its US and Swiss operations of £1.3m (2018: £6.0m).

Net cash outflows from capital expenditure were £7.2m, £5.1m lower than 2018. These included investments in manufacturing equipment for the Lyon site, as well as investment in the Group's laboratories and platform technologies.

The Group has access to a £50.0m multi-currency revolving credit facility with Barclays Bank PLC and HSBC Bank PLC. This facility expires in August 2021 and remains undrawn.

By order of the Board

Paul Fry
Chief Financial Officer

Consolidated income statement

for the year ended 31 December

	Note	2019 £m	2018 £m
Revenue	3	178.3	160.5
Cost of sales		(83.0)	(61.6)
Gross profit		95.3	98.9
Selling and marketing expenses		(3.0)	(3.4)
Research and development expenses	4	(50.2)	(55.5)
Corporate and administrative expenses		(13.7)	(12.0)
Other operating income		1.7	2.6
Operating profit before exceptional items, amortisation and impairment		30.1	30.6
Amortisation and impairment	5	(53.6)	(127.0)
Exceptional items	6	(3.5)	(9.0)
Operating loss		(27.0)	(105.4)
Loss from associates		—	(0.2)
Finance income		1.5	1.3
Finance expenses		(0.6)	(0.5)
Loss before tax		(26.1)	(104.8)
Net tax credit	7	4.0	16.6
Loss for the financial year		(22.1)	(88.2)
Adjusted EBITDA*	5	43.4	39.0
Loss per share (basic and diluted)	8	(3.4p)	(13.2p)

Consolidated statement of other comprehensive income
for the year ended 31 December

	2019	2018
	£m	£m
Loss for the financial year	(22.1)	(88.2)
<i>Items that may be subsequently reclassified to the income statement:</i>		
Net exchange difference on translation of foreign operations	(7.9)	14.2
Tax on items recognised directly in equity that may be reclassified	0.4	(0.5)
Increase in deferred tax rate on overseas permanent funding	(2.5)	—
<i>Items that will not be reclassified to the income statement:</i>		
Remeasurement of net retirement benefit obligations	(1.4)	0.2
Other comprehensive (loss)/income	(11.4)	13.9
Total comprehensive loss for the year	(33.5)	(74.3)

All results are attributable to shareholders of Vectura Group plc and are derived from continuing operations.

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

Consolidated balance sheet

as at 31 December

	Note	2019 £m	2018 £m
ASSETS			
Non-current assets			
Goodwill	10	162.2	163.4
Intangible assets	11	164.1	219.9
Property, plant and equipment		55.1	57.8
Other non-current assets		3.2	10.1
Total non-current assets		384.6	451.2
Current assets			
Inventories		27.7	26.7
Trade and other receivables		44.3	35.3
Cash and cash equivalents		74.1	108.2
Total current assets		146.1	170.2
Total assets		530.7	621.4
LIABILITIES			
Current liabilities			
Trade and other payables		(48.8)	(60.9)
Corporation tax payable		(12.5)	(10.1)
Borrowings	12	(1.2)	(0.2)
Provisions		(1.6)	(1.1)
Total current liabilities		(64.1)	(72.3)
Non-current liabilities			
Borrowings	12	(6.4)	(3.8)
Other non-current payables		—	(2.4)
Provisions		(7.9)	(9.8)
Retirement benefit obligations		(4.5)	(3.1)
Deferred tax liabilities		(28.4)	(35.7)
Total non-current liabilities		(47.2)	(54.8)
Total liabilities		(111.3)	(127.1)
Net assets		419.4	494.3
SHAREHOLDERS' EQUITY			
Share capital	14	0.2	0.2
Share premium		61.6	61.6
Translation reserve		30.0	40.0
Other reserves		320.2	447.3
Retained earnings/(losses)		7.4	(54.8)
Total shareholders' equity		419.4	494.3

The accompanying notes form an integral part of these consolidated financial statements. The consolidated financial statements of Vectura Group plc were approved by the Board of Directors on 16 March 2020 and were signed on its behalf by:

W Downie
Chief Executive Officer

P Fry
Chief Financial Officer

Consolidated statement of changes in equity
for the year ended 31 December

	Note	Share capital £m	Share premium £m	Other reserves			Translation reserve £m	Retained (losses)/earning £m	Total equity £m
				Merger reserve £m	Own shares reserve £m	Share-based payment reserve £m			
At 1 January 2018		0.2	61.5	593.2	(2.5)	8.4	26.3	(108.3)	578.8
Loss for the financial year		—	—	—	—	—	—	(88.2)	(88.2)
Other comprehensive income		—	—	—	—	—	13.7	0.2	13.9
Total comprehensive income / (loss) for the year		—	—	—	—	—	13.7	(88.0)	(74.3)
Share buyback programme		—	—	—	—	—	—	(13.8)	(13.8)
Share-based payments		—	—	—	—	3.7	—	—	3.7
Employee share schemes		—	0.1	—	0.3	(3.8)	—	3.3	(0.1)
Release of special reserves		—	—	(8.2)	—	—	—	8.2	—
Merger reserve release		—	—	(143.8)	—	—	—	143.8	—
At 31 December 2018		0.2	61.6	441.2	(2.2)	8.3	40.0	(54.8)	494.3
Adoption of IFRS 16	17	—	—	—	—	—	—	(0.4)	(0.4)
At 1 January 2019 as adjusted		0.2	61.6	441.2	(2.2)	8.3	40.0	(55.2)	493.9
Loss for the financial year		—	—	—	—	—	—	(22.1)	(22.1)
Other comprehensive loss		—	—	—	—	—	(10.0)	(1.4)	(11.4)
Total comprehensive loss for the year		—	—	—	—	—	(10.0)	(23.5)	(33.5)
Share buyback programmes	14	—	—	—	—	—	—	(3.6)	(3.6)
Dividends paid	9	—	—	—	—	—	—	(40.1)	(40.1)
Share-based payments		—	—	—	—	3.2	—	—	3.2
Employee share schemes		—	—	—	(0.1)	(5.1)	—	4.7	(0.5)
Merger reserve release	18	—	—	(125.1)	—	—	—	125.1	—
At 31 December 2019		0.2	61.6	316.1	(2.3)	6.4	30.0	7.4	419.4

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

Consolidated statement of cash flow statement
for the year ended 31 December

	Note	2019 £m	2018 £m
Cash flows from operating activities			
Loss for the financial year		(22.1)	(88.2)
Adjustments reconciling loss after tax to operating cash flows	15	41.4	123.3
Cash generated from operating activities		19.3	35.1
Research and development tax credits received		2.4	1.0
Corporation tax paid		(1.3)	(6.0)
Net cash inflow from operating activities		20.4	30.1
Cash flows from investing activities			
Purchase of intangible assets		(1.4)	(0.8)
Purchase of property, plant and equipment		(5.8)	(11.5)
Interest received		0.4	0.2
Net cash outflow from investing activities		(6.8)	(12.1)
Cash flows from financing activities			
Share buyback programme	14	(3.6)	(13.8)
Special dividend paid	9	(40.1)	—
Funding relating to the issue of shares and share options		(0.5)	(0.2)
Repayment of lease liabilities		(1.1)	—
Repayment of property mortgages		(0.1)	(0.3)
Other finance charges		(0.4)	(0.5)
Net cash outflow from financing activities		(45.8)	(14.8)
Effects of foreign exchange fluctuations on cash held		(1.9)	1.3
(Decrease)/increase in cash and cash equivalents		(34.1)	4.5
Cash and cash equivalents at the beginning of the year		108.2	103.7
Cash and cash equivalents at the end of the year		74.1	108.2

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

1. General information

Vectura's Group plc 2019 Annual Report will be posted to shareholders on 20 April 2020. The financial information set out in this document does not constitute the company's statutory accounts for the years ended 31 December 2019 or 2018 but is derived from those accounts. Statutory accounts for 2018 have been delivered to the registrar of companies, and those for 2019 will be delivered in due course, following the Company's Annual General Meeting, which will be held at 10.30am on 27 May 2020. The auditor has reported on those accounts; their reports were (i) unqualified, (ii) did not include a reference to any matters to which the auditor drew attention by way of emphasis without qualifying their report and (iii) did not contain a statement under section 498 (2) or (3) of the Companies Act 2006.

The final statements have been prepared in accordance with the Group's accounting policies approved by the Board. Critical accounting policy and judgment areas can be found in note 2 and details of principal business risks and uncertainties can be found in Note 20.

The Group is managed on the basis of a single reportable segment, being the development and supply of pharmaceutical products and as such no separate segmental information is provided as it would not be different from the Consolidated Income Statement.

Selected explanatory notes which reflect extracts from the full financial statements are included to explain events and transactions that are significant to the understanding of the changes in the Group's financial position and performance since the last annual financial statements.

Corporate information

Vectura Group plc (the "Company") is a public limited company incorporated and domiciled in the United Kingdom. The registered office is One Prospect West, Chippenham, Wiltshire SN14 6FH. The "Group" is defined as the Company, its subsidiaries and equity-accounted associates. The Group's operations and principal activities are described in the Strategic report. Previously issued financial information and other relevant resources are made available on our website: www.vectura.com.

Basis of preparation

The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS) and IFRS Interpretation Committee (IFRIC) interpretations issued by the International Accounting Standards Board and as adopted for use by the European Union (EU-IFRS).

The financial statements have been prepared on an historical cost basis modified to include revaluation to fair value of certain financial instruments and the recognition of net assets acquired including contingent liabilities assumed through business combinations at their fair value on the acquisition date modified by the revaluation of certain items, as stated in the accounting policies. All financial information is presented in sterling, and is rounded to the nearest £0.1m unless otherwise stated.

Going concern

The Group has made a loss for the year; however, it continues to be cash generative before distributions to shareholders. A summary of the Group's financial position, cash generated in the year and accounting loss made after non-cash amortisation charges is included within the Financial review. The Group has considerable financial resources together with long-term contracts with a number of customers across different geographic areas and jurisdictions. The Directors believe that the Group is well placed to manage its business risks successfully despite the current uncertain economic outlook due, primarily, to the UK exit from the EU and the COVID-19 outbreak. The Directors have a reasonable expectation that the Group has adequate resources to continue in operational existence for the foreseeable future, and as such they continue to adopt the going concern basis of accounting in preparing the annual financial statements.

Changes in accounting policies and disclosures

The accounting policies applied are consistent with those adopted and disclosed in the consolidated financial statements for the year ended 31 December 2018 except for changes arising from the adoption of the following new accounting pronouncements which became effective in the current reporting period:

- IFRS 16 Leases. The details and the impact of the transition is explained in note 17.
- IFRIC 23 Uncertainty over Income Tax Treatment. The details and the impact of the transition is explained in note 7.

A number of other new amendments are also effective from 1 January 2019 in relation to IAS - 28 Investments in Associates, IAS - 19 Employee Benefits, IFRS - 3 Business Combinations, IAS - 1 Presentation of Financial Statements and IAS - 8 Accounting Policies, Changes in Accounting Estimates and Errors and IFRS - 9 Financial Instruments but these do not have any material effect on the Group's financial statements.

1.1 Alternative performance measures (APMs)

When assessing and discussing the Group's reported financial performance, management makes reference to alternative performance measures. These measures are also used in discussions with the investment community. APMs are not displayed with more prominence, emphasis or authority than IFRS measures.

Adjusted EBITDA is defined as operating loss adding back amortisation and impairment, depreciation, share-based payments and exceptional items. Refer to note 5 "*Adjusted EBITDA*".

Exceptional items are presented whenever significant expenses are incurred or income is received as a result of events considered to be outside the normal course of business, where the unusual nature and expected infrequency merits separate presentation to assist comparisons with previous years. Items which are included within the exceptional category include:

- costs associated with major corporate transactions;
- Board-approved spend on the integration of major corporate transactions; and
- other major transformation programmes.

Furthermore, significant and unusual items of litigation (e.g. GSK litigation) and significant and unusual items which individually distort the underlying performance of the business and therefore warrant highlighting separately to the users of the accounts are also included within exceptional items. Refer to note 6 "*Exceptional items*".

2. Critical accounting areas of judgement and estimation

In preparing these consolidated financial statements, critical judgements in the application of accounting policies can have a significant effect on the financial results. Moreover, any changes in critical estimates and assumptions made could materially impact the amounts of assets, liabilities, revenue and expenses reported next year as actual amounts and results could differ from those estimates or those estimates could change in future.

Critical judgements

The following critical judgements are those which have the most significant effect on the amounts recognised in the financial statements:

Applying IFRS - 15 Revenue from Contracts with Customers to long-term collaborative agreements

Collaborative development and marketing agreements which license the Group's technology and intellectual property (IP) can and do have unique terms spanning multiple reporting periods. Consequently, the accounting judgements required to apply IFRS 15 to each such agreement can differ significantly.

The critical accounting judgements relate to all collaborative development agreements with performance obligations outstanding at the transition date and all future similar agreements signed. At present, the agreements relevant to the following IFRS 15 judgements outlined below are with Sandoz (VR2081) entered into in June 2017 and Hikma (generic of GSK Ellipta® products) entered in November 2018. These judgements were made at contract inception.

(a) Assessment of contract existence criteria

A contract with a customer is in the scope of the standard when it is legally enforceable, the contract is approved and both parties are committed to their obligations.

An agreement often provides a customer with an option to acquire additional services on the basis of success based fees. Judgement is required to determine the extent to which the Group or the customer is committed to these services throughout the service period, before a successful outcome is assured.

This has been applied to the agreement with Hikma to develop generic versions of GSK's Ellipta® portfolio. It has been judged that the licence to use Vectura's intellectual property and the provision of services for development of Vectura's Open-Inhale-Close (OIC) device are considered committed as the initial \$15.0m milestone received on signing the agreement in 2018 is non-refundable.

Hikma also has the option to acquire future formulation and process development services for up to five products on success-based terms specified in the agreement. These are not considered revenue contracts but treated as partnered R&D costs until such time the receipt of revenue is considered highly probable.

(b) Whether a licence to the Group's intellectual property is a separate distinct performance obligation

A licence granted by the Group usually provides the partner with a right to use, but not to own, the IP related to a development. A licence is capable of being distinct from development services if, regardless of contractual terms, it could be sold separately in which case revenue is recognised at the grant date (point in time) as applicable to the OIC device licence for the generic GSK Ellipta® portfolio with Hikma.

If the licence provided was not capable of being separately sold at the grant date then the revenue for the licence is recognised over time as required development services accrue. This treatment applies to the development of VR2081 with Sandoz.

(c) Allocation of the transaction price based on standalone selling prices at contract inception

For collaborative agreements containing multiple performance obligations, the Group must determine the standalone selling price identified on inception of the contract. Once these have been determined, these are not subsequently amended. The key assumptions used to determine the standalone selling price include forecast revenues, the cost of satisfying the obligation, development timelines and probabilities of technical, regulatory and commercial success.

Uncertain tax positions

A provision for an uncertain tax position is recognised within current tax liabilities relating to recent utilisation of historical losses claimed in an overseas jurisdiction. The provision is recognised on the basis of the Group's interpretation of inherently complex tax legislation. The judgement of whether and how much to provide is formed after taking external professional advice, applying IFRIC 23, and is based on management's judgement of the potential tax that could be assessed as due. The tax provision is recognised at £4.1m (2018: £4.9m). This provision is partially released to the Consolidated income statement as each annual Statute of Limitation (the period during which the tax authority can enquire into each return) is closed, with the uncertainty expected to be fully resolved in 2021.

Legal and other matters

The Group is involved in various legal proceedings which arise in the ordinary course of business. The Group obtains relevant legal advice and makes a judgement as to whether there is sufficient information to be able to make a reliable estimate of the likely outcome of any proceedings. Legal matters are inherently judgemental areas which could change substantially over time as each legal matter progresses and new facts emerge. Appropriate accounting treatment and disclosures are made based on the information available to the Group at the time.

Critical estimates

The following critical estimates, if changed in 2020, would materially impact reported performance:

Revenue - variable consideration included in revenue contracts

Variable consideration includes the estimate of payments in the form of contingent development-related and regulatory approval milestones. These milestones are included in the transaction price when the most likely outcome is that they will be received. Once this is established, the entire transaction price is constrained to the extent that it is highly probable that a significant reversal of revenue will not occur in future periods. The estimate is reassessed for each reporting period.

The initial transaction price for the development of the generic GSK Ellipta® portfolio with Hikma has been assessed as \$20.0m, which includes a second \$5.0m milestone due on completion of the device development services. The second milestone is being constrained (i.e. not recognised) until completion is considered highly probable. If this \$5.0m milestone had not been constrained, additional revenue of £3.1m (2018: £2.2m) would have been recognised in 2019.

Impairment of goodwill acquired through business combinations

Goodwill arising on a business combination is not amortised, but is tested annually for impairment. This testing requires judgement as to the fair value less costs of disposal of the cash-generating units (CGUs) to which goodwill has been allocated. The actual performance of CGUs may differ from the valuations derived through this exercise. Refer to note 10 "Goodwill".

Useful economic lives of intangible assets acquired through business combinations

Intangible assets relating to in-market products are amortised with reference to average patent lives in the most applicable territories. The key estimate is which patent or midpoint of the patents to use, due to the varying strength of the patents and different time periods for different territories. Given the quantum of the intangible assets, any change in assumptions would have a significant impact on the amortisation charge.

On 9 August 2019, certain Japanese patent extensions were granted. As a result, the useful economic life of the *flutiform*® inhaled in-market asset was extended by an additional four and a half years. Refer to note 11 "Intangible assets".

Actuarial assumptions applied to the Swiss pension benefits in the application of accounting policies

The Group operates a pension scheme in respect of its employees in Switzerland. As some of the risks of the scheme match the criteria under IAS - 19 Employee Benefits for a defined benefit plan, the scheme is accounted for as such. Application of IAS 19 involves estimates about uncertain future events based on independent actuarial valuation reports.

UK exiting the EU

On 31 January 2020 the UK left the European Union under the Withdrawal Agreement Act 2020. The implementation period completes on 31 December 2020 and therefore the main risk to Vectura of a disorderly implementation which was disclosed in the 2018 Annual Report could still arise, should this implementation period not be extended or the UK not establish a beneficial trading relationship with the EU. Management continues to monitor developments and has assessed the key business risks of a disorderly Brexit and mitigated these through ensuring ongoing EU regulatory requirements for medicinal products and devices will be maintained and implementing supply chain contingency planning to mitigate the impact of a disorderly Brexit. The mitigations include appointing third-party logistics experts, identifying alternative routings or methods of transportation and making provision for *flutiform*[®] release testing in the EU. In addition, the stock levels have been increased where appropriate and raw materials sourcing has been secured by building up stock.

Management has assessed the impact of this mitigated uncertainty on the carrying amounts of assets and liabilities in the Group financial statements and no impairment triggers relating to Brexit have been identified.

3. Revenue

	2019	2018
	£m	£m
Product supply revenues	115.0	85.6
Royalty and other marketed revenues	51.9	58.4
Development revenues	11.4	16.5
Total revenues	178.3	160.5

Detailed analysis and commentary on revenue is provided in the Financial review.

(a) Product supply revenues

The Group generates significant revenues from the supply of finished or semi-finished products, largely manufactured by third-party suppliers, to commercial distribution partners.

(b) Royalty and other marketed revenues

The Group also generates revenues from products marketed by partners which incorporate Vectura's intellectual property. These revenues typically comprise royalties, share of sales arrangements, sales-based milestones, and product approval and launch milestones. These revenues reflect financial returns from historical R&D investments in partnered programmes and are earned without further material costs being incurred by the Group.

(c) Development revenues

The Group also earns revenue from agreements with partners which draw on Vectura's device, formulation and development capabilities to deliver commercially attractive inhalation products. Under these agreements, during the development phase Vectura typically receives a series of cash flows in consideration for a variety of activities, which may comprise an upfront fee as consideration for the license to access intellectual property, milestone payments for specific clinical or other development-based outcomes, or fees billed directly for work performed.

Disaggregation of revenues

In the following table revenue from contracts with customers is disaggregated by major product and service line and timing of revenue recognition.

Revenue recognition	Product supply		Royalties and other marketed		Development services	
	2019	2018	2019	2018	2019	2018
	£m	£m	£m	£m	£m	£m
Point in time	115.0	85.6	51.9	58.4	7.1	12.8
Over time	-	-	-	-	4.3	3.7
Revenues by performance obligation	115.0	85.6	51.9	58.4	11.4	16.5

Point in time development services revenue includes £1.9m (2018: £4.2m) in relation to performance obligations met in prior years. The outstanding transaction price on unsatisfied performance obligations as at 31 December 2019 is £6.8m (2018: £11.1m), which is currently expected to be recognised in full in 2020.

In the following table revenue from contracts with customers is disaggregated by primary geographical market.

Revenue by geographical location

	2019	2018
	£m	£m
United Kingdom	64.3	55.2
Japan	54.1	35.1
Switzerland	31.9	31.0
Rest of Europe	18.1	13.3
United States of America	5.7	15.8
Rest of World	4.2	10.1
Total revenues	178.3	160.5

Geographical location is derived from customer invoicing points as opposed to the location of patients receiving treatment from the Group's licensed products.

Revenue from major customers

Three major customers contributed individually in excess of 10% of total Group revenues: Customer A – £55.1m (2018: £43.9m), Customer B – £54.1m (2018: £35.1m) and Customer C - £21.7m (2018: £22.4m).

Customer contract balances

The following table details trade receivables, unbilled trade receivables and contract liabilities with customers:

	Note	2019	2018
		£m	£m
Trade receivables		17.2	15.1
Unbilled trade receivables		12.0	10.2
Contract liabilities		(2.3)	(6.5)

Trade receivables are recognised when there is an enforceable right to invoice the customer for work performed to date under contractually agreed credit terms. The Group's unbilled trade receivables relate to accrued royalty income and are transferred to trade receivables when the right to payment becomes unconditional upon receipt of royalty statements. The royalty statements and subsequent payments are typically received in the following quarter. Unbilled trade receivables as at 31 December 2018 of £10.2m relate to Q4 2018 royalty statements, which were subsequently received in full. Unbilled trade receivables as at 31 December 2019 of £12.0m relate to Q4 2019 royalty statements and are expected to be received in full in the first half of 2020.

Contract liabilities consists of advance payments from customers for early-stage development services, with revenues being recognised over time.

In respect of VR2081 and the collaborative arrangement with Hikma, £1.5m (2018: £1.3) and £2.8m (2018: £2.4m) respectively of contract liabilities were released and recognised as revenues for the services performed.

	2019	2018
	£m	£m
Contract liabilities at 1 January	6.5	4.5
Advance payments received from customers	—	12.2
Foreign exchange	0.1	(0.3)
Released royalties and other marketed revenues	—	(2.0)
Recognised as licence revenue	—	(4.2)
Recognised as development services revenue	(4.3)	(3.7)
Contract liabilities	2.3	6.5

4. Research and development expenses

	2019	2018
	£m	£m
Partnered R&D	24.5	20.6
Pre-partnered R&D	25.7	34.9
Total research and development expenses	50.2	55.5

Partnered research and development expenditure represents expenditure to progress partnered programmes. Pre-partnered research and development expenditure reflects investments funded by the Group on programmes yet to be partnered, as well as investments in the Group's own innovative proprietary technology platforms.

5. Adjusted EBITDA

Adjusted EBITDA is a non-statutory alternative performance measure used by management and the Board to monitor the Group's performance. See note 1.1.

		2019	2018
		£m	£m
Operating loss		(27.0)	(105.4)
Exceptional items	6	3.5	9.0
Amortisation and impairment of intangible assets	11	53.6	127.0
Depreciation and impairment of property, plant and equipment		10.6	5.8
Share-based payments		2.7	2.6
Adjusted EBITDA		43.4	39.0

The Group has adopted IFRS 16 from 1 January 2019. In applying IFRS 16, in place of operating lease expenses for the Group's UK properties, the Group recognises depreciation and interest costs. In relation to these leases, the Group recognised £0.9m of depreciation charges and £0.1m of interest costs.

6. Exceptional items

Exceptional items are presented whenever significant expenses are incurred or income is received as a result of events considered to be outside the normal course of business, where the unusual nature and expected infrequency merits separate presentation to assist comparisons with previous years.

	2019	2018
	£m	£m
Legal fees ⁽¹⁾	3.0	7.1
Site closure costs ⁽²⁾	0.3	1.3
Other exceptional items ⁽³⁾	0.2	0.6
Total exceptional items	3.5	9.0

If the exceptional items were not presented as exceptional, the classification would be as follows: (1) classified as research and development expenditure; (2) classified separately as restructuring costs; and (3) classified as corporate and administration expenses in 2019.

Legal fees of £3.0m (2018: £7.1m) relate to ongoing legal proceedings against GSK from enforcement of Vectura's patents in respect of the Ellipta® products. Site closure costs arise from the decision to close the Group's operating site in Gauting, Germany, by December 2020 and consists of share-based payment charges related to the retention of staff of £0.3m (2018: £0.2m), with 2018 also including provision for redundancy costs of £1.1m. Other exceptional items of £0.2m relate to final IFRS 2 charges for retention shares that were issued post the 2016 merger and vested on 22 September 2019.

7. Tax

	2019	2018
	£m	£m
Current income tax	(4.4)	(4.6)
Prior year adjustments	0.3	(0.1)
Total current income tax charge	(4.1)	(4.7)
Deferred tax	8.1	21.3
Net tax credit reported in the income statement	4.0	16.6

Deferred tax charges of £2.1m (2018: £0.5m) were recognised in other comprehensive income.

Current tax arises from trading profits generated in Switzerland (2018: Switzerland and the US). Deferred tax relates predominantly to credits arising on the unwinding of tax liabilities on the intangible assets acquired as a result of the acquisition of Activaero in 2014 and the Skyepharma merger in 2016.

The Group's effective tax rate (ETR) before other comprehensive income (OCI) is a 15.3% credit (2018: 15.8% credit). This equates to the applicable UK tax rate of 19%, adjusted for a number of factors discussed below.

UK tax

The UK sub-group is loss-making and benefits from the R&D expenditure credit (RDEC). The RDEC is subject to UK corporation tax and therefore is included within the Consolidated income statement and presented as other operating income (refer to note 7). In addition, certain UK companies are able to participate in the UK Patent Box regime, the benefit of which is expected to increase as new products are approved. The UK corporation tax rate will reduce to 17% from 1 April 2020, which has been substantively enacted. The impact on the Group accounts is expected to be immaterial.

US tax

Taxable income arose in the prior period in respect of the percentage of net sales received from EXPAREL[®]. This ceased from September 2018.

Swiss tax

The Group continues to be tax paying in Switzerland. Over the course of 2019, the Swiss tax reform was substantively enacted with an effective date of 1 January 2020. This will increase the ETR for the Swiss group to approximately 13.45% in 2025 (2018: 9.7%) after the transitional period has concluded. During this time the Group will mitigate this increase through applying for temporary transitional reliefs which are anticipated to reduce the Swiss group ETR to approximately 10.4%.

Effective tax rate (ETR)

In Switzerland (2018: Switzerland and the US), the Group is profitable and subject to tax at the local rates (Swiss ETR 9.5% charge (2018: 9.7%)). In 2019, the US corporate rate applied was 21% (2018: 21%). The uncertain tax position disclosed has decreased by £0.7m in the year. These charges, along with a significant credit in respect of deferred tax liabilities relating to intangible assets acquired on the Skyepharma and Activaero acquisitions, together drive the Group's ETR credit of 15.3% (2018: 15.8%).

	2019	2018
	£m	£m
Loss before tax	(26.1)	(104.8)
Loss before tax calculated at the UK corporation tax of 19% (2018: 19%)	5.0	19.9
Tax effects of:		
Expenses not deductible for tax purposes	(0.1)	(0.1)
Unrecognised deferred tax*	(5.6)	(8.9)
Prior year deferred tax	0.1	0.4
Recognition of deferred tax on prior year losses	0.2	2.0
Differences arising from prior period computations	0.3	(0.1)
Differences in effective overseas tax rates	3.0	3.4
Impact of deferred tax rate change	1.1	—
Total tax credit for the year	4.0	16.6

* Unrecognised deferred tax mainly relates to losses incurred for which no deferred tax assets have been recognised as future recovery, or timing of recovery, cannot be supported.

The ETR (excluding the future release of the uncertain tax position) is expected to remain in the range of 10–15% credit for 2020 as a result of both the taxable Swiss profits and the significant credit in respect of deferred tax liabilities on intangibles acquired, which is expected to continue for the remainder of their useful lives. If VR315 (US) progresses to market as expected, the Group's profit before tax would increase, and the ETR (before the release of the uncertain tax position) is expected to increase to a 20% charge.

IFRIC 23 - Uncertainty over Income Tax Treatments

On 1 January 2019, the IFRIC 23 interpretation, which addresses the accounting for uncertain tax positions, became mandatory for use in accordance with EU-IFRS and was adopted by the Group at this time. The interpretation outlines the method required for measurement of the uncertainty and the Group's only uncertain tax position was calculated through a method consistent with the interpretation and therefore no transitional adjustment or disclosure is required following adoption.

8. Loss per share

Basic loss per share of 3.4p per share (2018: 13.2p per share) equals diluted loss per share of 3.4p per share (2018: 13.2p per share). Loss per share, basic and dilutive, has been calculated by dividing the loss attributable to shareholders by the weighted average number of shares in issue during the period.

Options granted under employee share plans are anti-dilutive for the year ended 31 December 2019. The following table provides details of the impact as if shares had been considered dilutive.

	2019	2018
Loss after tax (£m)	(22.1)	(88.2)
Weighted average number of ordinary shares (m)	651.9	666.1
Effect of dilutive potential ordinary shares (m)	10.6	6.3
Indicative diluted weighted average number of ordinary shares (m)	662.5	672.4

9. Special dividend paid to shareholders

On 9 September 2019, the Group announced a distribution to shareholders in the form of a special dividend of approximately £40.0m (2018: nil). This was approved at a general meeting on 10 October 2019 and, subsequently, a distribution of 6p per ordinary share was paid to shareholders, totalling £39.9m (2018: nil). Directly attributable costs of £0.2m have been expensed to equity.

10. Goodwill

	2019	2018
	£m	£m
At beginning of the year	163.4	161.4
Foreign exchange	(1.2)	2.0
At end of the year	162.2	163.4
<i>Allocation to cash-generating units (CGUs)</i>		
UK and Germany	99.8	100.1
Switzerland	62.4	63.3
At end of the year	162.2	163.4

Goodwill has been allocated to cash-generating units (CGUs), being the Group's geographic locations for operations and intellectual property. The recoverable amounts of each CGU is assessed using a fair value less costs of disposal model. This is calculated using a discounted cash flow approach, with a post-tax discount rate applied to the projected risk-adjusted post-tax cash flows and terminal value.

The Group's weighted average cost of capital (WACC) of 10.25% (2018: 10%) is used in the calculation to discount the cash flows to reflect the impact of risks relevant to the Group and the time value of money. The Group rate is then adjusted for risks specific to each CGU.

Cash flows relating to the Swiss CGU are discounted at 8% (2018: 9%). The primary reason for the decline in the discount rate comparing to 2018 is the reduction in interest rates in Switzerland, the Eurozone and Japan, which are the major markets the Swiss CGU operates in, which are close to zero or negative. The discount rate used for UK and Germany CGU cash flows is 12% (2018: 11%). Whilst no specific Brexit adjustment is made to the discount rates, market volatility caused by Brexit is incorporated into risk-free rates, equity market returns and economic expectations.

Cash flows are based on the most recent budget approved by the Board covering 2019 and the Ten Year Plan to 2029. Details relating to the discounted cash flow models used in the impairment tests of the cash generating- units are as follows:

Valuation basis	Fair value less cost of disposal
Key assumptions	Time to develop and launch pipeline products Net sales forecasts and related royalty inflows Timing of partnering pipeline products and milestone achievement Brexit proceeds in an orderly manner with minimal disruption to the <i>flutiform</i> [®] supply chain Gross profit margins on product supply R&D expenditure Terminal growth rate Discount rate
Determination of assumptions	Forecast development plans Net sales forecasts are determined from partner forecasts and external market data Milestone amounts and royalty rates reflect past experience and forecast sales from market data Margins reflect past experience, adjusted for expected future changes Discount rates based on Group WACC, adjusted for country specific risks Taxation rates based on appropriate rates for each region
Specific projected cash flow year	Ten years (reflecting a longer-term planning cycle)
Terminal growth rate	UK and Germany: nil Switzerland: decline of 10%
Discount rate	UK and Germany: 12% Switzerland: 8%

The Group conducted a sensitivity analysis on the impairment test of each CGU's carrying value. The UK and Germany CGU valuation indicates significant headroom such that a plausible change in any key assumption is unlikely to result in an impairment of the related goodwill. The forecast cash flows would need to reduce in excess of 50% (2018: 65%) before impairment arises. This is primarily because this CGU comprises a significant number of internally generated intangibles.

The Swiss CGU has low headroom (£22.7m), primarily due to *flutiform*[®] moving towards its maturity stage and not being fully replaced by the launch of new products. This is incorporated in the forecast cash flows used in the impairment test. The sensitivity analysis indicates that either a decline of annual cash flows in excess of 8% or an increase in the discount rate by 1.35% would, all other assumptions being equal, cause impairment.

The sensitivity of the Swiss CGU of the UK exiting the EU has been considered. The final position at the end of the implementation period could have a range of potential outcomes, of which the most severe is the UK not establishing a beneficial trading relationship with the EU before the end of the implementation period, 31 December 2020. In this scenario, the Group believes that there is a possibility that the Group's supply chain could be disrupted. *flutiform*[®] is manufactured in the UK with raw materials imported mainly from the EU into the UK and the Group's partners export finished product from the UK into the EU and Japan.

If any of the risks associated with the implementation period materialise it will likely result in an impairment in the Swiss CGU. There remains a high level of uncertainty as at the date of approval of these financial statements as to how and whether specific risks will materialise. The full implications of the UK leaving the EU will not be understood until future tariffs, trade, regulatory, tax, and other free trade agreements to be entered into by the UK are established. Furthermore, Vectura could experience changes to laws and regulations post implementation period, in areas such as intellectual property rights, employment, environment, supply chain logistics, data protection and health and safety, which may be relevant in assessing the Group's assets.

11. Intangible assets

	Inhaled in-market assets £m	Smart nebuliser technology £m	Non-inhaled in-market assets £m	Other £m	Total £m
Cost					
At 1 January 2018	309.1	138.3	76.8	16.1	540.3
Additions	—	—	—	0.9	0.9
Foreign exchange	15.8	1.6	4.2	0.8	22.4
At 31 December 2018	324.9	139.9	81.0	17.8	563.6
Additions	—	—	—	1.3	1.3
Foreign exchange	(5.8)	(7.5)	(2.1)	(0.3)	(15.7)
At 31 December 2019	319.1	132.4	78.9	18.8	549.2
Amortisation					
At 1 January 2018	(74.1)	(71.7)	(43.4)	(15.7)	(204.9)
Amortisation	(48.0)	(14.5)	(22.8)	(0.2)	(85.5)
Impairment	—	(41.5)	—	—	(41.5)
Foreign exchange	(5.7)	(1.7)	(3.6)	(0.8)	(11.8)
At 31 December 2018	(127.8)	(129.4)	(69.8)	(16.7)	(343.7)
Amortisation	(40.1)	(2.2)	(2.7)	(0.4)	(45.4)
Impairment	—	(8.2)	—	—	(8.2)
Foreign exchange	2.5	7.4	1.8	0.5	12.2
At 31 December 2019	(165.4)	(132.4)	(70.7)	(16.6)	(385.1)
Net book value					
At 31 December 2019	153.7	—	8.2	2.2	164.1
At 31 December 2018	197.1	10.5	11.2	1.1	219.9

During the period, the GSK Ellipta® technology licence included within inhaled in-market assets was fully amortised.

As at 31 December 2019 the carrying value of the smart nebuliser technology assets, acquired through the Activaero transaction on 13 March 2014, has been fully impaired. Whilst partnering engagement for VR647 is ongoing, given developments in the status and timing of these discussions and in consideration of the Group's R&D investment priorities, the Board considers that there is a low probability that the value of the VR647 intangible asset will be realised. Accordingly, a full impairment charge of £8.2m, offset by the release of deferred tax liabilities of £2.2m, was recognised.

Non-inhaled in-market assets include several near end of life licences, patents, know-how agreements and marketing rights recognised on the Skyepharma merger, which are in use and from which the Group continues to receive royalties.

Impairment tests on intangible assets are undertaken if events occur which call into question the carrying values of the assets. There was no indication of impairment for the remaining intangible assets as at 31 December 2019.

The Group's intangibles are amortised on a straight line basis using the following useful economic lives (UEl)s:

	Acquisition date	Useful economic life from acquisition date
Inhaled in-market assets	June 2016	11.5 years
Non-inhaled in-market assets	June 2016	6.5 years

The Group's sensitivity analysis shows that, had UELs been extended for 2019 by one year, then the impairment and amortisation charge would be £4.4m lower. Had UELs been reduced for 2019 by one year, then the impairment and amortisation charge would be £6.0m higher.

On 9 August 2019, certain Japanese patent extensions were granted. As a result, the UEL of the *flutiform*[®] inhaled in-market asset was extended by an additional four and a half years. Consequently, the amortisation charge for the period has reduced.

Following a contract renegotiation, effective from 1 January 2019, the UEL for the remaining non-inhaled in-market asset was extended to reflect minimum guaranteed royalties until December 2022.

12. Borrowings

	2019	2018
	£m	£m
Current		
Finance lease liabilities	1.0	—
Property mortgage	0.2	0.2
Total current borrowings	1.2	0.2
Non-current		
Finance lease liabilities	2.6	—
Property mortgage	3.8	3.8
Total non-current borrowings	6.4	3.8
Total borrowings	7.6	4.0

Finance lease liabilities of £4.7m were initially recognised upon adoption of IFRS 16 on 1 January 2019. As at 31 December 2019, these liabilities are £3.6m, of which £2.6m is denominated in sterling and relates to the expected terms remaining on UK property site leases discounted at between 2% and 3%. The remaining finance lease liability of £1.0m is denominated in Swiss Francs and was previously recognised as an onerous lease provision, on transition to IFRS 16 Leases on 1 January 2019 this was de-recognised and a finance lease liability was recognised. The corresponding right-of-use asset is fully impaired.

The property mortgage is denominated in Swiss francs and is secured on the Group's Swiss buildings with a fixed rate of interest of 1.3% per annum until 31 March 2020. Owing to the nature of Swiss rollover mortgages, most of the principal of the loan balance is presented as long term given the Group's intention to continue to rollover the principal balance until the related property is sold, which is expected to be in more than one year. All expected interest payments and a partial principal repayment in 2020 are presented as current.

13. Financial instruments

The Group has exposure to credit, liquidity and currency risks from its use of financial instruments. This note sets out the Group's key policies and processes for managing these risks.

	Fair value through profit and loss		Amortised cost		Total	
	2019	2018	2019	2018	2019	2018
	£m	Represented £m	£m	Represented £m	£m	Represented £m
Cash and cash equivalents	—	—	74.1	108.2	74.1	108.2
Trade receivables and unbilled trade receivables	—	—	29.2	25.2	29.2	25.2
Other current assets	—	—	7.6	—	7.6	—
Other non-current assets	0.5	0.4	—	6.4	0.5	6.8
Non-derivative financial assets	0.5	0.4	110.9	139.8	111.4	140.2
Trade and other payables	—	—	(46.5)	(56.8)	(46.5)	(56.8)
Mortgage borrowings	—	—	(4.0)	(4.0)	(4.0)	(4.0)
Finance lease liabilities*	—	—	(3.6)	—	(3.6)	—
Non-derivative financial liabilities	—	—	(54.1)	(60.8)	(54.1)	(60.8)
Financial instruments	0.5	0.4	56.8	79.0	57.3	79.4

*The Group has applied IFRS 16 using the modified retrospective approach under which the disclosure requirements in IFRS 16 have not generally been applied to comparative information.

The Group's financial instruments are measured at amortised cost unless consideration is contingent. Contingent assets and liabilities are held at fair value through profit and loss (FVTPL) on the basis of their expected discounted cash flows, being the present value of expected payments discounted using a risk free discount rate adjusted as appropriate. Therefore no separate fair value analysis is presented.

The Group has no external debt, except for a Swiss mortgage at a fixed rate of interest, and therefore does not consider the impact of interest rate risk to be material to its results or operations and accordingly no sensitivity analysis is shown.

(a) Credit risk

The impairment provisions for financial assets are based on assumptions about risk of default and expected loss rates. The Group uses judgement in making these assumptions and selecting the inputs to the impairment calculation based on the Group's past history and existing market conditions as well as forward-looking estimates at the end of each reporting period.

There were no impairment losses recognised in profit and loss in the year and the expected credit losses are immaterial.

(b) Capital management

The Group manages its capital to ensure that all entities in the Group will be able to continue as a going concern while maximising the return to stakeholders. The capital structure of the Group consists of:

14. Ordinary share capital

		Number
Allotted, called up and fully paid	£m	of shares
Ordinary shares of 0.025p, each at 1 January 2019	0.2	665,387,145
Issued to satisfy Vectura employee share plans	—	1,512,754
Share consolidation	—	(51,275,466)
Share buyback programme – cancellations	—	(4,127,660)
Ordinary shares of 0.0271p, each at 31 December 2019	0.2	611,496,773

On 10 October 2019, the Group announced that the Board had approved a share buyback programme to return up to £10m to shareholders. As at 31 December 2019 £3.5m of capital was returned to shareholders at a weighted average price of 85.7p per share. The share buyback programme is expected to be completed in the first quarter of 2020. Directly attributable costs of £0.1m have been expensed to equity.

At the general meeting on 10 October 2019, shareholders approved the proposed distribution of a 6p per share dividend totalling £39.9m. Refer to note 9 “Special dividend paid to shareholders”.

Following the special dividend payment, a share consolidation took place. The weighted average number of shares calculation is adjusted prospectively in 2019 (12 shares for every 13 held; nominal value now 0.0271p).

During the year, the Group allotted 1,512,754 (2018: 1,561,183) ordinary shares related to employee share option awards.

15. Cash flow information

Cash generated from operating activities

	2019	2018
	£m	£m
Cash flows from operating activities		
Loss after taxation	(22.1)	(88.2)
Adjustments		
Net tax credit	(4.0)	(16.6)
Amortisation and intangible asset impairment	53.6	127.0
Depreciation and fixed asset impairment	10.6	5.8
Net finance income	(0.9)	(0.8)
Share-based payments (including those in exceptional items)	3.2	3.7
Increase in inventories	(1.3)	(2.0)
Increase in trade and other receivables	(6.0)	(1.9)
(Decrease) /increase in trade and other payables	(13.9)	7.2
Loss from associates	—	0.2
Other non-cash items	0.1	0.7
Total adjustments	41.4	123.3
Cash generated from operating activities	19.3	35.1

Analysis of movement in financial liabilities

	2019		2018	
	£m	£m	£m	£m
At the beginning of the period		4.0		4.1
Adoption of IFRS 16		4.7		—
Repayments of property mortgage	(0.1)		(0.3)	
Net repayment of obligations under finance leases	(1.1)		—	
Total changes from financing cash flows		(1.2)		(0.3)
Interest expense		0.2		0.1
Foreign exchange movements		(0.1)		0.1
At the end of the period		7.6		4.0

Financial liabilities relate to a Swiss property mortgage secured on the Swiss R&D facility and finance lease liabilities recognised under IFRS 16.

16. Contingent assets

In accordance with the requirements of IAS - 37 Provisions, Contingent Liabilities and Contingent Assets, a possible asset that arises from past events, and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the entity is disclosed, as a contingent asset.

GSK patent enforcement

As at 31 December 2019, potential assets estimated to be \$129.4m (2018: nil) are not recognised in the financial statements, but are disclosed as contingent as the existence of these assets is dependent on the outcome of legal proceeding in the US.

In the May 2019 jury trial in the US, the Group's US patent was found not invalid and infringed by GlaxoSmithKline's US sales of three Ellipta® products. The jury awarded Vectura \$89.7m in damages for the period from August 2016 through to December 2018, based on 3% of US sales of these products. The jury also found that GSK's infringement was wilful, following post-trial motions, the 3% royalty rate was in effect confirmed as applicable until patent expiry in mid-2021. This is calculated to be an additional \$33m from January 2019 to December 2019. A further \$6.7m of interest was also awarded.

GSK has appealed the decision and the outcome of this appeal is expected by Q1 2021. Whilst the outcome of the trial was favourable, until the outcome of the appeal is known, all potential assets related to this (including a potential deferred tax asset on future income against brought forward trading losses) remain unrecognised.

Supplier rebate

As at 31 December 2019, the Group was due a rebate of £3.6m (2018: nil) from one supplier. The methodology used to calculate the rebate has been disputed by the supplier, which results in uncertainty over the receipt of the rebate. Until this dispute is resolved, the rebate will not be recognised as an asset.

17. New accounting standards - IFRS 16 Leases

The Group has initially adopted IFRS 16 Leases from 1 January 2019. Historically, the Group has only entered into material leases relating to commercial properties at its operating sites in the UK.

Previously, under IAS 17, leases were classified as operating leases with annual rental and service charges recognised in the Consolidated income statement on an accruals basis over the lease terms and no assets were recognised on the balance sheet. However, IFRS 16 introduced a single, on-balance sheet model for lessees and, as a result, the Group has recognised right-of-use assets representing its right to use these assets and lease liabilities representing its obligations to make lease payments.

Identification of leases

The definition of a lease under IFRS 16 has only been applied to contracts entered into or changed on or after 1 January 2019. On transition, the practical expedient to grandfather the assessment of which transactions are leases has been taken such that IFRS 16 has only been applied to contracts previously identified as leases. Contracts not considered as leases under IAS 17 have not been reassessed.

As a lessee the Group has identified leases for the Group's premises located at Chippenham, Cambridge Science Park and Grosvenor Gardens, London, which were previously considered operating leases. Additionally, the Group's onerous contract provision for a lease in Switzerland was de-recognised and a finance lease liability recognised in its place. The corresponding right-of-use asset is fully impaired.

The modified retrospective approach to transition

The Group has applied IFRS 16 using the modified retrospective approach, under which the cumulative effect of initial application is recognised in retained earnings at 1 January 2019 and accordingly comparative information for 2018 is not restated. Additionally, the disclosure requirements in IFRS 16 have not generally been applied to comparative information, including alternative performance management information.

Lease liabilities are initially measured at the present value of the remaining lease payments, discounted at an applicable incremental borrowing rate. The interest rate implicit in the lease cannot be readily determined and as a result the incremental borrowing rate has been used which has been obtained from a financial institution privy to the facts, circumstances, location, security and term of each lease liability. This incremental borrowing rate, individually tailored to each lease, is in the range of 2-3%.

Right-of-use assets are measured at an amount equal to the lease liability, except where there is considered to be a significant difference between the lease liability and the asset value calculated as though IFRS 16 had always been applied.

The right-of-use assets are subsequently depreciated using the straight-line method from the commencement day to the end of the lease term. In addition, the right-of-use asset is periodically reduced by impairment losses, if any, and adjusted for certain remeasurements of the lease liability.

Practical expedients on transition

The Group has used the following practical expedients when applying IFRS 16 to leases previously classified as operating leases under IAS 17:

- Used the transitional discount rate as if it had always applied in the past
- Used hindsight when determining the lease term which previously contained renewal options
- Excluded initial direct costs from measuring the right-of-use asset at the date of initial application
- Adjusted the right-of-use assets by the amount of IAS 37 onerous contract provisions immediately before the date of initial application, as an alternative to an impairment review

In respect of the six month rolling lease arrangement in Germany, the Group has utilised the exemption not to recognise right-of-use assets and liabilities for leases with less than 12 months of lease term on the transition date. Therefore, the cost of this lease will continue to be charged to the Consolidated income statement as rent on an accruals basis.

Impact on the financial statements

On transition to IFRS 16, the Group recognised right-of-use assets for its three UK property leases and the associated additional lease liabilities, recognising the difference in retained earnings. Additionally, the Group's onerous contract provision for a lease in Switzerland was de-recognised and a finance lease liability recognised in its place. The corresponding right-of-use asset is fully impaired. The impact on transition is summarised in the table below:

	As reported 31 December 2018	Transitional adjustments	Opening balance 1 January 2019	Closing balance 31 December 2019
	£m	£m	£m	£m
Property, plant and equipment	57.8	3.6	61.4	55.1
Prepayments and other receivables	6.3	(0.3)	6.0	4.9
Provisions	(10.9)	1.0	(9.9)	(9.5)
Finance lease liabilities	-	(4.7)	(4.7)	(3.6)
Net assets and retained earnings	494.3	(0.4)	493.9	419.4

	1 January 2019 £m
Operating lease commitments at 31 December 2018	6.7
Effect of discounting using incremental borrowing rate at 1 January 2019	(0.2)
Break clause reasonably certain to be exercised	(1.8)
Lease liabilities recognised at 1 January 2019	4.7

Right-of-use assets

Right-of-use assets related to leased properties that do not meet the definition of investment property are presented as property, plant and equipment.

	Land and buildings £m
At 1 January 2019	3.6
Depreciation charge for the year	(0.9)
At 31 December 2019	2.7

Extension options

At the reporting date, the Group is exposed to future cash outflows that are not reflected in the measurement of lease liabilities. This includes exposure arising from extension options. The Group has included extension options in the Chippenham lease to provide operational flexibility. The extension options held are exercisable only by the Group and not by the lessors. The Group assesses whether it is reasonably certain to exercise the extension options if there is a significant event or significant changes in circumstances within its control. It is currently assumed that the extension option is not exercised.

The Group has estimated that the potential future lease payments, should it exercise the extension option, would result in an increase in lease liability of £1.8m.

18. Related-party transactions

On 21 June 2019, Vectura Group plc, the parent entity, sold its investment in a subsidiary, Vectura Group Investments Limited, to a fellow subsidiary Vectura Group Services Limited. The transaction was performed at £147.6m book value in accordance with s845 of the Companies Act 2006 and settled one-third for cash and two-thirds for a loan receivable. On disposal of the investment in Vectura Group Investments Limited, associated Group merger reserves of £125.1m were released to retained earnings, one-third being considered realised and two-thirds considered unrealised until such time in the future that the debtor is repaid.

On 30 June 2019, Vectura's CEO James Ward-Lilley stepped down and left the Group. Remuneration related to his services and departure is provided in the Remuneration report.

Remuneration of key management personnel

The remuneration of the Directors, who are the key management personnel of the Group, was £3.0m and is set out below:

	Year ended 31 December 2019 £m	Year ended 31 December 2018 £m
Short-term employee benefits	1.4	0.8
Annual incentive plan	0.7	0.7
Non-Executive Directors' fees	0.6	0.5
Post-employment benefits	0.1	0.1
Other	0.2	0.3
Total remuneration of key management personnel	3.0	2.4

Please refer to the Remuneration report for the remuneration of each Director. The Remuneration Report only includes Directors who held office in 2019.

19. Post balance sheet events

Since 31 December 2019, a further 6,859,255 shares have been repurchased as part of the £10.0m share buyback at a weighted average price of 90.64p per share. As at the date of these financial statements a total of £9.8m of the £10.0m have been repurchased, with associated costs of £0.1m, at a weighted average price of 88.79p. A second £10.0m share buyback programme is planned to commence in Q2 2020.

20. Risks and uncertainties

During the year, the Directors carried out a robust assessment of the principal risks and uncertainties facing the Group, including those that would threaten its business model, future performance, solvency, liquidity and viability.

The Group is transitioning its business model towards offering development services where a smaller proportion of the overall contract value is delivered through contingent milestones. This new business model is lower risk and provides for a smoother revenue profile. Following the shift to the CDMO business model, a new principal risk of “Failure to win new customer contracts for development services and execute these profitably” has been added.

In addition, in recognition of the importance of IT to the Group and increased regulation around data privacy, a new principal risk has been added being “Failure to protect critical and sensitive data and systems”.

The principal risk of “Failure or delay in partnering VR647 for Phase III development” materialised in 2019. Accordingly, this risk is no longer a principal risk. The principal risk of “Failure to launch VR315 (US) in a competitive timeframe” is decreasing, following the resubmission to the FDA in November 2019 and Sandoz discontinuing development of its generic version in 2020.

The principal Group risks are summarised as follows:

Brexit specific risks

- Short term supply chain disruption from the UK exiting the implementation period on 31 December without agreeing a beneficial trading relationship with the EU (a “hard Brexit”)
- Adverse regulatory changes resulting in higher operating costs over the short, medium and longer term

Non-Brexit risks

- Failure to win new customer contracts for development services and execute these profitably
- Supply chain disruption
- Failure to launch VR315(US) in a competitive timeframe
- Failure of partners to deliver on their obligations
- Failure or delay in achieving development milestones required to advance the generic product pipeline
- Failure to develop the FOX® nebuliser platforms to secure future growth in new customer contracts
- Changes in the regulatory, operating or pricing environment
- Failure to attract or retain talent/key personnel
- Failure to protect intellectual property
- Failure to protect critical and sensitive data and systems

A summary of all the Group’s principal risks which are monitored by the Board will be included in the Annual Report for the year ended 31 December 2019.

¹ Adjusted EBITDA is a non-IFRS measures which is calculated as operating loss, adding back amortisation and impairment, depreciation, share-based payments and exceptional items. A reconciliation of operating loss to adjusted EBITDA is presented in note 5 to the financial statements.

² Consolidation of the CDMO industry: opportunities for current players and new entrants September 2017.

³ IQVIA SMART MIDAS constant currency sales. Royalties payable by partners to the Group are based on agreed contractual definitions of net sales, which differ from IQVIA reported sales and may include other adjustments or deductions.