

Annual Report 2019

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We are a science-led global healthcare company

Our purpose

To improve the quality of human life by helping people do more, feel better, live longer.

Our goal

To become one of the world's most innovative, best-performing and trusted healthcare companies.

Our strategy

To bring differentiated, high-quality and needed healthcare products to as many people as possible, with our three global businesses, scientific and technical know-how and talented people.

Our long-term priorities

Our priorities are underpinned by our ambition to build a more performance-focused culture, aligned to our values and expectations.

Innovation

We invest in scientific and technical excellence to develop and launch a pipeline of new products that meet the needs of patients, payers and consumers.

Performance

We deliver growth-based performance by investing effectively in our business, developing our people and executing competitively.

Trust

We are a responsible company and commit to use our science and technology to address health needs, make our products affordable and available and to be a modern employer.

Our values and expectations

Our values – patient focus, transparency, respect and integrity.

Our expectations – courage, accountability, development and teamwork.

Cautionary statement

See the inside back cover of this document for the cautionary statement regarding forward-looking statements.

Non-IFRS measures

We use a number of adjusted, non-IFRS, measures to report the performance of our business. Total reported results represent the Group's overall performance under IFRS. Adjusted results, pro-forma growth rates and other non-IFRS measures may be considered in addition to, but not as a substitute for or superior to, information presented in accordance with IFRS. Adjusted results and other non-IFRS measures are defined on pages 50 to 52 and reconciliations to the nearest IFRS measures are on pages 62 and 65.

We believe that Adjusted results, when considered together with Total results, provide investors, analysts and other stakeholders with helpful complementary information to understand better the financial performance and position of the Group from period to period, and allow the Group's performance to be more easily compared against the majority of its peer companies. These measures are also used by management for planning and reporting purposes. They may not be directly comparable with similarly described measures used by other companies.

Our business model

We have three global businesses that discover, develop and manufacture innovative medicines, vaccines and consumer healthcare products. Every day, we help improve the health of millions of people around the world.

Our operations span the value chain from identifying, researching, developing and testing ground-breaking discoveries, to regulatory approval, manufacturing and commercialisation.

We have over 99,000 employees across 95 countries with outstanding scientific and technical know-how and deep expertise in regulation, intellectual property and commercialisation. We also work with world-leading experts and form strategic partnerships to complement our existing capabilities.

Innovation is critical to how we improve health and create financial value. As a research-based healthcare company we rely on intellectual property protection to help ensure a reasonable return on our investments so we can continue to research and develop new and innovative medicines. In 2019 we invested £4.6 billion in R&D. In Pharmaceuticals and Vaccines we focus on science related to the immune system, human genetics and advanced technology. In Consumer Healthcare we leverage our scientific expertise and deep consumer insights to create healthcare products that meet consumer demands.

Our ability to launch new products successfully and grow sales from our existing portfolio is key to our commercial success. For patients and consumers we deliver transformational medicines, vaccines and consumer healthcare products. In 2019 that included 2.3 billion packs of medicines, 701 million vaccine doses and 4.2 billion consumer healthcare products.

As part of our capital allocation framework we invest in our three businesses and provide returns to shareholders in the form of dividends and share value growth. In 2019 we paid a dividend of 80p per share and delivered £5.1 billion of free cash flow.

We make a positive contribution to the communities in which we operate by creating employment, working with suppliers and paying tax. We offer a broad range of employee benefits, including preventative healthcare services, so that we are able to attract and retain the best people. By delivering on our purpose, the greatest contribution we make is to improve the health of people around the world with our medicines, vaccines and consumer healthcare products.

Pharmaceuticals

Our Pharmaceuticals business has a broad portfolio of innovative and established medicines in respiratory, HIV, immuno-inflammation and oncology. We are strengthening our R&D pipeline through a focus on immunology, human genetics and advanced technologies to help us identify transformational new medicines for patients.

 Read more on page 17

Turnover	£m
Respiratory	3,081
HIV	4,854
Immuno-inflammation	613
Oncology	230
Established Pharmaceuticals	8,776
Total	17,554

Vaccines

We are the world's largest vaccines company by revenue, delivering vaccines that protect people at all stages of life. Our R&D focuses on developing vaccines against infectious diseases that combine high medical need and strong market potential.

 Read more on page 23

Turnover	£m
Meningitis	1,018
Shingles	1,810
Influenza	541
Established Vaccines	3,788
Total	7,157

Consumer Healthcare

Our world-leading Consumer Healthcare business combines science and consumer insights to create innovative everyday healthcare brands that consumers trust and experts recommend. In 2019, we finalised an agreement with Pfizer to combine our two consumer healthcare businesses.

 Read more on page 27

Turnover	£m
Wellness	4,526
Oral health	2,673
Nutrition	1,176
Skin health	620
Total	8,995

Our business model continued

Preparing for the future

Investing in R&D and new products

In order to be successful, we are increasing investment in R&D and new products to deliver future growth. Since announcing our new approach to R&D in 2018, we have made significant progress to strengthen our pipeline, particularly in oncology. We now have 39 medicines and 15 vaccines in the pipeline, and in 2019 we had three major approvals, eight regulatory submissions, six positive read-outs from pivotal studies and we progressed four new assets into pivotal studies.

During 2019 we also completed transactions with Tesaro and with Merck KGaA, further strengthening our position in oncology, and initiated alliances to build out our platform technologies, in genomics with the University of California, and in cell therapy with Lyell Immunopharma.

The positive clinical data we are generating and the progress we have made to strengthen the pipeline underpins our decision to further increase investment in R&D over the next two years.

Creating two new companies

In early 2020, consistent with our strategic priorities and previous announcements, we started a two-year programme to prepare GSK for separation into two new leading companies: New GSK, a biopharma company, with an R&D approach focused on science related to the immune system, use of genetics and new technologies; and a new Consumer Healthcare company with category-leading power brands and innovation based on science and consumer insights.

Our intention remains to separate around three years from the close of the transaction that resulted in the formation of our new Consumer Healthcare Joint Venture, which was in July 2019.

The new programme will use the unique catalyst of separation to reset the capabilities and cost base for both companies, and help support delivery of the significant value creation opportunities we see in both New GSK and new Consumer Healthcare.

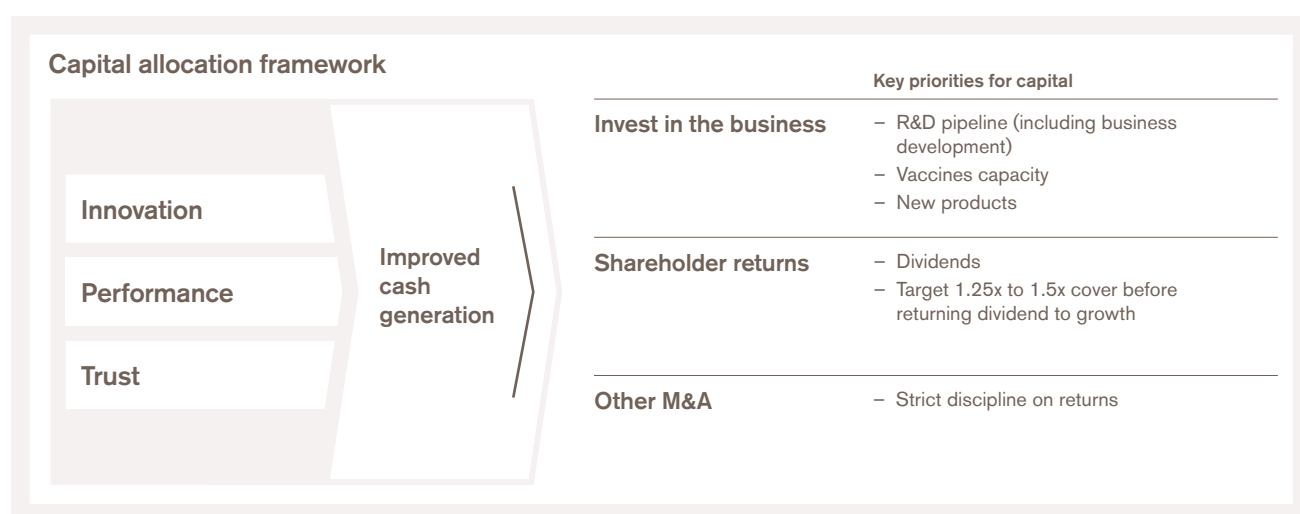
For New GSK, we see a clear opportunity to drive a common approach to R&D as science related to the immune system converges across both pharmaceuticals and vaccines. This will enable us to be even more effective in how we allocate our budget, share technical and scientific expertise and deliver our pipeline, regardless of modality.

Under the programme, we will also seek to improve our capabilities and create efficiencies in our global support functions; continue to simplify and focus our manufacturing network, ensuring our supply chain is ready to launch our new speciality medicines, and rationalise our portfolio through divestments.

For the new Consumer Healthcare company, this programme will support the building of key technology infrastructure and the expertise necessary to operate as a standalone company.

We believe that increased investment in our pipeline and new products, together with effective implementation of our new two-year programme, will set each new company up with strong foundations for future performance. The financial benefits, costs and reporting associated with the programme are set out on pages 63 and 64.

Capital allocation



Chairman's statement

I am delighted to introduce my first GSK Annual Report as Chairman. I am passionate about life sciences having worked in the industry for many years. It is a sector that I know can make a meaningful difference to patients and people around the world.

While GSK has a proud history of innovation, it was the exciting future ahead that made joining GSK irresistible. Not only do we have the opportunity to create the world's leading Consumer Health business but also to create a biopharma business, founded on today's leading scientific platforms. The Board and an outstanding management team led by Emma are determined to achieve this.

GSK delivered good operating performance in 2019 with growth in sales and earnings and good cash generation. Emma and her team are successfully focused on strengthening the pipeline and delivering strong commercial execution. This is evident in the contribution to growth from new products in these results.

Innovation

2019 saw good progress on the Group's priority to strengthen its pharmaceuticals pipeline, particularly in oncology, with eight filings and four assets moved into pivotal trials. The Board was particularly pleased to see positive data came from assets acquired through the Tesaro transaction.

The distinctive new approach to R&D, to focus on the immune system, the use of genetics and advanced analytical technologies, is also advancing with the formation of partnerships including with the University of California, 23andMe and Lyell and the attraction of new talent into the organisation. Over the longer term, this new approach promises to deliver a more productive R&D organisation delivering a higher number of differentiated medicines. This is an area the Board Science Committee is working closely with management on.

In my first few months, I have had many conversations with shareholders. I am pleased to report strong support for the strategic direction of the company and for the intention to separate into two new companies. To successfully deliver this the Group has initiated a new programme to help prepare for separation. Consequently, we have established a new Board committee, to work closely with management and provide support and oversight over the next two years.

Capital allocation

The Board supports management's clear framework for capital allocation which prioritises investment in the pharmaceuticals pipeline and building vaccine supply capacity. Disciplined support of business development opportunities is also part of the framework. Of course, the Board are also mindful of returns to shareholders and we returned 80p per share in 2019 as expected. Total shareholder return in 2019 was 25%.

Environment, social and governance (ESG)

With 2019 the first year of required compliance with the revised UK Corporate Governance Code, and with the increased emphasis on the value of ESG factors to overall performance, I have been pleased to find GSK's purpose, strategy and priorities well placed to deliver long-term value for society and shareholders. That we will need to do more and give greater prominence to what we are doing, is clear, but we start from a good place.

GSK has a strong foundation in global health innovation and this continues to play an important role. Promising data on our candidate TB vaccine and recognition for GSK's leadership in antimicrobial resistance, a major global health threat is good demonstration of this. Access and affordability of medicines is a critical issue for the industry and society, and the company continues to be focused on making its products affordable and available through responsible pricing and strategic access programmes and partnerships.

Tackling climate change will require action from everyone and GSK is committed to playing its part. The company is delivering well on reducing its carbon footprint in line with the Paris Agreement, and is assessing the opportunities and risks that the transition to a low carbon economy presents.

Board changes

We have made progress on searching for Judy Lewent's successor as Chair of the Audit & Risk Committee.

I am delighted that Judy has agreed to stay for a further year to facilitate a transition before stepping down from the Board at the 2021 AGM. Whilst I am mindful that the 2018 UK Corporate Governance Code indicates that Non-Executive Directors should not serve for more than nine years, I firmly believe that a smooth transition is in the best interests of the company and shareholders.

As is set out in more detail in the section on Board governance, we have re-evaluated our priorities and the Board committee architecture to be able to support and oversee the creation of two outstanding new organisations.

During the year Sir Philip Hampton stood down from the Board as anticipated in last year's Annual Report, and Iain Mackay became our Chief Financial Officer, replacing Simon Dingemans. I'd like to take this opportunity to thank Philip and Simon for their service to GSK.

Finally, my thanks go to all of GSK's employees, partners, shareholders and customers for their support and warm welcome.



Sir Jonathan Symonds
Chairman

CEO's statement

I am pleased with the progress we made in 2019 on our three long-term priorities of Innovation, Performance and Trust. We have strengthened our pipeline, improved operational execution and further reshaped the Group.

Growth in 2019 sales and earnings

Group sales grew 10% at actual exchange rates and 8% at constant exchange rates to £33.8 billion. This is a good performance, particularly when considering that 2019 was the first year of a generic version of *Advair* in the US.

New products drove the increase in sales, reflecting their innovation and our focus on commercial execution. *Shingrix*, our shingles vaccine, had a remarkable year with sales of £1.8 billion and is now the most successful biopharma launch of the last 10 years. The product also received the prestigious Prix Galien award for innovation. In Respiratory, we saw strong growth from *Trelegy* and *Nucala*, and in HIV, new two-drug regimens, *Dovato* and *Juluca*, contributed sales of £422 million.

The Total Group operating margin increased 2.8 percentage points but the Adjusted operating margin decreased 2.1 percentage points (CER) reflecting our decision to invest in these new products and our priority pipeline programmes. Total earnings per share were 93.9p, up 27% at actual exchange rates, 23% CER and Adjusted earnings per share grew 4% at actual exchange rates, 1% CER to 123.9p.

We achieved strong cash generation, with free cash flow of £5.1 billion. As expected, we announced a dividend of 80p in 2019 and we expect to do so again in 2020.

Landmark year for R&D

When I became CEO, I made strengthening our R&D pipeline our first priority. In 2019 we made significant progress. Under the leadership of Dr Hal Barron, our Chief Scientific Officer, we delivered three major approvals, eight regulatory filings for new medicines, six positive readouts from assets in pivotal studies and progressed four new assets into pivotal studies, three of which are biologics.

This progress reflects successful prioritisation and development of the pipeline in core areas such as HIV and Respiratory, and in fast emerging areas such as Oncology. Here, we were particularly pleased to see pivotal data for *Zejula*, for ovarian cancer, and belantamab mafodotin for multiple myeloma. We believe both these assets have the potential to transform how patients are treated for these underserved cancer types.

In all, we have 39 medicines and 15 vaccines currently in clinical development, and in 2020 we expect at least six potential product approvals. We also expect a substantial amount of proof-of-concept data including combination studies for various immuno-oncology agents and for innovative vaccines; for respiratory syncytial virus (RSV) and for chronic obstructive pulmonary disease (COPD).

We continue to build our capabilities in new platform technologies, notably with a pioneering new partnership with the University of California, to establish a state-of-the-art laboratory for CRISPR gene-editing technologies; and with the biotech company, Lyell, for development of new cell therapies. I am also pleased that our partnership with 23andMe is progressing well. We have now identified eight new targets to work on together in immunology, oncology, neurology and cardiovascular disease.

Preparing for the future

Delivering innovation is our first priority, and our recent data readouts, together with the progress we have made to strengthen the pipeline, underpin our decision to further increase investment in R&D and our new products for long-term growth.

At the same time, we continue to focus on operational execution, including delivering a successful integration in Consumer Healthcare following completion of the transaction with Pfizer on 31 July 2019.

We are also now preparing for separation of the Group. As previously stated, our intention is to separate around three years from closing the transaction. We have therefore initiated a two-year programme to prepare two new companies: New GSK, a Biopharma company with an R&D approach focused on science related to the immune system, the use of genetics and advanced technologies; and a new Consumer Healthcare company with a world-leading portfolio of brands and scale.

Our new programme aims to use the unique catalyst we have of separation to set competitive capabilities and a cost base for both companies, and help to deliver the significant value creation for patients, consumers and shareholders.

Building Trust

GSK has consistently, and will continue to take action to make a broader contribution to society in addition to delivery of financial returns. In 2019 we made good progress across all of our Trust commitments, and we are well placed to respond to increasing investor interest in environmental, social and governance (ESG) performance. We were pleased to be ranked the top pharma company in the Dow Jones Sustainability Index for our sector.

CEO's statement continued

Most notable have been several recent initiatives related to global health and health security. Following the publication of excellent data for our candidate TB vaccine, in early 2020 we secured a ground-breaking agreement with the new Gates Medical Research Institute, to develop the vaccine for use in low-income countries. This new alliance reflects our aim to take a sustainable approach to global health, focusing our efforts and expertise on science and research, while partnering with others to ensure development and delivery. We also filed regulatory submissions for a new formulation of our latest HIV medicine, which will expand access for use by children in resource poor settings.

We were also pleased to see our science and research recognised through GSK's leadership of the Access to Medicine Foundation's 2020 antimicrobial resistance benchmark.

In February 2020, to support the global response to the outbreak caused by coronavirus (SARS-CoV-2), we formed collaborations with CEPI (Coalition for Epidemic Preparedness Innovations) and other institutions and companies to make our vaccine adjuvant technology available for the development of an effective vaccine against the virus.

In another area of our Trust agenda, we are working hard to reduce our environmental impact. Underpinned by five public targets, our goal is to reduce our impact by one quarter by 2030. In this report we also set out our approach to climate change risk, including our first voluntary disclosure using recommendations of the Taskforce for Climate-related Financial Disclosure (TCFD).

Our people and culture

We continue to work to develop a more performance-focused culture, with a strong emphasis on ethics and values. Building trust internally remains a key priority. Our regular employee survey helps us review our levels of employee engagement and we were pleased to achieve excellent engagement scores at all levels of the organisation over the course of last year.

We are also pursuing a broad agenda to promote inclusion and diversity. In 2019, female representation across the organisation increased, particularly at senior management level, and GSK was recognised in the Stonewall LGBT+ rights group, as a top global employer.

The significant progress we made in 2019 is due to the effort, talent and dedication of GSK people and all those we work with. I want to thank them for their enormous contribution and we count on them again in 2020.



Emma Walmsley

Chief Executive Officer

Financial performance

Total results

	2019		2018		Growth	
	£m	% of turnover	£m	% of turnover	£%	CER%
Turnover	33,754	100	30,821	100	10	8
Cost of sales	(11,863)	(35.1)	(10,241)	(33.2)	16	16
Gross profit	21,891	64.9	20,580	66.8	6	4
Selling, general and administration	(11,402)	(33.8)	(9,915)	(32.2)	15	13
Research and development	(4,568)	(13.5)	(3,893)	(12.6)	17	15
Royalty income	351	1.1	299	1.0	17	17
Other operating income/(expense)	689	1.9	(1,588)	(5.2)		
Operating profit	6,961	20.6	5,483	17.8	27	23
Net finance costs	(814)		(717)			
Profit on disposal of interest in associates	—		3			
Share of after-tax profits of associates and joint ventures	74		31			
Profit before taxation	6,221		4,800		30	25
Taxation	(953)		(754)			
<i>Tax rate</i>	<i>15.3%</i>		<i>15.7%</i>			
Profit after taxation	5,268		4,046		30	26
Profit attributable to non-controlling interests	623		423			
Profit attributable to shareholders	4,645		3,623			
Earnings per share	93.9p		73.7p		27	23

How we performed

Cost of sales

Total cost of sales as a percentage of turnover was 35.1%, 1.9 percentage points higher at AER and 2.4 percentage points higher in CER terms. This primarily reflected an increase in the costs of Major restructuring programmes, the unwind of the fair value uplift on inventory arising on completion of the Consumer Healthcare Joint Venture with Pfizer and continued adverse pricing pressure in Pharmaceuticals, partly offset by a more favourable product mix in Vaccines.

Selling, general and administration

Total SG&A costs as a percentage of turnover were 33.8%, 1.6 percentage points higher at AER and 1.6 percentage points higher at CER. This included increased significant legal charges arising from the settlement of existing matters and provisions for ongoing litigation, increased investment resulting from the acquisition of Tesaro and greater promotional product support, particularly for new launches.

Research and development

Total R&D expenditure was £4,568 million (13.5% of turnover), up 17% AER, 15% CER. This reflected a significant increase in study and clinical trial material investment in Oncology and increased spending on the progression of key non-Oncology assets, partly offset by savings from the early phase portfolio reprioritisation in late 2018.

Other operating income/(expense)

Net other operating income primarily reflected the profit on disposal of rabies and tick-borne encephalitis vaccines and a number of other asset disposals together with an increase in value of the shares in Hindustan Unilever Limited to be received on the disposal of *Horlicks* and other Consumer Healthcare brands.

Operating profit

Total operating profit was £6,961 million in 2019 compared with £5,483 million in 2018. Reduced remeasurement charges on the contingent consideration liabilities, no Consumer Healthcare put option charge, increased profits on disposals and an increase in value of the shares in Hindustan Unilever Limited to be received on the disposal of *Horlicks* and other Consumer Healthcare brands were partly offset by increased charges for Major restructuring and significant legal matters.

Tax

The charge of £953 million represented an effective tax rate on Total results of 15.3% (2018 – 15.7%) and reflected the different tax effects of the various Adjusting items.

Non-controlling interests

The allocation of Total earnings to non-controlling interests amounted to £623 million (2018 – £423 million). The increase was primarily due to an increased allocation of ViiV Healthcare profits.

Earnings per share

Total earnings per share was 93.9p, compared with 73.7p in 2018. The increase in earnings per share primarily reflected reduced remeasurement charges on the contingent consideration liabilities and put options, an increase in the value of the shares in Hindustan Unilever Limited to be received on the disposal of *Horlicks* and other Consumer Healthcare brands, a reduced effective tax rate and an increased share of after-tax profits of associates as a result of a non-recurring income tax benefit in Innoviva.

Financial performance continued

Total and Adjusted results

Total reported results represent the Group's overall performance.

GSK uses a number of Adjusted, non-IFRS, measures to report the performance of its business. Adjusted results and other non-IFRS measures may be considered in addition to, but not as a substitute for or superior to, information presented in accordance with IFRS. See page 50 for a fuller definition.

GSK believes that Adjusted results, when considered together with Total results, provide investors, analysts and other stakeholders with helpful complementary information to understand better the financial performance and position of the Group from period to period, and allow the Group's performance to be more easily compared against the majority of its peer companies. These measures are also used by management for planning and reporting purposes. They may not be directly comparable with similarly described measures used by other companies.

GSK encourages investors and analysts not to rely on any single financial measure but to review GSK's Annual Reports, including the financial statements and notes, in their entirety.

GSK is undertaking a number of Board-approved Major restructuring programmes in response to significant changes in the Group's trading environment or overall strategy, or following material acquisitions. Costs, both cash and non-cash, of these programmes are provided for as individual elements are approved and meet the accounting recognition criteria. As a result, charges may be incurred over a number of years following the initiation of a Major restructuring programme.

The Group has also initiated a two-year Separation Preparation programme to prepare GSK for separation into two new leading companies in biopharma and consumer healthcare.

GSK is committed to continuously improving its financial reporting, in line with evolving regulatory requirements and best practice.

GSK's reported results include five months of results of the former Pfizer consumer healthcare business from 1 August 2019. Pro-forma growth rates at CER have been calculated for 2019 including the equivalent five months of results of the former Pfizer consumer healthcare business in the comparative period, as more fully described on page 52.

Adjusting items	Total results £m	Intangible asset amortisation £m	Intangible asset impairment £m	Major restructuring £m	Transaction- related £m	Divestments, significant legal and other items £m	Adjusted results £m
Turnover	33,754						33,754
Cost of sales	(11,863)	713	30	658	383	–	(10,079)
Gross profit	21,891	713	30	658	383	–	23,675
Selling, general and administration	(11,402)		4	332	104	247	(10,715)
Research and development	(4,568)	64	49	114		2	(4,339)
Royalty income	351						351
Other operating income/(expense)	689			1	(142)	(548)	–
Operating profit	6,961	777	83	1,105	345	(299)	8,972
Net finance costs	(814)			5		(1)	(810)
Share of after-tax profits of associates and joint ventures	74						74
Profit before taxation	6,221	777	83	1,110	345	(300)	8,236
Taxation	(953)	(156)	(17)	(208)	(124)	140	(1,318)
<i>Tax rate</i>	15.3%						16.0%
Profit after taxation	5,268	621	66	902	221	(160)	6,918
Profit attributable to non-controlling interests	623				164		787
Profit attributable to shareholders	4,645	621	66	902	57	(160)	6,131
Earnings per share	93.9p	12.6p	1.3p	18.2p	1.2p	(3.3)p	123.9p

Intangible asset amortisation and impairment

Amortisation and impairment of intangible assets and goodwill excludes computer software.

Major restructuring

Major restructuring costs, which include impairments of tangible assets and computer software (under specific Board-approved programmes that are structural, of a significant scale and where the costs of individual or related projects exceed £25 million), including integration costs following material acquisitions.

Transaction-related

Transaction-related accounting or other adjustments related to significant acquisitions.

Divestments, significant legal and other items

Proceeds and costs of disposals of associates, products and businesses; significant legal charges (net of insurance recoveries) and expenses on the settlement of litigation and government investigations; other operating income other than royalty income, and other items.

Financial performance continued

Adjusted results

	2019		2018		Growth	
	£m	% of turnover	£m	% of turnover	£%	CER%
Turnover	33,754	100	30,821	100	10	8
Cost of sales	(10,079)	(29.9)	(9,178)	(29.8)	10	10
Gross profit	23,675	70.1	21,643	70.2	9	7
Selling, general and administration	(10,715)	(31.7)	(9,462)	(30.7)	13	12
Research and development	(4,339)	(12.9)	(3,735)	(12.1)	16	14
Royalty income	351	1.1	299	1.0	17	17
Operating profit	8,972	26.6	8,745	28.4	3	–
Net finance costs	(810)		(698)			
Share of after-tax profits of associates and joint ventures	74		31			
Profit before taxation	8,236		8,078		2	(1)
Taxation	(1,318)		(1,535)			
<i>Tax rate</i>	<i>16.0%</i>		<i>19.0%</i>			
Profit after taxation	6,918		6,543		6	3
Profit attributable to non-controlling interests	787		674			
Profit attributable to shareholders	6,131		5,869			
Earnings per share	123.9p		119.4p		4	1

How we performed

Cost of sales

Adjusted cost of sales as a percentage of turnover was 29.9%, 0.1 percentage points higher at AER and 0.5 percentage points higher at CER. On a pro-forma basis, Adjusted cost of sales as a percentage of turnover was 29.9%, 0.3 percentage points higher at CER. This primarily reflected continued adverse pricing pressure in Pharmaceuticals, partly offset by a more favourable product mix in Vaccines, largely due to the growth of *Shingrix* in the US.

Selling, general and administration

Adjusted SG&A costs as a percentage of turnover were 31.7%, 1.0 percentage point higher at AER and 1.0 percentage point higher on a CER basis. On a pro-forma basis, Adjusted SG&A costs as a percentage of turnover were 31.7%, 0.8 percentage points higher at CER, compared with 2018. This primarily reflected increased investment resulting from the acquisition of Tesaro and in promotional product support, particularly for new launches in Vaccines, Respiratory and HIV, partly offset by the continuing benefit of restructuring in Pharmaceuticals and the tight control of ongoing costs.

Research and development

Adjusted R&D expenditure was £4,339 million (12.9% of turnover), 16% higher at AER, 14% higher at CER than in 2018. On a pro-forma basis, Adjusted R&D expenditure grew 13%. This reflected a significant increase in study and clinical trial material investment in Oncology and increased spending on the progression of key non-Oncology assets, partly offset by savings from the early phase portfolio reprioritisation in late 2018.

Operating profit

Adjusted operating profit was £8,972 million, 3% higher at AER but flat at CER on a turnover increase of 8% CER. The Adjusted operating margin of 26.6% was 1.8 percentage points lower at AER, and 2.1 percentage points lower on a CER basis than in 2018. On a pro-forma basis, Adjusted operating profit was 3% lower at CER on a turnover increase of 4% CER. The Adjusted pro-forma operating margin of 26.6% was 1.9 percentage points lower on a CER basis than in 2018. The reduction in pro-forma Adjusted operating profit primarily reflected continuing price pressure and investments in R&D and promotional product support, partly offset by the benefit from sales growth, particularly in Vaccines, a more favourable mix in Vaccines and Consumer Healthcare and the continued benefit of restructuring.

Tax

Tax on Adjusted profit amounted to £1,318 million and represented an effective Adjusted tax rate of 16.0% (2018 – 19.0%), reflecting the impact of the settlement of a number of open issues with tax authorities.

Non-controlling interests

The allocation of Adjusted earnings to non-controlling interests amounted to £787 million (2018 – £674 million). The increase primarily reflected an increased allocation of Consumer Healthcare profits.

Earnings per share

Adjusted EPS of 123.9p compared with 119.4p in 2018, up 4% AER, 1% CER, with Adjusted operating profit flat at CER. The improvement primarily resulted from a reduced effective tax rate and an increased share of after-tax profits of associates, partly offset by increased net finance costs and a higher non-controlling interest allocation of Consumer Healthcare profits.

Our long-term priorities

Our long-term priorities are designed to create lasting value for patients, consumers and shareholders. 2019 was an important year of execution and we made good progress in delivering on our objectives.

Innovation

We invest in scientific and technical excellence to develop and launch a pipeline of new products that meet the needs of patients, payers and consumers.

2019 objectives

- Deliver continued strong sales of *Trelegy Ellipta*, *Nucala*, HIV two-drug regimen and *Shingrix*
- Continue to strengthen pipeline through execution of new R&D approach, accelerating priority assets and optimising recent strategic business development transactions

2019 progress

- Delivered strong sales of all key launches, notably *Shingrix* with sales of £1.8 billion
- Strengthened pipeline with eight filings, six positive pivotal trial results, and four priority assets accelerating to phase II/III
- Accelerated oncology pipeline with regulatory submissions for *Zejula* in first-line maintenance ovarian cancer, belantamab mafodotin in relapsed/refractory multiple myeloma, and dostarlimab in endometrial cancer
- Developed advanced technology capability with significant hires and partnerships with world-leading scientists

2020 priority objectives

- Deliver Innovation sales with excellent commercial, R&D and supply chain execution
- Further accelerate and strengthen pipeline with six potential approvals expected

Performance

We deliver growth by investing effectively in our business, developing our people and executing competitively.

2019 objectives

- Continue to drive sales growth and operational performance
- Successful integration of Tesaro
- Deliver restructuring benefits
- Develop plan for integration of Pfizer's consumer healthcare business
- Accelerate capability building in priority areas including digital, data and analytics

2019 progress

- Group sales £33.8 billion, up 10% AER, 8% CER, pro-forma +4%
- Free cash flow £5.1 billion
- Total earnings per share 93.9p (up 27% AER, 23% CER), Adjusted earnings per share 123.9p (up 4% AER, 1% CER)
- Successful integration of Tesaro and built capability in priority areas, notably specialty therapies, including oncology
- Continued delivery on restructuring benefits to support investment in innovation and new launches
- Completed Consumer Healthcare JV with Pfizer and on track to deliver synergies
- Invested in new talent to build capability

2020 priority objectives

- Prioritise spending to deliver growth and return on investment
- Successful Consumer Healthcare JV integration, including driving growth and delivering synergies
- Deliver further capability building in specialty Pharmaceuticals
- Deliver two-year programme to prepare GSK for separation into two new companies

Trust

We are a responsible company. We commit to use our science and technology to address health needs, make our products affordable and available and be a modern employer.

2019 objectives

- Focus on supply service levels, execute portfolio and network simplification
- Deliver progress on Trust commitments
- Progress global health research in TB and HIV
- Deliver modern employer programmes to empower employees to be themselves, feel good and keep growing at GSK

2019 progress

- Filed FDA and EU regulatory submissions for paediatric dolutegravir
- Released positive final phase II results for our candidate TB vaccine and built a collaboration with the Bill & Melinda Gates Medical Research Institute for the continued development of the asset for developing countries – which was finalised and announced in January 2020
- Continued to embed modern employer programmes with progress in engagement, diversity and inclusion, employee health and wellbeing, and development
- Ranked top in Dow Jones Sustainability Index for the pharmaceuticals industry

2020 priority objectives

- Continue to deliver on-time in-full supply of our products
- Build reputation with a focus on Innovation
- Deliver progress on Trust commitments

Culture

We are committed to developing the right culture to drive and maximise performance. We are empowering and enabling everyone at GSK to live our values and expectations, and changing the way we work to accelerate delivery of our long-term priorities.

Principal risks

Our principal risks are: patient safety; product quality; financial controls and reporting; anti-bribery and corruption; commercial practices; privacy; research practices; third party oversight; environment, health and safety, and sustainability; information security; and supply continuity. Our risk management framework is designed to support our long-term priorities. See pages 43 to 46 and 275 to 287.

Our culture

We are building a more performance-focused culture, aligned to our values and expectations, that will help us achieve our purpose and power our long-term priorities.

GSK has a well-established purpose – to help people do more, feel better, live longer – together with strong values of patient focus, respect, transparency and integrity. We are extremely proud of how our purpose and values lead us as a company. However, our operating environment is changing rapidly and our stakeholders have increasing expectations of us.

We recognise that our culture must have a greater focus on performance and growth, while remaining firmly purpose-led and values-based. This necessary shift in culture is key to delivering our goal of becoming one of the world's most innovative, best performing and trusted healthcare companies.

Our expectations – courage, accountability, development and teamwork – sit alongside our values to help us develop the behaviours we need in our desired culture:

Courage: having high ambitions, setting an accelerated pace, smart risk taking where appropriate, making the right decisions assertively even when it is difficult, and speaking up when we see opportunities to improve or have a concern.

Accountability: taking ownership, having single point of accountability decision making, prioritising work that supports our strategy and delivering what we promise.

Development: prioritising people's development and encouraging them to ask for and give open and honest feedback, so we continually grow as individuals, teams and as an organisation.

Teamwork: ensuring our people work better together on aligned objectives and understand how they contribute to our long-term priorities, encouraging diversity of thought and inspiring each other; holding each other to account.

Enabling culture change

Culture change is a long-term commitment and requires focus at every level of the company:

- We have made company-wide changes to our incentive schemes, governance and ways of working, including implementing key performance indicators and standardised performance reviews.
- We continue to strengthen how our values and expectations are embedded into our recruitment processes, leadership development, employee training and performance evaluation.
- Across the whole company there are two broad themes we are focusing on: clearer accountability and better decision-making to drive pace and performance, and an open, honest and straight-talking culture where our people trust their leaders and feel confident to share their views. Each of the businesses have set clear objectives to drive the culture shift needed in their area.
- Our leaders and managers should be role models of our desired culture. This starts with having the right people, and we have made significant changes to our top 125 leaders, with 29% new appointments (internal movement and external hires) in the last year. We have invested significantly in building High Performing Teams (HPT), including our Corporate Executive Team, taking part in ongoing HPT development programmes.

Tracking progress

We track our cultural change with a range of indicators and the Board receives regular updates. In addition to specific lead indicators by business area, we measure employee feedback across the company through our global employee survey. This focuses on (a) our progress on embedding a culture that prioritises Innovation, (b) our discipline, competitive edge, speed and agility to deliver growth orientated Performance, (c) employee Trust, including pride in our purpose and progress on our Modern Employer priorities and (d) how well the values and expectations are embedded into our ways of working.

We also measure progress on key drivers of culture:

- (1) strength of talent and succession plans for key roles and
- (2) effectiveness of our global people manager population through our global One80 survey (see page 36). We use our employee engagement scores as an additional indicator of our progress in embedding a culture in which our employees are inspired by our purpose and are working together in the best way so that we meet our long-term priorities, bring competitive returns to shareholders, and help more patients and consumers.

Key performance indicators

We track progress against our long-term priorities with ten operating key performance indicators. These measure our performance at a Group level and across our three businesses.

Our operating key performance indicators (KPIs) are reviewed regularly by our Corporate Executive Team and the Board. Our employees are updated on our progress against them every quarter. Our performance system aligns employees' bonuses with a relevant subset of our ten indicators and the remuneration policy used to reward the performance of our executives also includes measures linked to our KPIs (see pages 117, 123 and 125).

We track all of our operating KPIs internally, and below we provide performance data for those that we report externally. Due to commercial sensitivities we do not publish data for all operating KPIs (indicated as n/r). We use a number of adjusted, non-International Financial Reporting Standards (IFRS) measures to report our business performance, as described on pages 50 to 52. These include Adjusted results, free cash flow and CER growth rates. Non-IFRS measures may be considered in addition to, but not as a substitute for or superior to, information presented in line with IFRS.

Innovation

	2019	2018	2017
Innovation sales ^R			
Pharmaceuticals and Vaccines – sales of products launched in the last five years	£3.8bn	£1.7bn ^a	£0.4bn ^a
Consumer Healthcare – sales from products which are new to a market in the last three years as a % of total sales	12%	11%	13%
Pipeline value and progress – the value of products in our pipeline and R&D milestones achieved	n/r	n/r	n/r

Performance

	2019	2018	2017
Group turnover ^R – up 10% AER, 8% CER	£33.8bn	£30.8bn	£30.2bn
Profit ^R			
Total operating profit – up 27% AER, 23% CER	£7.0bn	£5.5bn	£4.1bn
Adjusted operating profit – up 3% AER, flat CER	£9.0bn	£8.7bn	£8.6bn
Total operating margin	20.6%	17.8%	13.5%
Adjusted operating margin	26.6%	28.4%	28.4%
Free cash flow ^R – down 11%	£5.1bn	£5.7bn	£3.5bn ^b
Market share – our market share in relation to our competitors	n/r	n/r	n/r
Top talent and succession plans for key roles – our most talented employees in key roles with succession plans in place	n/r	n/r	n/r

Trust

	2019	2018	2017
Employee feedback – employee engagement scores from our global employee survey	78%	78%	79%
Supply service level – percentage of orders delivered on-time and in-full	n/r	n/r	n/r
Corporate reputation – reputation index among stakeholders and informed public measured globally and in top 13 markets	n/r	n/r	n/r

^R Linked to Executive LTI awards and bonus, see pages 117, 123 and 125.

^a Comparative information reflects sales of those products that meet the definition for 2019.

^b Revised to include proceeds from the sale of intangible assets.

n/r Not reported externally.

Industry trends

The healthcare industry operates in a rapidly changing environment with strong growth potential. Our strategy is designed to respond to this context by maximising opportunities and mitigating risks.

We are operating in a dynamic environment, shaped by fast-changing and interdependent global trends. We continue to be responsive to this changing environment through monitoring industry trends and engaging with key stakeholder groups (see pages 15 to 16).

The global healthcare industry

Global growth is projected to rise from an estimated 2.9% in 2019 to 3.3% in 2020, a downward revision of 0.1% from the previous World Economic Outlook. Rising geopolitical tensions have increased uncertainty about the future of the global trading system and international cooperation, taking a toll on business confidence and investment decisions.¹

The global healthcare market continues to grow, with worldwide pharmaceutical sales totalling £801 billion from September 2018-2019, up 6.4%. North America remains the largest pharmaceutical market with a 48% share of global sales, with Europe representing 21%. China is the second largest individual country for pharmaceutical sales, representing 8.5% of global sales.² Global vaccine sales rose to approximately £23.8 billion in 2019, up around 15% from 2018.³ The global consumer healthcare market is estimated to be approximately £140 billion.³

The healthcare sector remains intensely competitive, with companies increasingly pursuing mergers, acquisitions and partnerships to strengthen pipelines and portfolios. 2019 saw significant M&A activity in oncology and speciality care, together with several company mergers, most notably with Bristol-Myers Squibb acquiring Celgene and AbbVie acquiring Allergan.

Intellectual property (IP) protection is important to continue to incentivise innovation. This helps research-based healthcare companies ensure a reasonable return on their investments and allows them to continue to conduct research and develop new and innovative medicines. Once IP protection expires, or if challenges to a patent are upheld, generic competitors can rapidly capture a large share of the market. Vaccines and other biologics do not face such exposure to generic competition through these 'patent cliffs'. They require high capital investment due to the highly technical manufacturing processes, and complex regulatory and quality requirements.

Global trends: opportunities and challenges

Changing demographics

Demographic change is increasing demand for both preventive and therapeutic healthcare products.

The world's population continues to grow. From an estimated 7.7 billion people worldwide in 2019, the global population is predicted to grow to 8.5 billion by 2030.⁴ Virtually all countries are experiencing population ageing, with the proportion of the world's population over 60 projected to nearly double between 2015 and 2050.⁵ More people are living in cities and affluence is growing, with the size of the global middle class projected to be approximately 4.9 billion people by 2030, up from 1.8 billion in 2009.⁶

Our response

These factors are all contributing to rising demand for healthcare, including in areas where we are focused such as oncology and respiratory, as well as pressuring healthcare systems to restrain spending growth. As part of our Innovation priority we are investing in developing and launching a pipeline of new products that meet the changing needs of patients, payers and consumers (see pages 17 to 21 and 23 to 25). We ensure our products serve a broad demographic through our global health and pricing strategies (see pages 30 to 34).

1 IMF World Economic Outlook Update

2 IQVIA data

3 Internal data

4 https://population.un.org/wpp/Publications/Files/WPP2019_Highlights.pdf

5 <https://www.who.int/news-room/fact-sheets/detail/ageing-and-health>

6 http://oecdobserver.org/news/fullstory.php/aid/3681/An_emerging_middle_class.html

Industry trends continued

Advances in science and technology

Rapid advances in innovative science and technology are transforming the sector. Cell therapy technologies, where cells become living medicines, are changing the definition and profile of medicine. New advances in functional genomics, such as CRISPR, are changing what is possible in drug discovery and will enable researchers to pinpoint novel targets with a higher probability of success. The scale of data from genetic libraries and genomics requires artificial intelligence (AI) to interpret, and machine learning helps to predict possible new pathways to a medicine. The growth in data is also improving the healthcare ecosystem and helping to build a virtuous cycle of data, technology and R&D. Regulators and purchasers can use these technologies to track product effectiveness, while consumers relying on digital tools to manage their health and understand their genetic profiles are helping research efforts by building a better understanding of genetics and disease.

Our response

The application of advanced technologies is central to our R&D approach, as part of our Innovation priority. We are developing core capabilities in AI, machine learning, functional genomics and cell therapy to accelerate the pace at which we identify and develop novel targets and medicines, including creating the Laboratory for Genomics Research, a state-of-the-art lab to apply CRISPR gene editing technologies to drug discovery. We have made significant investments to help us realise the potential of these cutting-edge technologies and, ultimately, strengthen our pipeline. We are also attracting the best scientific minds to work for us and with us, by entering into ambitious and creative collaborations, such as our partnership with Lyell Immunopharma, to enhance our cell and gene therapy programme and with 23andMe, with which we have eight ongoing joint programmes (see page 21).

Pricing and access

The pricing of healthcare products and the increasing pressure to fund high-cost, innovative therapies continues to attract significant attention from governments and the public, with calls for better transparency on how prices are set and a greater emphasis on value and health outcome-based pricing. Government and payer budgets remain subject to increasing review as demand for healthcare grows and the healthcare policy environment remains fluid, with payers introducing increasingly restrictive cost-control mechanisms.

In the US, the government has proposed several drug pricing initiatives, including a new 'international pricing index', in order to reduce healthcare costs for patients and the government. While there are still significant potential obstacles to the implementation of national drug pricing proposals, multiple states have also passed legislation or regulation that increases oversight, transparency and/or control of pharmaceutical prices. Organisations that assess the value of pharmaceutical products relative to price and health outcomes, such as the Institute for Clinical and Economic Review, are also rising in prominence in the US.

In Europe, while the majority of markets have established price control processes in place, national healthcare authorities are continually looking to sharpen these tools in response to changing market dynamics. Disparity in both access and supply availability across EU markets has been a topic of recurrent debate in recent years. Member states have repeatedly raised serious concerns over the problem of medicines shortages. They call for transparency of prices, R&D costs and public subsidies, pushing to roll back existing flexibilities with EU legislation and/or create additional hurdles for market access.

In Europe and many Emerging Markets, international reference pricing (IRP) continues to gain traction, with over 70 markets now using this as a primary lever for pricing control. Increasingly, countries are also cooperating on health technology assessments (HTAs) – the new EU HTA regulation proposal would centralise the clinical assessments of new medicines and medical devices.

Beyond Europe many countries are implementing various forms of HTA. In China several policies have been proposed to boost the quality, efficiency and value of healthcare delivery and HTA implementation is among the key initiatives proposed. Products with high clinical value, particularly those seeking a premium price, will likely be prioritised for HTA review, especially in oncology and other critical disease areas. While accelerating access to innovation, China is also implementing cost containment measures to balance its healthcare budget. Saudi Arabia is establishing a new, independent and evidence-based HTA entity to help it maximise health gains through efficient use of resources. Finally, in Japan the pharmaceutical industry remains concerned about the proposed use of HTA for pricing control rather than value assessment.

Our response

We aim to improve the health of millions of people each year by making our products available at responsible prices that are sustainable for our business. Getting this right is fundamental to both our Performance and Trust priorities. When setting the price of our medicines in developed markets, we apply a value-based approach to balance reward for innovation with access and affordability (see page 33). We aim to bring truly differentiated, innovative products that bring highly effective health outcomes for patients and payers, so that even those products with a high cost will bring value to patients and healthcare systems. By investing in genetics, genomics, big data and AI we are accelerating the pace at which we develop transformational medicines, prioritising those molecules with a higher probability of success – we know that genetically validated drug candidates are twice as likely to become registered medicines, improving the productivity of our R&D investment.

Industry trends continued

Regulatory environment

Healthcare is a highly regulated industry, reflecting public expectations that products comply to stringent levels of quality, safety and efficacy.

Governments continue to introduce and develop regulatory approaches to support the accelerated development and introduction of new medicines and to encourage pharmaceutical innovation. Regulatory authorities are exploring how to progress or adapt regulatory science to address new and potentially disruptive technologies, such as digital healthcare, cell and gene therapies, big data and real-world evidence. Work on cross-border harmonisation of pharmaceutical regulation is increasing through supranational bodies, such as the International Council for Harmonisation, the geographic scope of which continues to expand, including to emerging markets. This work is supporting the introduction and development of initiatives in which regulators from different jurisdictions share or co-operate in the assessment of regulatory submissions, for example the US Food and Drug Administration (FDA) is providing a framework for concurrent submission and review of oncology products with international partners.

Our response

GSK closely monitors and, where relevant and appropriate, engages in how we can improve regulation, particularly in the UK, Europe and the US. For example, as scientific innovation moves beyond the scope of current regulation and standards, we are working with the sector to engage with governments to explore new policies, processes and incentives that would support the discovery and delivery of medicines developed through emerging technologies and techniques (see page 16).

Societal expectations

Expectations of business are changing. As well as delivering financial returns, companies are expected to create value for a range of stakeholders through taking action on social and environmental issues. Some are calling for the purpose of business to be redefined, with groups like Business Roundtable, a leading business group in the US, saying a corporation exists to benefit all stakeholders, moving away from the long-standing endorsement of shareholder primacy.

In order to attract and retain the best talent companies need to rise to the expectations of a workforce that is motivated by delivering on a greater purpose. Employees who work for a company with a strong sense of purpose, and who feel connected to it, are three times more likely to thrive in what they do.¹

At the same time, investors are increasingly asking companies to articulate how they are managing a range of environmental, social and governance (ESG) risks and opportunities. Major institutional investors are publicly stating that they believe that ESG factors impact a company's long-term success and so are important to their investment decisions.

Companies are expected to contribute to the UN Sustainable Development Goals (SDGs), especially as we move into the final decade for their delivery by 2030. There is growing public demand for companies to play a role in managing climate change and mitigating climate risk, as well as address other environmental issues such as plastics, air pollution and water management. Companies are also under increasing pressure to address social issues such as human rights, inclusion and diversity and fair pay, both in direct operations and throughout the supply chain.

The pharmaceutical sector in particular has a trust deficit and remains under sustained scrutiny around sales and marketing practices and ethics and compliance. It is also facing additional reputational challenges related to issues like the opioid crisis in the US, as well as the growing momentum of the anti-vaccine movement in some regions.

Our response

Our Trust priority is designed to respond to multi-stakeholder expectations and prioritise the areas where we are positioned to have significant and sustainable impact. We set 13 public commitments to support our Trust priority in 2018 and are making good progress against them (see pages 30 to 42). We recognise that expectations are moving quickly and that we need to respond accordingly (see pages 15 to 16).

¹ Mercer 2018 Global Talent Trends Study. Input: 800 executives, 1,800 HR leaders, 5000+ employees, 21 industries, 44 countries

Stakeholder engagement

Engaging and building trust with the broad range of stakeholders that interact with, or are impacted by, our business is key to delivering our strategy and ensuring our success over the long term.

Section 172 statement

We have various mechanisms that enable management and the Board to understand and consider stakeholder views as part of their oversight and decision making. This is explained in our section 172 statement, which is set out in full on page 111, and is incorporated by reference into this Strategic report. On this page we summarise our key stakeholder groups, how we engage with them, the issues that matter most to them and what we are doing in response.

Patients and consumers	<p>Insights from patients and consumers enable us to develop products that better meet their needs.</p> <p>How we engage</p> <ul style="list-style-type: none"> – Advisory boards, disease-specific patient panels and Patient Advocacy Leaders Summits to provide patient insights – Engagement and support for patient groups (disclosed on gsk.com), and initiatives that empower patients to get involved in medicine development – Market research and consumer sensory labs help to uncover consumer insights 	<p>What matters</p> <ul style="list-style-type: none"> – The pricing of healthcare products, particularly out-of-pocket expenses – Differentiated product innovation based on patient and consumer needs – Access to a reliable supply of high-quality, safe products <p>What we are doing</p> <ul style="list-style-type: none"> – We take a values-based approach to pricing to balance reward for innovation with access and affordability – Strengthening our pipeline to bring innovative products to patients and ensure we maintain high standards for product quality and safety
Investors	<p>We maintain regular and constructive dialogue with investors to communicate our strategy and performance in order to promote investor confidence and ensure our continued access to capital.</p> <p>How we engage</p> <ul style="list-style-type: none"> – Ongoing communications including the AGM, quarterly results calls and detailed company information online – One-to-one meetings between Board members, senior executives and institutional investors including introduction roadshows for our new Chairman and CFO – Biannual investors and analysts perception study and, for the first time in 2019, we conducted a specific ESG study 	<p>What matters</p> <ul style="list-style-type: none"> – Financial performance and commercial success – Understanding how our R&D strategy is successfully developing our pipeline – Management of key environment, social and governance (ESG) issues to mitigate risk and create opportunity <p>What we are doing</p> <ul style="list-style-type: none"> – Continuing to report in line with best practice disclosure on progress towards our financial targets and strategic goals – Specific business and R&D updates and events e.g. Viiv meet the management, Vaccines Investor Day, Oncology roundtables – We are increasing engagement on ESG matters
Healthcare professionals and medical experts	<p>We work with healthcare professionals (HCPs) and medical experts to understand patient needs and to ensure our products are being administered in the right way.</p> <p>How we engage</p> <ul style="list-style-type: none"> – Scientific dialogue to increase understanding of disease management and patient experience – Providing high-quality, balanced information about our medicines and vaccines – Collaboration on clinical trials and research 	<p>What matters</p> <ul style="list-style-type: none"> – Access to product and scientific information – Responsible sales and marketing practices – Safety, efficacy and differentiated innovation <p>What we are doing</p> <ul style="list-style-type: none"> – Increasing the use of digital channels to deliver a more personalised and effective sharing of information to HCPs – Updating our salesforce incentive policy to attract and retain the best talent while upholding ethical standards – Using HCP insights on disease management and patient experience to inform the development of our medicines
R&D partners and academia	<p>We partner with scientific institutions, national health systems, business partners and academia to help ensure we develop differentiated healthcare products.</p> <p>How we engage</p> <ul style="list-style-type: none"> – Collaboration with outstanding scientists from organisations across the globe – Establishing joint ventures to strengthen innovation and efficiency – Working with academic institutions to accelerate discovery and development of new medicines 	<p>What matters</p> <ul style="list-style-type: none"> – Finding the right partner to accelerate a potential medicine or vaccine to approval to reach patients – Pushing the science as far as it can go to advance human health – Dissemination and advancement of scientific knowledge <p>What we are doing</p> <ul style="list-style-type: none"> – Working with world leading experts at biotechs, universities and other scientific institutions to improve drug discovery and increase the productivity of our R&D pipeline – Collaborating with partners such as Open Targets, FinnGen, and the UK Biobank that are focused on identifying disease-relevant genes to validate high-potential targets

Stakeholder engagement continued

Governments and regulators	<p>We work with governments and regulators to advocate for policies that encourage innovation, promote efficient management of healthcare spending and give patients the support they need.</p> <p>How we engage</p> <ul style="list-style-type: none"> – Meeting with regulatory bodies throughout the development process to ensure high quality and safe new products – Engaging with government health agencies to demonstrate the value of our products – Working with governments to build a strong operating environment for life sciences 	<p>What matters</p> <ul style="list-style-type: none"> – Environments which value innovation and drive investment in life sciences – Scientific funding and collaboration – Medicines pricing and reimbursement – Public health threats <p>What we are doing</p> <ul style="list-style-type: none"> – Working with policymakers to support an operating environment that remains competitive for R&D investment, enables mobility of scientific talent and accelerates the uptake of innovative medicines, including the UK Life Sciences Industrial Strategy – Actively engaging on government proposals for healthcare reform, including in the US where we successfully ensured patient access to full treatment regimes for HIV and cancer was maintained – Partnering with authorities in China to ensure support for global innovation, including swift regulatory approval of <i>Shingrix</i> and <i>Benlysta</i>
NGOs and multilateral organisations	<p>We work with partners to improve access to healthcare services and our products, and to advocate for the policy environment in which we can be successful.</p> <p>How we engage</p> <ul style="list-style-type: none"> – Working with non-governmental organisations (NGOs) and partners to research and develop products to address global health challenges – Collaborating with NGOs and generic manufacturers to sustainably supply our products to developing countries – Partnerships to strengthen health systems in developing countries and drive progress on global health priorities 	<p>What matters</p> <ul style="list-style-type: none"> – Access to medicines and vaccines – Achieving the UN SDGs and WHO targets for specific disease areas – Universal Health Coverage (UHC) and the future of health systems – Sustainable financing for global health <p>What we are doing</p> <ul style="list-style-type: none"> – Focusing on our unique value-add as a global health partner to develop products where we have scientific expertise – Partnering with organisations that have complementary capabilities and reach to create sustainable models that share risk, including working with partners to pilot implementation of the malaria vaccine – Leveraging our community investment programmes to support our scientific expertise and deliver more impact for patients
Suppliers	<p>We work with thousands of suppliers, large and small, who provide goods and services that support us in delivering a reliable supply of high-quality, safe products for our patients and consumers.</p> <p>How we engage</p> <ul style="list-style-type: none"> – Regular direct engagement between business owner and supplier to ensure they support GSK's strategies and targets – Engage with suppliers through our Third Party Oversight programme and by conducting in-depth audits – Participate in cross-industry forums such as the Pharmaceutical Supply Chain Initiative and the Consumer Goods Forum to improve supply chain sustainability 	<p>What matters</p> <ul style="list-style-type: none"> – Prompt payment for smaller suppliers – Understanding GSK standards and policies to ensure compliance – Opportunities to innovate and grow the relationship <p>What we are doing</p> <ul style="list-style-type: none"> – Updating our payment practices to ensure that smaller UK suppliers benefit from preferential payment terms – Conducting business with suppliers who share our values and high quality and ethical standards to ensure security of supply – Engaging with suppliers to develop improvement plans and track progress when we identify areas for improvement – Expanding our third-party Environment Health and Safety team to the countries where our priority suppliers are located to provide more proactive support
Employees	<p>We involve and listen to employees to help us maintain strong employee engagement and retain talented people.</p> <p>How we engage</p> <ul style="list-style-type: none"> – Regular interactive 'Let's Talk' events with the Corporate Executive Team and other senior leaders – Facilitating dialogue and collaboration through our internal communications platform – Global diversity councils and Employee Resource Groups covering different strands of diversity – Global all-employee survey and One80 Survey for employees to provide feedback on line managers 	<p>What matters</p> <ul style="list-style-type: none"> – Opportunities for career and personal development – Flexible working to support balancing wider responsibilities – Working in an inclusive and diverse environment – Working for a purposeful company and a great line manager <p>What we are doing</p> <ul style="list-style-type: none"> – Providing all employees with access to a new development portal with resources that are most relevant to their roles, development needs and interests – Our largest markets have formal flexible working and carer policies and all our markets are reviewing their competitiveness – Monitoring employee engagement through the employee survey and acting on feedback to improve engagement

Pharmaceuticals

Our Pharmaceuticals business has a broad portfolio of innovative and established medicines in respiratory, HIV, immuno-inflammation and oncology. We are strengthening our R&D pipeline through a focus on immunology, human genetics and advanced technologies to help us deliver transformational medicines for patients.

Progress against our long-term priorities

Innovation

- Strengthened our R&D pipeline with eight filings and four assets advancing to pivotal phase II/III studies
- Accelerated our oncology portfolio with positive pivotal data readouts and regulatory submissions for *Zejula* in first-line maintenance ovarian cancer, belantamab mafodotin in relapsed/refractory multiple myeloma, and dostarlimab in endometrial cancer
- Received approvals and expanded indications for key medicines across our portfolio
- Invested significantly in advanced technologies, including establishing the Laboratory for Genomics Research and collaborating with Lyell Immunopharma

 Read more below

Performance

- Total 2019 turnover £17.6 billion, up 2% AER, flat at CER
- Strengthened capabilities in specialty care medicine
- Changed sales incentive programme to recruit and retain representatives with the best expertise and experience
- Supply chain productivity up by more than 20% since 2016

 Read more on page 22

Trust

- Filed US and EU regulatory submissions to simplify, optimise and extend use of dolutegravir in children living with HIV
- Progressed gepotidacin, the first in a new chemical class of antibiotics to treat drug resistant bacteria, to phase III clinical research
- Donated 890 million albendazole tablets to support efforts to end lymphatic filariasis and control intestinal worms in school-age children
- 101 Pharmaceutical regulatory inspections, all with satisfactory results

 Read more on pages 30 to 42

Innovation

Our new R&D approach focuses on science related to the immune system, the use of human genetics and the application of advanced technologies, such as functional genomics, machine learning, artificial intelligence and cell therapy. This approach, powered by the multiplier effect of Science x Technology x Culture, is helping to strengthen our pipeline and accelerate the pace at which we discover, develop and deliver medicines to improve patients' lives.

As we prepare to create New GSK, we will drive a common approach to R&D across Pharmaceuticals and Vaccines. This will enable us to more effectively allocate capital and share technical and scientific expertise, to deliver our pipeline, regardless of modality, for the new Biopharma company.

We are evolving our R&D culture to embrace single-point accountable decision making and smart risk taking (rewarding good decisions even when the outcome may not be as expected) to help us deliver scientific and technological excellence.

Our R&D pipeline contains 39 potential new medicines, including 15 clinical oncology assets. We have doubled the number of assets in our clinical oncology portfolio since early 2018.

In 2019, we advanced four assets into pivotal phase II/III studies and achieved positive regulatory decisions and data readouts across our portfolio.

We received approvals for three medicines: *Dovato*, an HIV treatment; *Dectova*, a treatment for influenza A or B; and new self-administration options for our respiratory biologic, *Nucala*. We also received expanded indications for medicines including *Zejula*, our oral poly ADP-ribose polymerase (PARP) inhibitor for ovarian cancer and *Benlysta*, the world's first biologic treatment for systemic lupus erythematosus (SLE or 'lupus'). We submitted eight filings for regulatory approval.

Pharmaceuticals continued

HIV

Around 37.9 million people are living with HIV worldwide. We have a long-standing commitment to combatting, preventing and ultimately curing HIV, helping to make it a smaller part of people's lives.

Our HIV business is managed through ViiV Healthcare, which is majority owned by GSK, with Pfizer and Shionogi as shareholders. ViiV Healthcare is the sole global specialist HIV pharmaceutical company. We are at the forefront of innovation, with the world's only HIV-dedicated discovery and early development facility. Our portfolio of 15 approved antiretroviral medicines offers a range of therapeutic options for people living with HIV. They include our established therapies *Tivicay* and *Triumeq*, which contain dolutegravir, considered the most potent available antiretroviral.

2019 was a pivotal year for ViiV Healthcare, with growing momentum for our portfolio of two-drug regimen (2DR) therapies, which are powered by dolutegravir. We launched *Dovato*, our new once-daily, single-pill 2DR, the first approved for treatment-naïve patients, in the US and EU. This followed positive results from the GEMINI 1 and 2 and TANGO studies which showed *Dovato* was as effective as dolutegravir-based three-drug regimens. By containing fewer antiretrovirals than traditional HIV treatments, *Dovato* and our first 2DR, *Juluca*, aim to reduce the number of HIV drugs people living with the virus take over a lifetime. Following its 2018 launch in the US, Japan and nine European markets, *Juluca* achieved reimbursement in 10 additional markets in 2019. During the year, the SWORD 1 and 2 studies demonstrated *Juluca*'s long-term safety, efficacy and tolerability.

We submitted cabotegravir and rilpivirine, the first once-monthly, complete long-acting HIV regimen for regulatory review in the US and EU. This followed the global ATLAS and FLAIR pivotal phase III studies which demonstrated that the therapy was as effective as a daily oral three-drug regimen in maintaining viral suppression. In December 2019, we received a complete response letter from the FDA regarding the US submission and will work closely with the regulatory authority to determine appropriate next steps. Regulatory review in the EU is ongoing.

In July 2019, we launched the year-long CUSTOMIZE study to identify and evaluate ways of implementing a once-monthly HIV regimen into clinical practice. The programme involves ViiV Healthcare employees working with clinical staff, healthcare providers and people living with HIV across the US.

In December 2019, we filed for US regulatory approval for fostemsavir, our first-in-class attachment inhibitor for heavily treatment-experienced adults with HIV-1 infection, including those who are failing on current antiretroviral regimens and have exhausted all treatment options. The submission followed positive results from the 96-week phase III BRIGHT study.

In line with our commitment to delivering optimal HIV treatment formulations for children, we made two regulatory submissions in December 2019 that aim to simplify, optimise and extend the use of dolutegravir in paediatric HIV patients. For more information (see page 32).

Oncology

Cancer remains a major global cause of death. Our work in oncology aspires to maximise patient survival through transformational medicines. We have an increasingly large and broad portfolio of assets in development, both alone and in novel combination studies. Our pipeline is focused on four areas: immuno-oncology, which uses the human immune system to treat cancer; cell therapy, where human T-cells are engineered to target the disease; cancer epigenetics, where the gene-regulatory system of the epigenome is modulated to curb cancer; and synthetic lethality, where two mechanisms work together synergistically to destroy cancerous cells.

We are making good progress. Since early 2018 we have doubled the number of assets in our clinical oncology pipeline. In 2019 we achieved three positive pivotal data readouts and are on track for three oncology launches in 2020. We have achieved this by accelerating our own clinical programmes, fast-tracking the assets acquired with the oncology-focused biopharmaceutical company Tesaro, and successful business development collaborations, including our strategic alliance with Merck KGaA.

To further strengthen our oncology pipeline and enhance our cell and gene therapy programme, we announced a five-year collaboration with Lyell Immunopharma. Lyell is exploring ways of improving the function and 'fitness' of T-cells to enhance response rates in solid tumour cancers and prevent relapses due to T-cell 'exhaustion'. Combining our cell and gene therapy programmes with Lyell's technologies has the potential to enhance the activity and specificity of cell therapies in solid tumour cancers.

Our current oncology assets

Zejula, our oral PARP inhibitor, is approved in the US and Europe for women with recurrent ovarian cancer. We believe that *Zejula* could transform treatment options for patients in additional ovarian cancer stages, and for both men and women with other cancers.

Following a priority review, in October 2019, the FDA approved an expanded indication for *Zejula* as a late-line treatment for women whose advanced ovarian cancer is associated with homologous recombination deficiency. The approval was supported by the positive results of the phase II QUADRA study. This approval allows us to address the unmet clinical need and demonstrates that *Zejula* is active as a late line therapy for women beyond those with BRCA mutations. In December 2019, we also filed for US approval of *Zejula* in first-line maintenance therapy of women with platinum responsive ovarian cancer. The submission, which has been accepted by the FDA, was based on positive results from the phase III PRIMA study which showed a significant reduction in disease progression for women, irrespective of their biomarker status.

Reflecting our broad development plan, a number of further clinical studies of *Zejula*, alone and in combination with other therapies, are in progress for additional ovarian cancer stages as well as for non-small cell lung cancer and breast cancer.

Pharmaceuticals continued

Belantamab mafodotin, our first-in-class, humanised immunoconjugate against B-cell maturation antigen (anti-BCMA), is being studied for the treatment of multiple myeloma, the second most common blood cancer, for which there is currently no cure. Our extensive development programme for this asset will enable us to move quickly into earlier lines of treatment. In December 2019, we filed for regulatory approval following positive results from the pivotal DREAMM-2 study, which explored belantamab mafodotin in patients with relapsed/refractory multiple myeloma, and have subsequently been granted a priority review by the FDA.

In the second-line setting, our phase I/II DREAMM-6 study is assessing belantamab mafodotin in combination with standard of care. The results will inform pivotal second-line studies, which are due to start in the second half of 2020. We also started two other studies: DREAMM-5, a fourth-line, phase I/II study exploring use in combination with novel agents, and DREAMM-9, a phase III first-line study in combination with standard of care.

Dostarlimab is a PD-1 inhibitor targeting endometrial cancer, the sixth most common cancer in women. It is being evaluated for use as a monotherapy and in combination with other immuno-oncology agents. We filed for regulatory approval in a second-line endometrial cancer setting in late 2019, following positive results from the GARNET study, the largest ever trial of an anti-PD-1 monotherapy in patients with advanced or recurrent endometrial cancer. In September 2019, we enrolled the first patients in RUBY, a first-line study of dostarlimab in combination with chemotherapy.

In February 2019, we announced a global alliance with Merck KGaA to jointly develop bintrafusp alfa, an investigational bifunctional fusion protein immunotherapy currently in development for multiple difficult-to-treat cancers. The most advanced potential registration study is in second-line biliary tract cancer, a group of rare, aggressive gastrointestinal cancers associated with limited treatment options and poor outcomes.

Our anti-ICOS agonist antibody, GSK3359609, is designed to selectively enhance the function of T-cells. We are studying the antibody alone and in combination with other therapies, due to its considerable potential across a range of tumour types. Following the positive results of the INDUCE-1 study, we initiated a phase II/III study with registration potential in combination with pembrolizumab in first-line recurrent/metastatic head and neck squamous cell carcinoma.

Our lead T-cell immunotherapy, GSK3377794, targets the NY-ESO-1 antigen that is expressed across multiple cancer types. The therapy is on an accelerated development path, having received both European PRIME and US FDA breakthrough status, with ongoing phase II studies in synovial sarcoma, lung cancer and multiple myeloma. This asset, along with our other cell therapies, could be enhanced by leveraging the technologies available to us via our new collaboration with Lyell Immunopharma.

Respiratory

GSK has been a world leader in respiratory for five decades, pioneering the development of modern, innovative medicines for asthma and chronic obstructive pulmonary disease (COPD). We have launched six new treatments since 2012, establishing the broadest portfolio of once-daily, inhaled respiratory medicines in our industry.

In 2019, we continued the successful roll out of *Trelegy Ellipta*, our single inhaler triple therapy for COPD. It is now available in over 40 markets, with key launches in 2019 that included Japan and China. Following positive results from the phase III CAPTAIN study, which showed the effect of *Trelegy* in treating patients with asthma, we filed for this new indication in the US and Japan.

Nucala, our first-in-class biologic for patients with severe eosinophilic asthma (SEA), continued to strengthen its clinical profile with approval in the US and EU of two new self-administration options, and early data from the REALITI-A study showing *Nucala* significantly reduces exacerbations in a real-world setting. Approval in the US for use in children with SEA aged six to 11 provided a new option for this difficult to treat patient population.

Despite our advances in respiratory medicines, there are still areas of significant unmet need where we continue to innovate. We are exploring *Nucala*'s potential across a spectrum of eosinophil-driven diseases and in 2019 reported positive results from our hypereosinophilic syndrome programme which will support regulatory submissions in 2020. We initiated a new phase III study in COPD, and data from our nasal polyps programme is anticipated in 2020. We achieved proof of concept for two further investigational medicines in our biologics pipeline, a long-acting anti-interleukin-5 (IL-5) antagonist for SEA and an anti-IL33 receptor for severe asthma, which we hope will provide new options for patients and extend our respiratory leadership into the future.

Immuno-inflammation

We are committed to the research and development of medicines for immune-mediated diseases, such as lupus and rheumatoid arthritis (RA), that are a significant health burden for patients and society. Our research focuses on the biology of the immune system, reflecting our aim to develop immunological-based medicines that alter the course of inflammatory disease.


We are the only company with a biologic treatment, *Benlysta*, specifically developed and approved for adult and paediatric lupus. In 2019 the medicine was approved for adults in China where more than one million people have lupus. During the year intravenous *Benlysta* became the first biologic treatment to be approved in the US, EU and Japan for children who have limited treatment options for this challenging disease. We also announced positive results from the pivotal BLISS-LN study showing the effect of *Benlysta* in active lupus nephritis, an inflammation of the kidneys caused by SLE.

We announced the start of the phase III study of otilimab, our anti GM-CSF antibody, in patients with RA, following results from the phase II BAROQUE study. About 24.5 million people globally are affected by RA, a chronic, systemic inflammatory condition.

Pharmaceuticals continued

Pharmaceuticals pipeline overview

We have 39 assets in development, of which 15 are focused on oncology. We expect a number of pivotal readouts in 2020.

Phase	Compound	Indication
Pivotal/registration*	<i>Benlysta</i> + <i>Rituxan</i> ¹	systemic lupus erythematosus ²
	cabotegravir ² LA + rilpivirine ¹	long-acting HIV
	 <i>Dovato</i>	HIV
	daprodustat (HIF-PHI)	anaemia
	fostemsavir (attachment inhibitor)	HIV
	<i>Nucala</i>	COPD/hypereosinophilic syndrome/nasal polyps
	<i>Trelegy</i> ¹	asthma
	 <i>Dectova</i> ¹ IV	IV influenza
	 <i>Nucala</i> pre-filled syringe	severe asthma
	belantamab mafodotin ¹ (BCMA ADC)	multiple myeloma
	 <i>Zejula</i> (PARP inhibitor) ¹	first-line maintenance ovarian cancer ²
	 dostarlimab (PD-1 antagonist) ¹	endometrial cancer
	 bintrafusp alfa ¹ (TGFβ trap/anti-PDL1)	biliary tract cancer ²
	 otilimab ¹ (3196165)	rheumatoid arthritis
	 gepotidacin ¹ (2140944)	uncomplicated urinary tract infection and gonorrhoea
	 3359609 ¹ (ICOS receptor agonist)	head and neck squamous cell carcinoma ^{2,3}
Phase I expansion/phase II	 3640254 (maturation inhibitor)	HIV
	3228836 ¹ (HBV ASO)	hepatitis B
	3772847 ¹ (IL33r antagonist)	severe asthma
	3377794 ¹ (NY-ESO-1 TCR)	cancer
	2330811 (OSM antagonist)	systemic sclerosis
	2881078 (SARM)	COPD muscle weakness
	525762 (molibresib, BET inhibitor)	cancer
	2330672 (linexibat, IBAT inhibitor)	cholestatic pruritus in primary biliary cholangitis
	3326595 ¹ (PRMT5 inhibitor)	cancer
	GR121619 ¹ (oxytocin)	postpartum haemorrhage
	 TSR-022 (TIM-3 antagonist) ¹	cancer
	 3036656 ¹ (leucyl t-RNA inhibitor)	tuberculosis
	 2831781 ¹ (LAG3)	ulcerative colitis
	 TSR-033 ¹ (LAG3 antagonist)	cancer
Phase I	3858279 ¹ (CCL17 antagonist)	osteoarthritis pain
	3511294 ¹ (IL5 LA antagonist)	asthma
	1795091 (TLR4 agonist)	cancer
	3810109 ¹ (broadly neutralising antibody)	HIV
	3537142 ¹ (NYESO1 ImmTAC)	cancer
	3439171 ¹ (H-PGDS inhibitor)	Duchenne muscular dystrophy
	3368715 ¹ (PRMT1 inhibitor)	cancer
	2269557 (nemiralisib PI3Kd inhibitor)	activated phosphoinositide 3-kinase delta syndrome
	 3745417 (STING agonist)	cancer
	3174998 ¹ (OX40 agonist)	cancer
	 3186899 ¹ (CRK-12 inhibitor)	visceral leishmaniasis
	 3732394 (combinectin entry inhibitor)	HIV

 Approved

 Progressed/New

* Includes programmes in pivotal phases of development or where pivotal data has reported and regulatory submissions are under consideration or under review.

1 In-licence or other alliance relationship with third party.

2 Additional indications also under investigation.

3 ICOS HNSCC is a phase II/III study with registrational potential.

Note: for oncology, where phase I studies are conducted in patients, the progression from phase I to phase II is defined when expansion cohorts are started.

Pharmaceuticals continued

Infectious diseases

We started two phase III studies for gepotidacin, the first in a new chemical class of antibiotics to treat drug resistant bacteria, in urogenital gonorrhoea and uncomplicated urinary tract infection. This marks the first time these infections have been addressed by new oral antibiotics in 20 years. First results are expected by the end of 2021.

In 2019, Brazil became the first malaria-endemic country to approve *Kozenis* for the radical cure of *P. vivax* malaria. Single-dose *Kozenis* (known as *Krintafel* in the US) is the first new treatment for *P. vivax* malaria for more than 60 years. This milestone follows publication of the positive results from the DETECTIVE and GATHER phase III studies.

We are using new technology to develop novel medicines for hepatitis B, a viral infection of the liver that can lead to significant health conditions, including cirrhosis, liver failure and liver cancer. We exercised an option to license Ionis Pharmaceuticals' antisense medicines for people with chronic hepatitis B following positive phase II results.

We received EU approval for *Dectova* for the intravenous treatment of influenza A or B which can cause epidemic seasonal infections. The innovation, intended for hospitalised patients, complements our oral version of this neuraminidase inhibitor, which we market as *Relenza*.

Additional programmes

In Japan, we filed for regulatory approval for daprodustat, an oral hypoxia-inducible factor prolyl hydroxylase inhibitor for patients with anaemia associated with chronic kidney disease. If approved, daprodustat will provide a new and convenient oral treatment option for these patients.

Leveraging advanced technologies

Advanced technologies are central to our R&D approach. We have made significant investments in artificial intelligence, machine learning, functional genomics and cell therapy to accelerate our identification of novel targets and medicines. To realise the potential of these cutting-edge technologies, in 2019 we made numerous internal appointments to lead and build our in-house capabilities, and also announced external partnerships with ambitious goals.

Our five-year collaboration with the University of California to establish the Laboratory for Genomics Research (LGR) is designed to create a state-of-the-art lab to apply CRISPR gene editing technologies to drug discovery. The new laboratory will explore how gene mutations cause disease and will aim to develop new CRISPR-based technologies to understand gene function. With genetically-validated targets twice as likely to become successful medicines, applications of CRISPR to drug discovery will be an important approach to improve R&D productivity.

The LGR programme builds on our 2018 collaboration with 23andMe, the world's leading consumer and research genetics company, by enhancing our ability to identify the function of disease-relevant genes and validate high-potential disease targets. We aim to begin our first clinical programme with 23andMe in 2020 and have eight ongoing joint programmes across oncology, immunology, neurology and cardiovascular. LGR also extends the relevance of other genetics and genomics collaborations, such as the Open Targets collaboration which has led to the discovery of a new synthetic lethal target for treating cancers with genomic instability (WRN ReqQ Helicase) by GSK scientists in collaboration with the Sanger Institute in the UK. Additional important collaborations include FinnGen, the UK Biobank, and the Dutch Human Functional Genomics Project, with which ViiV Healthcare has announced a five-year collaboration.

Delivering next generation medicines

We are evolving our culture in R&D so that we are better equipped to discover and deliver the next generation of transformational medicines. We are incentivising scientists to have a mindset of single-point accountability and smart risk taking, where courageous decisions are made and owned by individuals, rather than being consensus-driven.

Significant steps have been taken across R&D to ensure we are prioritising our best assets, and ending or exiting under-performing programmes. Moving away from a therapy area based approach to research is helping our teams to focus on the molecules most likely to become medicines.

We are embracing fresh thinking with new talent in 24% of key R&D roles, around half joining from outside the company, and we have moved to a more integrated governance model, involving scientific peer review, commercial input and data-driven decisions.

Pharmaceuticals continued

Performance

Pharmaceuticals turnover in 2019 was £17,554 million, up 2% AER, but flat at CER. HIV sales were up 3% AER, 1% CER, to £4,854 million. Respiratory sales were up 18% AER, 15% CER, to £3,081 million. Sales of Established Pharmaceuticals were £8,776 million, down 7% AER, 8% CER. See Group financial review on page 49 for full details.

Accelerating growth and transitioning towards specialty care

In 2019, we continued to align our resources behind the markets, therapy areas and brands with the greatest opportunity for growth, to improve our performance. Excellent execution of launches in HIV and respiratory was a major focus. By concentrating on key markets and assets, and our ongoing investment in clinical evidence to deliver compelling and competitive medicine profiles, we achieved strong performances from our new and recent launches, including *Trelegy Ellipta*, *Nucala*, *Juluca* and *Dovato*.

In line with the growing shift in our portfolio to innovative specialty care products, including oncology, we reinforced our capabilities in these areas. In anticipation of our three oncology launches in 2020, and leveraging our acquisition of Tesaro, we made rapid and material progress in developing our oncology commercial expertise. We are recruiting outstanding people with a track record of success in oncology into key markets, including rebalancing our US salesforce. We also increased our broader investment in specialty care, for example with *Benlysta*, where additional resource and a new team drove strong performance.

As part of our two-year programme to prepare for separation, and to support our long-term priorities, we will further rationalise our portfolio through divestments. We plan to review several assets including our prescription dermatology business.

Engaging with healthcare professionals

To further support this transition towards a more specialty care focused portfolio, we revised our incentive programme for sales representatives in certain countries. This will allow us to attract and retain the best salespeople, enhancing the quality of our dialogue with healthcare professionals (HCPs) to help them better serve patients. The changes uphold our ethical and values-led approach to HCP engagement, in full compliance with laws and policies, while supporting delivery of strong performance. They were applied initially in the US, UK and Canada, with comprehensive training, controls and monitoring to ensure appropriate implementation.

We also evolved the way we engage with HCPs in certain countries to improve understanding of new data and clinical experience with our innovative products, and to deliver better outcomes for patients. This included the introduction of scientific workshops to enable interactive debate with and among HCPs, and an increased use of digital channels to support scientific engagement through virtual advisory boards and educational activities such as webinars. These initiatives have been well-received with positive feedback from HCPs. Early indications suggest the changes are enhancing understanding of the science behind key medicines, including *Nucala* and our 2DR HIV treatments.

Creating a specialty-ready, more competitive supply chain

Reliable supply is core to growth in key therapy areas. We are creating a more modern, agile supply chain, underpinned by new technology, that can launch specialty medicines at speed, while accelerating delivery across our portfolio.

In 2019, we opened a next-generation biopharmaceutical manufacturing facility at our Upper Merion, Pennsylvania site. This technologically-advanced \$120 million manufacturing hub has the flexibility and speed necessary for making complex specialty medicines. A new analytical lab is also part of the facility, which brings together the R&D and manufacturing teams at Upper Merion. This will help us develop a more highly-skilled workforce, improved technological and scientific capabilities and the right infrastructure to research potential new genetic targets and manufacture them into new medicines. We also completed a \$139 million expansion of our Rockville, Maryland site, which will increase manufacturing capacity for *Benlysta* by 50%.

In Singapore, we opened a new state-of-the-art pharmaceutical manufacturing facility at our Jurong site. The \$96 million development included the creation of two continuous manufacturing facilities, and the expansion and modernisation of an existing production unit. The transformation is expected to significantly improve efficiency, expand capacity for manufacturing our assets, including daprodustat and dolutegravir, and reduce medicine production times.

In 2019, we completed exits of the Guarulhos, Brazil, Cork, Ireland and Suzhou, China sites from our network, and initiated the exit of the Verona, Italy site, which we expect to complete in 2020.

Improving supply performance

Our on-time in-full supply performance levels to customers again improved, putting GSK in the top quartile as benchmarked with our peers on this measure. Productivity levels have now risen by more than 20% over the past three years. All new products were introduced on time, including successful delivery of first-market launches for *Dovato* and the new *Nucala* self-administration options.

We continued to perform well against safety, quality and compliance measures. There were 101 Pharmaceutical regulatory inspections in 2019, all satisfactory.

Digital transformation

We are progressing towards our goal of becoming a digital and data-driven organisation. In 2019, we continued to improve the way we harness technology, developing new ways of working to drive performance and increase our ability to deliver medicines to patients. We are leveraging data to unlock smarter, faster interactions with our customers and understand the impact our commercial activities have on prescribing. This includes piloting artificial intelligence-driven recommendations to help optimise our HCP engagement. We are also applying advanced analytics to drive efficiencies across the business, from supply chain management and manufacturing to our commercial operations, identifying opportunities to free up resources.

Vaccines

We are the world's largest vaccines company by revenue, delivering vaccines that protect people at all stages of life. Our R&D focuses on developing vaccines against infectious diseases that combine high medical need and strong market potential.

Innovation

- Progressed four new candidate vaccines into human trials, including one using a novel vaccine technology (SAM)
- Received FDA fast track designation for all three RSV candidate vaccines
- Increased pipeline focus on therapeutic and antimicrobial resistance vaccines
- Agreed three partnerships to accelerate the development of new assets or technology

 Read more below

Performance

- Total 2019 turnover £7.2 billion, up 21% AER, up 19% CER primarily driven by growth in *Shingrix*
- Optimised our supply chain to increase *Shingrix* production capabilities
- Received authorisation of *Shingrix* in China for the prevention of shingles in adults aged 50 and over

 Read more on page 26

Trust

- Released positive final phase II results of our TB candidate vaccine and announced its licensing to the Gates MRI for its continued development for low income countries with high TB burden in January 2020
- Launched our RTS,S malaria vaccine, in selected regions of Malawi, Ghana and Kenya as part of a WHO-coordinated pilot programme
- Made our adjuvant technology available to partners including CEPI in early 2020 to support rapid development of candidate vaccines against coronavirus (SARS-CoV-2)

 Read more on pages 30 to 42

Innovation

Our R&D approach is powered by the multiplier effect of Science x Technology x Culture. This focus is expected to enable us to develop and deliver groundbreaking vaccines, remain at the forefront of vaccines science, and leverage new disruptive technologies: all within an R&D culture built on smart risk taking and that attracts, develops and retains the best people, and partners with leading experts.

We have 15 innovative assets in clinical development, with key data readouts on several candidate vaccines expected in 2020. We classify our vaccine pipeline in three categories (life-cycle management, new commercial assets and global health assets) to ensure we allocate the appropriate resources to priority vaccine development programmes that deliver the best value to society and support the Group's strategy.

The category 'life-cycle management' is focused on the development of new presentations and indications, and on the geographic expansion of our marketed vaccines. We classify as 'new commercial assets', those vaccine candidates with the potential to make the greatest contribution to our commercial success in the future, and 'new global health assets', as those vaccine candidates with the highest potential to impact on global health threats. In the development of our global health assets we are using our science, including proprietary technology platforms, and focusing our investment for maximum impact while ensuring the development is sustainable and backed by strong partnerships (see Trust on page 31).

Vaccines continued

In 2019, we accelerated the development of our candidate vaccines against respiratory syncytial virus (RSV), and advanced our therapeutic candidate vaccine against chronic obstructive pulmonary disease (COPD). We progressed four new strategic candidate vaccines into human trials; one for RSV in older adults, the second against *Clostridium difficile* which could help to address antimicrobial resistance, the third, testing our SAM technology in a rabies model, and the fourth, our therapeutic candidate vaccine against chronic hepatitis B. To focus our work, we also terminated our hepatitis C virus and universal flu programmes as they had not met our expectations. Our work on an HIV candidate vaccine for developing countries was discontinued after clinical results showed lack of efficacy. We also transferred our candidate vaccines against Ebola and Marburg viruses to the Sabin Vaccine Institute (see page 31).

Our expertise in both vaccines and advanced technology has allowed us to focus our technologies on therapeutic and antimicrobial resistance candidate vaccines. This also puts us in a strong competitive position in the new era of therapeutic vaccines. Our pipeline will increasingly expand from prophylactic assets to include therapeutic assets which can provide benefits throughout the course of life. We are investing in several therapeutic assets (including moving our candidate vaccine against chronic hepatitis B into phase I/II clinical development) that have the additional benefit of accelerated delivery, as they typically involve shorter regulatory lead times and allow for accelerated clinical testing.

Our vaccines scientists are the foundation of our innovation success and we continue to evolve our culture to focus on creating an environment where people take accountability, smart risks and focus on accelerating development timelines. In 2019, we simplified our governance process and implemented single point decision making. In early 2020 we announced the proposal to create a development organisation for all GSK R&D as part of our two-year programme to create a New GSK with a common R&D approach. We have made progress in accelerating priority pipeline assets, including accelerating the delivery of our RSV portfolio. This has been achieved by challenging our approach to regulatory engagement and using techniques such as adaptive clinical trial design and quality by design to reduce manufacturing scale-up time.

Developing and delivering ground-breaking vaccines: RSV and COPD

An important factor determining the development of vaccine candidates in our pipeline is the burden of the disease – both COPD and infections with RSV have a high prevalence and medical need and are therefore key assets in our pipeline.

RSV

We have a portfolio of three different candidate vaccines against RSV, the most common cause of lower respiratory tract infection. Currently no vaccine protects against this virus which, in the US alone, leads to 177,000 hospitalisations and 14,000 adult deaths every year.

Each of our three RSV candidate vaccines is tailored to meet the specific needs of its target group: maternal, paediatric and older adults. Given their promising early results and the strong medical need, all three RSV candidate vaccines have been FDA fast tracked in 2019. They are in phase I/II trials with key data readouts expected in 2020.

Our maternal RSV candidate is based on a recombinant pre-fusion antigen, our paediatric RSV candidate harnesses our adenovirus vector technology and our older adult RSV candidate, for people over 60, leverages the recombinant pre-fusion antigen combined with our AS01 adjuvant system, which is a key ingredient in *Shingrix*, enabling its efficacy and success in market.

COPD

One in 20 of all deaths globally is caused by COPD, but no vaccine currently exists to prevent the disease. Our COPD candidate is a therapeutic vaccine aimed at reducing the frequency of acute exacerbations and slowing disease progression in COPD sufferers. It contains four bacterial antigens and our AS01 adjuvant system. The programme complements our leadership in medicines for respiratory diseases. To date we have demonstrated that our adjuvanted COPD vaccine candidate is safe and highly immunogenic. In 2019, enrolment for our phase IIb study in adults was completed ahead of plan and the study results are due in 2020.

Life-cycle management: shingles and meningitis

We balance the focus on our strong pipeline with the active life-cycle management of our marketed vaccines. This enables us to deliver new presentations and reach more populations and geographies with our established vaccines, ensuring they continue to play a strong role in our business performance. Six of our pipeline programmes are evolutions of our existing products or franchises.

Shingles

Shingrix marks a step change in the prevention of shingles, a painful and potentially serious illness. The vaccine addresses the age-related decline in immunity, achieving more than 90% efficacy across all age groups. It is the first non-live shingles vaccine to combine a specific antigen with an adjuvant to sustain the immune response. In 2019 we published new clinical data supporting the use of *Shingrix* in adults at greater risk of shingles due to conditions such as cancer or organ transplant. We are currently exploring the possibility of extending the vaccine's indication based on these results.

Shingrix received the prestigious Prix Galien award in every country where it was available in 2019: US (best pharmaceutical product), Germany (best primary care product), and Canada (best innovative product). The Prix Galien is considered the world's leading award for innovation and excellence in medical products and devices.

Vaccines continued

Meningitis

We are the market leader in vaccines against meningococcal meningitis, based on 2019 revenue, with our complementary portfolio of *Bexsero*, targeting serogroup B, and *Menveo*, against serogroups A, C, W, and Y. Since its launch in 2015 *Bexsero* has become the industry-leading meningitis B vaccine. In the US, where it is licensed for 10 to 25 year olds, a phase III trial is currently evaluating lowering the age indication to two months. Simultaneously, an alternative, liquid presentation of *Menveo* is progressing through phase II trials to simplify vaccine preparation steps for healthcare providers. In January 2020, the *New England Journal of Medicine* published two independent meningitis B studies demonstrating the real world impact of *Bexsero* in reducing disease in infants – showing a 75% drop in cases in the UK over three years – and the need for direct, individual protection among adolescents. The US FDA approved the indication of a single booster dose administration of *Menveo* to individuals aged 15 to 55 years who are at continued risk of meningococcal disease if at least four years have elapsed since a previous dose.

We remain committed to developing a pentavalent meningitis ABCWY vaccine targeting the five most common meningococcal serogroups. Our research efforts are building on our successful vaccines *Bexsero* and *Menveo*, combining the antigens of these two vaccines with favourable safety and efficacy profiles. Following the completion of the phase II studies in 2019, we are in discussion with the regulatory authorities about a potential phase III start. Key data are expected to be published in 2020.

Leveraging advanced technologies

Our expertise and capabilities in developing and applying advanced technologies is an important differentiator. We have led the industry in adjuvant technology for decades and continue to innovate in this field.

Our adjuvant technology platforms, which lead to an enhanced immune response, play a key role in our innovation: our AS01 adjuvant technology is a key component in six of our pipeline assets, including our RSV and COPD candidate vaccines, as well as enabling the success of our licensed *Shingrix* vaccine. Our AS03 adjuvant technology has been made available to partners including CEPI for collaborations to strengthen the global response to the coronavirus epidemic (SARS-CoV-2).

Our SAM platform – which started clinical investigation in August 2019 – has the potential to significantly reduce the lead time of vaccines research, enable faster, simpler manufacturing, and improve vaccine potency. Other novel technologies we have been progressing in 2019 include bioconjugates and generalised modules for membrane antigens (GMMMA), used to investigate two shigella candidates currently in phase II (see Trust section).

Partnerships

Partnerships are central to our innovation strategy and to our efforts to accelerate vaccine development. We collaborate with leading experts, institutions and companies to access external, cutting-edge technology and expertise. We aim to be the scientific partner of choice and currently have more than 110 external collaborations across multiple fields.

In 2019, we continued building valuable partnerships, including one to develop a new vaccine to prevent cervical cancer, with Inovax and Xiamen University in China. We established a collaboration with VBI, a biotech company, to facilitate development of a specialised therapeutic vaccine candidate for patients with recurrent glioblastoma. We also established a partnership with Viome, a company with deep expertise in understanding the gut microflora and its role in chronic diseases, to facilitate vaccine development to prevent or even treat such conditions.

Vaccines pipeline

Phase	Indication/vaccine	
Registration	<i>Shingrix</i> immunocompromised*	●
	<i>Rotarix</i> liquid (PCV free ¹)	●
Phase III	<i>Bexsero</i> infants (US)	●
	MMR (US)	●
Phase II	Therapeutic COPD*	●
	RSV paediatric	●
	MenABCWY	●
	<i>Menveo</i> liquid	●
	Malaria (fractional dose)*	●
	Shigella*	●
	RSV maternal*	●
Phase I/II	RSV older adults*	●
	Therapeutic chronic hepatitis B*	●
	Clostridium difficile	●
	SAM (rabies model)	●

● Commercial assets ● Global Health assets ● Life-cycle management

* In-license or other alliance relationship with third party.

¹ Porcine circo virus free formulation.

Vaccines continued

Performance

Vaccines turnover in 2019 was £7,157 million, up 21% AER and 19% CER, primarily driven by growth in sales of *Shingrix*. Meningitis vaccines also contributed significantly to growth. See Group financial review on page 57 for full details.

Our future growth strategy

Our ambition is to continue to grow our business ahead of the global vaccines market. To achieve this objective, we are prioritising our key assets, *Shingrix* and *Bexsero* and focusing on the US and China, the world's two largest vaccines markets.

As our *Shingrix* manufacturing capacity increases, we have the opportunity to expand this vaccine's geographic footprint over time. During the year we received regulatory approval for *Shingrix* in China where we plan to have a phased launch to ensure continuity of supply. There is also potential to expand the reach of *Shingrix* by increasing the coverage in eligible adults in the US and through extending its indication to younger, immune-compromised adults.

Our other key strategic asset, *Bexsero*, already has a 70% share of the global meningitis B vaccines market, based on 2019 revenue. To further grow *Bexsero*, our main geographic focus will be on the EU and US. In the EU, our infant indication has a strong market advantage, as the competitor product only offers adolescent protection. In the US, our short immunisation schedule, that allows for both doses to be taken within one month, is particularly relevant during local meningitis outbreaks.

To further expand in the US, besides *Shingrix* and *Bexsero*, we are developing assets specifically for the US market, including an MMR vaccine and a PCV-free formulation rotavirus vaccine, both currently in phase III testing. In China, we plan to leverage our established vaccine portfolio, including *Cervarix* and *Engerix-B*, as well as licensing more of our existing vaccines in the future.

Creating a simpler, more competitive supply chain

We have a world-class network of 12 manufacturing sites, across 9 countries. This gives us a strategic global supply capability, which allows us to produce and deliver around 2 million vaccine doses every day.

We have directed significant capital into expanding our supply chain capacity to meet the demand for *Shingrix* and are working on creating a new purpose-built facility which we expect to bring on line from 2024. Based on our strengthened manufacturing capacity, we achieved supply of high teens of millions of doses in 2019, over a year ahead of our original plans. In the meantime, we are ensuring continuity of supply across the markets that have already launched *Shingrix* and by phased launches in additional markets.

In 2019, to improve focus and efficiency, we divested two of our sites, in Ankleshwar, India and Tianyuan, China. We have also transferred to Bavarian Nordic two of our travel vaccines, against rabies and tick-borne encephalitis.

Supply performance

Our supply performance has continued to improve as demonstrated by our *Bexsero*, *Shingrix* and flu supply. In 2019, we shipped 701 million doses and achieved strong on-time, in-full (OTIF) delivery.

As part of our two-year programme to create New GSK, we will optimise our Vaccines manufacturing network to support both commercial and pipeline assets. This will include investment in lyophilisation facilities, filling and packaging technologies and further simplification of supply chain processes.

All Vaccines' sites inspected by the FDA in 2019 passed. In Belgium, our pertussis acellular manufacturing facility passed an FDA pre-approval inspection, while our new inactivated poliovirus vaccine unit is on track to file for EU approval.

Digital transformation

We are progressing towards our goal of becoming a digital and data-driven organisation. In 2019, we continued to improve the way we harness technology, developing new ways of working to drive performance and increase our ability to deliver vaccines to people around the world. We are leveraging data, artificial intelligence and digital models to optimise our research and development projects as well as our supply network to drive efficiencies across the business.

Consumer Healthcare

Our world-leading Consumer Healthcare business combines science and consumer insights to create innovative everyday healthcare brands that consumers trust and experts recommend for oral health, pain relief, cold, flu and allergy relief, digestive health, and vitamins, minerals and supplements.

Progress against our long-term priorities

Innovation

- 44 first market launches across all categories including *Sensodyne Pronamel Intensive Enamel Repair* and *TUMS Chewy Bites with Cooling Sensation*
- 133 new innovation roll-outs including *Sensodyne Sensitivity & Gum* and *Polident Cushion and Comfort*

 Read more below

Performance

- Total 2019 turnover £9.0 billion, up 17% AER, up 17% CER, up 2% proforma
- Completed joint venture with Pfizer that combined our consumer healthcare businesses; on track to deliver synergies of £500 million total annual cost savings by 2022

 Read more on pages 28 to 29

Trust

- Supply chain service levels continued to improve, with excellent on-time, in-full delivery performance
- Helped 3,500 children access free life-changing cleft lip and palate surgery and comprehensive cleft care through our partnership with Smile Train

 Read more on pages 30 to 42

Innovation

In 2019, we closed a deal with Pfizer to combine our two consumer healthcare businesses, making us number one globally in over-the-counter (OTC) medicines and therapeutic oral health, and giving us leading positions in key geographies including the US and China.¹

The proportion of our sales in 2019 from products introduced in the past three years was 12%.

Delivering best-in-class innovation

We combine deep consumer insights and scientific and technical expertise to deliver innovations across each of our categories. For example, in oral health we launched our most advanced formulation for enamel care, *Pronamel Intensive Enamel Repair* toothpaste, in the US, UK and Germany. With more than 80% of people globally at risk of enamel wear, and 30% of European adults aged 18-35 already showing moderate signs of enamel wear, this formula is proven to actively repair acid-weakened enamel to help people strengthen and protect their teeth.

Another launch in 2019 was *Sensodyne Sensitivity & Gum*, which was developed for approximately one third of the adult population that experience tooth sensitivity, with over half of them also experiencing gum problems. The new offering provides dual relief for sensitivity and bleeding gums, all in one daily toothpaste. It launched in over 30 markets including the UK and Turkey.

In denture care, our consumer insights show that denture wearers experience gum discomfort on a regular basis and this can have a significant impact on their lives. To address this, we developed *Polident Cushion and Comfort* which provides better cushioning and comfort for tired and tender gums as well as providing a strong denture adhesive. In 2019, it launched in 14 markets including Italy and Spain.

In pain relief, we gained approval from the FDA in February 2020 for *Voltaren Arthritis Pain* as an OTC product for the temporary relief of arthritis pain. *Voltaren Arthritis Pain* is the first prescription strength, nonsteroidal anti-inflammatory (NSAID) topical gel for arthritis pain available OTC in the US to the nearly 30 million Americans with osteoarthritis.

TUMS, an almost 90-year-old brand, continues to innovate by focusing on improving fast heartburn relief. One of the most common heartburn symptoms is a burning sensation in the mouth and throat. *TUMS Chewy Bites* have always been fast acting, but it was essential that we develop an antacid that consumers could also feel working. To address this, we created *TUMS Chewy Bites with Cooling Sensation*; it goes to work in seconds while providing a cooling sensation so consumers can cool down and fight heartburn fast.

¹ Based on Nicholas Hall's DB6 Global OTC Database 2018.

Consumer Healthcare continued

Building industry-leading capabilities

Our Consumer Sensory Labs around the world enable us to listen to, understand and meet the needs of consumers. Every year, we carry out research involving around 10,000 consumers either in one of our three Consumer Sensory Labs or in consumers' homes to gain deeper understanding of consumer reactions to products during the development process to help improve our brands and develop new ones.

In 2019, we added a Consumer Sensory Lab facility in the US through our joint venture and during 2020, we plan to open a new Lab in China to further enhance our capabilities.

Through our research, we found that consumers in India and China are increasingly looking for products that combine science and natural or traditional approaches. Leveraging these insights we developed *Sensodyne Herbal Multi-Care* toothpaste for the relief of sensitive teeth which captures the flavours of eucalyptus and fennel.

The increasing use of digital technology is revolutionising the way consumers buy and use healthcare products. We are using the joint venture with Pfizer as an opportunity to further build our digital innovation capabilities and evolve our Digital Innovation Hub. The team will develop innovations that are focused on creating platforms and business models that will meet the future healthcare needs of consumers.

Performance

Consumer Healthcare sales in 2019 were £8,995 million, up 17% AER and 17% CER. On a pro-forma basis, sales grew 2%, driven by strong performance in the oral health category, partly offset by a decline in skin health. Mid year we completed the joint venture with Pfizer, creating a leading Consumer Healthcare business.

We are leveraging the joint venture integration as a catalyst to accelerate growth and drive innovation. We are sharpening our strategic resource allocation to ensure we focus our investments on the right markets and brands so that we can generate the strongest growth and highest returns. Our power brand portfolio has expanded with the addition of *Advil* and *Centrum* alongside our seven other power brands including *Sensodyne*, *Voltaren* and *Theraflu*. Our local star brands are geographically concentrated in one or more key markets, such as *TUMS*, *Emergen-C* and *ChapStick* in the US, or *Caltrate* and *Fenbid* in China. Together, power brands and local stars will drive performance of Consumer Healthcare and reinforce our global leadership in pain relief, respiratory, wellness and therapeutic oral health.

We are redefining our operating model to reflect the global and local nature of our brands, moving accountabilities and decision making closer to consumers and customers to accelerate our speed to market and leverage the scale and expertise of our global portfolio. We are also investing in key capabilities such as digital, data and analytics, and sustainability, to unlock growth and ensure that we meet the expectations of consumers and customers.

Creating a world-leading Consumer Healthcare company

Since completing the transaction with Pfizer to create a new Consumer Healthcare Joint Venture on 31 July 2019, we have made good progress towards integrating the two businesses. On Day 1 of the joint venture, we completed legal closes in 15 markets, including our two biggest markets, the US and China, all together accounting for more than 80% of Pfizer Consumer Healthcare revenues. Following the close, no business continuity issues or significant employee experience issues were reported, and we completed the appointment of approximately 500 critical leadership roles. By the end of 2019 we completed legal closes of the joint venture in 40% of the local markets and continue to work towards local closes in remaining markets during 2020.

At the same time as announcing the joint venture, we announced our intention to separate Consumer Healthcare via a demerger within around three years of closing the transaction. Through the 'Future Ready' programme, planning work has begun to prepare for our future separation and is focused on building the key technology infrastructure and support functions necessary to operate as a standalone company. This work will continue in parallel with integration of the joint venture and delivery of planned savings.

We are on track to deliver £0.5 billion synergies by 2022. Synergies are expected to be achieved from a number of areas, including network rationalisation, logistics and infrastructure, advertising and marketing, sales and distribution and functional support. Up to 25% of the cost savings generated are intended to be reinvested in the joint venture to support innovation and other growth opportunities. Overall, the Consumer Healthcare joint venture is targeting an adjusted operating margin percentage in the mid-to-high 20s by 2022.

Work is continuing to secure required regulatory approvals for the proposed sale of *Horlicks* and other consumer health food drinks brands to Unilever, as announced in December 2018 following a strategic review of our nutrition portfolio. We are also progressing with the proposed merger of our 72.5% stake in GlaxoSmithKline Consumer Healthcare Limited in India with Hindustan Unilever Limited, which would allow Hindustan Unilever Limited to sell and distribute our OTC and oral health brands in India through a distribution arrangement. The transaction is expected to be finalised around the end of Q1 2020, subject to approvals.

Consumer Healthcare continued

Leading for growth

As we create our new business, we are evolving our culture to put consumers and customers at the heart of every decision we take, build leadership capabilities and drive performance. In the second half of 2019, we took steps to define the behaviours and mindsets required to embed effective decision making, clarity of accountability and courageous straight talk. Our top 100 leaders are building strong ownership and are acting as culture ambassadors across the business. We deployed a streamlined decision making tool designed to help identify the single point of accountability, and we plan to roll this out during 2020. We have also implemented High Performing Team development programmes to around 91 of our most senior leadership teams, with an emphasis on straight talk and decision making. We are actively listening and taking action on employee feedback and on the perception and evolution of our culture, integration planning and engagement through our quarterly Consumer Healthcare Pulse surveys and the annual GSK employee survey (see pages 35 to 36).

Digital transformation

By putting digital technology at the heart of our business, we aim to deliver more meaningful interactions with consumers, fuel brand growth and achieve efficiency savings. In 2019, we continued to accelerate our digital transformation and prioritise building our digital capabilities, including hiring expert new talent.

We launched a three-year Asia Pacific Digital Accelerator programme to drive sales through digital commerce and promote a digital-first culture within the region. The programme integrates external digital experts into GSK Consumer Healthcare's team in different countries across Asia Pacific to enhance digital capabilities, build internal capacity and embed agile ways of working.

We have made progress transforming our marketing model and capabilities in strategically important areas, most notably through the creation of the cutting-edge marketing services team which leverages technology solutions, data and strategic partnerships to provide specialist marketing capabilities at scale to improve the quality and effectiveness of marketing campaigns.

By combining our anonymised first-party data with Google's second-party data and leveraging additional technology platforms, we identify signals that help us target specific audiences, based on their behaviours, with dynamic and relevant content across media platforms.

We have rolled out a new technology platform in 92 markets which enables us to track media spend in real time, enabling us to optimise campaign performance, target audiences with greater precision and create valuable first party data. Together, the insights provided through these platforms are delivering an improved consumer experience with more personalised content and efficiency savings.

Winning with shoppers, customers and experts

Expert endorsement builds trust in our brands and drives shopper purchase decisions. *Sensodyne* retains its unequalled number one leadership position with dentists as a brand recommended most often for sensitivity in 70% of markets in which we compete. Of our OTC brands, 70% are sold in pharmacies. We continued to prioritise our relationships with dentists and pharmacists and to invest in information that supports our products. In 2019, our expert sales representatives called on 400,000 dentists in over 90 markets to share relevant science-based information.

We have Shopper Science Labs in the UK, US and Singapore that use state-of-the-art technology to track shopper behaviour in real time to provide us with rich insights on consumers' shopping habits around the world. We have additional satellite lab facilities located in Canada, South Africa and Mexico and by the headquarters of our major US retail partners.

In 2019, we leveraged our Shopper Science Labs to strengthen our customer relationships, developing an ecommerce evaluation tool that enables us to overlay digital content and integrate digital prototyping tools with key retailer websites, including Amazon.com and Tesco.com, to simulate a realistic ecommerce shopping experience with shoppers.

Creating a simpler, competitive supply chain

We continue to drive strong improvement in service to our customers with continued excellent on-time, in-full service levels. This has allowed our supply chain to focus on opportunities for driving more value for the business, consumers and the environment by eliminating waste, packaging and costs.

The joint venture has provided a renewed focus on cost saving initiatives with a leaner structure in non-manufacturing site teams to drive synergy savings and increase speed of decision making. This includes the optimisation of our manufacturing network – consolidating and maximising capacity in our own sites and streamlining the number of contract manufacturers (CMOs) we use to ensure we have the right balance of trusted, cost-efficient manufacturing, with clear business continuity plans in place to manage supply stability. During 2019, we announced the closure of Agbara, Nigeria and Dehiwala, Sri Lanka.

In our supply chain, we have consolidated accountability for end-to-end operations in our Regions and built closer partnerships with the local commercial and R&D teams to drive local innovation and significantly improve supply chain agility. Making more products, more frequently, in smaller batches, allows for less inventory, and enables us to respond more quickly and effectively to changing consumer demand.

Trust

Trust is one of our three long-term priorities and is essential to how we achieve our purpose, drive long-term growth and add value for society and our shareholders.

Our commitments on Trust

Our purpose is to help people do more, feel better and live longer

Using our science and technology to address health needs

New medical innovations

Develop differentiated, high-quality and needed medicines, vaccines and consumer healthcare products to improve health

Global health

Improve global health impact through R&D for infectious diseases that affect children and young people in developing countries focusing on HIV, malaria and TB

Health security

Help the world to better prepare for future disease outbreaks with pandemic potential, and tackle antimicrobial resistance

Making our products affordable and available

Pricing

Improve the health of millions of people each year by making our products available at responsible prices that are sustainable for our business

Product reach

Use access strategies to reach 800 million underserved people in developing countries with our products by 2025

Healthcare access

Partner to improve disease prevention, awareness and access to healthcare services by 12 million people by 2025

Being a modern employer

Engaged people

Achieve and maintain a competitive employee engagement score by 2022

Inclusion and diversity

Accelerate our progress on inclusion and diversity, aiming for over 37% female representation in senior roles and recognition in global LGBT+ indices, by 2022

Health, wellbeing and development

Be a leading company in how we support employee health, wellbeing and personal development

Being a responsible business

Reliable supply

Commit to quality, safety and reliable supply of our products for patients and consumers

Ethics and values

Operate an ethical, values-driven culture, in which any issues are responded to swiftly and transparently

Data and engagement

Use data responsibly and transparently. Improve patient and scientific engagement

Environment

Reduce our environmental impact by one quarter by 2030

Society has high expectations of businesses, with people rightly expecting companies to behave responsibly and contribute to tackling societal challenges. Operating responsibly brings direct benefits to society but also creates value for our shareholders. It supports our ability to attract and retain talent, manage costs and build trust with patients and consumers, our customers, payers and stakeholders who influence our licence to operate. We have mechanisms to help us identify and respond to our different stakeholder groups (summarised on pages 15 to 16).

The 13 commitments detailed above support our Trust priority in driving progress in the key areas where we can make a significant impact, and ensuring that we are running our business in a responsible way.

These commitments seek to address the most material topics relevant to our stakeholders and to our business, and are designed to help us respond to challenges and opportunities within our industry and society more broadly (see pages 12 to 14). They contribute to many of the UN Sustainable Development Goals (SDGs). As a science-led, global healthcare company, our biggest contribution is towards Goal 3: ensure healthy lives and promote well being for all at all ages.

Our Corporate Responsibility (CR) Committee forms an important part of the Board's oversight of our Trust priority. The Committee provides ongoing scrutiny on progress against our commitments and how the company is addressing the evolving views and expectations of our broad range of stakeholders.

The Corporate Executive Team and senior management oversee implementation of our Trust commitments and report regularly to the CR Committee (see pages 109 to 110).

Trust continued

External benchmarking

- **DJSI:** top of the pharmaceutical industry group for the 2019 Dow Jones Sustainability Index.
- **ATMI:** top of the Access to Medicine Index, and leading the industry in the 2020 Antimicrobial Resistance Benchmark.
- **FTSE4Good:** member of the FTSE4Good Index since 2004.
- **CDP:** in 2019 received a score of 'B' in CDP Climate Change and CDP Water, and named CDP Supplier Engagement Leader.

Our approach to reporting

In this Trust section, we report progress against our 13 commitments. We also publish online detailed information on our contribution to the SDGs, along with an ESG performance summary with current and historical data, and our UN Global Compact Communication on Progress, Global Reporting Initiative index, Sustainability Accounting Standards Board index and assurance statements.

⊕ GSK.com: Responsibility reports and data • Our contribution to the SDGs

Science and technology

We are committed to using our science and technology to address health needs. Innovation is at the core of who we are and what we do, and we have a unique opportunity to impact global health – from the prevention and treatment of infectious diseases to urgent public health threats, such as the growing resistance to antibiotics.

New medical innovations

The biggest impact that we can have as a science-led, global healthcare company is to successfully discover and develop innovative products. We are using cutting-edge science and technology to develop differentiated, high-quality and needed medicines, vaccines and consumer healthcare products to improve health. Read more about innovation within our three businesses on pages 17, 23, and 27.

Global health

Our commitment is to improve our global health impact through R&D for infectious diseases that affect children and young people in developing countries focusing on HIV, malaria and TB. Our early discovery work also allows us to pursue promising scientific leads in other developing world diseases, such as Chagas disease, leishmaniasis and sleeping sickness.

We need to ensure a sustainable, collaborative model for translating scientific discoveries into benefit for the most vulnerable patients. To ensure the ongoing sustainability of our investment in global health science, and in the interests of products reaching patients more quickly, we seek development partnerships. Where appropriate, to maximise impact we transfer our technology to third party organisations with the right capability and focus. For example, in 2019 we transferred our Ebola and Marburg vaccine candidates to the Sabin Vaccines Institute. We believe these transfers will help ensure that the vaccine candidate technologies can be developed faster and more efficiently brought to those who need them.

Tuberculosis

TB is the leading cause of death through infectious disease worldwide and represents a significant public health threat. An effective vaccine against TB will have a marked impact on the disease's control – including drug-resistant TB – through interruption of transmission. It will also help to achieve the World Health Organization (WHO) target of ending the TB epidemic by 2035.

In 2019, the final phase IIb results of our candidate vaccine, developed in partnership with IAVI, confirmed primary findings that the vaccine candidate showed reduced risk of developing pulmonary TB by half in HIV-negative adults with latent TB infection. In January 2020, we announced the licensing of this asset to the Bill & Melinda Gates Medical Research Institute for its continued development for low income countries with high TB burden, in line with our global health strategy.

We have a world-leading portfolio of first-in-class medicines for TB, spanning different mechanisms. In combination with other medicines, these may be contenders to transform the TB landscape as part of a new TB regimen that is effective in all patients, even those with resistance to the currently-available TB medicines.

In February 2020, we joined the Partnership to Accelerate New TB Treatments (PAN-TB). This collaboration, involving other companies and the Bill & Melinda Gates Foundation, aims to accelerate the development of a treatment course for any form of TB, even multi-drug resistant forms of the infection, and create a course that is shorter, less complicated, and easier to tolerate than existing options.

Malaria

Our work to fight malaria ranges from developing medicines and vaccines to working with partners to strengthen health systems.

Our RTS,S vaccine is the first vaccine to help protect children against the deadliest form of malaria, *P. falciparum*. In 2019, the WHO-coordinated pilot implementation programme led by local ministries of health, and in partnership with PATH and GSK, launched in selected regions of Malawi, Ghana and Kenya. Every year until 2023, at least 360,000 children are expected to receive the vaccine. We have committed to donating up to 10 million doses and are undertaking additional post-approval pharmacovigilance, effectiveness and impact studies. We are currently working with the WHO and PATH, Gavi and other potential funders to ensure a sustainable supply of the vaccine for a potential broad implementation beyond the pilot.

Tafenoquine (*Krintafel/Kozenis*), our single dose radical cure treatment for *P. vivax* malaria, developed in partnership with Medicines for Malaria Venture, received regulatory approval in malaria endemic countries Brazil, in 2019, and Thailand, in early 2020.

Trust continued

HIV

Through ViiV Healthcare, we are committed to developing and delivering HIV treatment formulations optimised specifically for infants and children under the age of 15. This is driven by the WHO-led Paediatric ARV Drug Optimisation priorities.

In 2019, we continued to progress our clinical development programmes for paediatric formulations of dolutegravir, in partnership with the International Maternal Paediatric Adolescent AIDS Clinical Trials Network and the Paediatric European Network for Treatment of AIDS.

In December 2019, we filed FDA and EU regulatory submissions, seeking approval of the first-ever 5mg dispersible-tablet formulation of dolutegravir, as well as a simplified dosing regimen to optimise use of the existing dolutegravir 50mg film-coated tablet in paediatric HIV patients. These submissions will be the gateway to regulatory submissions in low- and middle-income countries, as well as providing regulatory references for generic manufacturers to register their paediatric formulations under voluntary licensing agreements.

Through our public-private partnership with the Clinton Health Access Initiative, Unitaaid and two generic manufacturers (Mylan and Macleods), we are expediting the development, registration and market entry of generic formulations of paediatric dolutegravir in resource-limited settings. The aim of this project is to reduce the gap between our dispersible tablet formulation being available and the generic dispersible tablet formulations being available to children in developing countries to months rather than years.

Other developing world diseases

We pursue the most promising scientific leads in other areas beyond TB, malaria and HIV, both within GSK and through our Tres Cantos Open Lab in Spain and GSK Vaccines Institute for Global Health (GVGH) in Italy.

The Tres Cantos Open Lab furthers R&D for diseases in the developing world by offering external researchers the potential to access GSK's compound library, screening tools and scientific expertise. As well as supporting research into TB and malaria, projects include neglected tropical diseases such as Chagas disease, leishmaniasis and sleeping sickness.

The GVGH aims to discover effective and affordable vaccines for high-burden infectious diseases in developing countries. Around 40 scientists focus on translating laboratory concepts into high-quality vaccines. Current areas of work include shigella, invasive nontyphoidal salmonella, typhoid and paratyphoid fever, and Group A streptococcus.

In February 2020, the Indian health regulatory authorities approved a new vaccine to help protect children against typhoid fever. This had first been developed by the GVGH and then transferred in 2013 to Indian vaccine company, Biological E, once proof-of-concept had been demonstrated. This is the first licensing of a vaccine created in the GVGH's labs and successfully further developed and brought to market through an effective partnership.

 GSK.com: Inside the GVGH

Health security

We are using our vaccines, medicines and scientific know-how to help the world better prepare for future disease outbreaks with pandemic potential, and to tackle antimicrobial resistance (AMR).

Pandemic preparedness

GSK is committed to playing our part to prepare for, and respond to, pandemics. We work with governments to support their pandemic readiness plans, and we support the Pandemic Influenza Preparedness Agreement adopted by WHO member states in 2011. In the event of a declared pandemic, we will provide the WHO with real-time access to our pandemic influenza vaccines and antivirals for the world's poorest countries. These commitments are a combination of donations and tiered prices depending on the country's gross national income (GNI). GSK supports the WHO's pandemic preparedness activities, including the Global Influenza Surveillance and Response System – a worldwide network able to rapidly identify and respond to influenza outbreaks including those with pandemic potential.

In February 2020 GSK announced two new collaborations to make our established pandemic vaccine adjuvant platform technology available to enhance the global efforts to develop a vaccine against the 2019 novel coronavirus (SARS-CoV-2). The use of an adjuvant, which is added to some vaccines to enhance the immune response, is of particular importance in a pandemic situation since it can reduce the amount of antigen required per dose, allowing more vaccine doses to be produced and made available to more people. The first collaboration announced is with the Coalition for Epidemic Preparedness Innovations (CEPI) and the University of Queensland, and the second collaboration is with China-based Clover Biopharmaceuticals.

Addressing antimicrobial resistance

AMR is one of the biggest health challenges facing the world. We are playing a leading role in the industry's response and GSK once again ranked first in the Access to Medicine Foundation's 2020 AMR Benchmark for our 2019 performance.

Vaccines play a critical role in avoiding the need for antibiotics, by preventing bacterial, viral and other infections. Our vaccines against diseases such as diphtheria, meningitis, pneumonia and pertussis have protected tens of millions of individuals from bacterial infections, which are major drivers of direct antibiotic prescribing.

In addition, our vaccines for non-bacterial infections, like influenza, rotavirus and malaria, can also prevent unnecessary or avoidable prescribing of antibiotics due to secondary infections. We are committed to researching and developing new vaccines to prevent and mitigate AMR infections and reduce avoidable antibiotic use.

We are one of only a few pharmaceutical companies who actively research and develop new antibiotics to treat resistant infections. In our Pharmaceutical pipeline, gepotidacin is the first in a new chemical class of antibiotics with a mechanism distinct from any currently approved antibiotic. This progressed to phase III clinical research in October 2019 and is being studied to treat patients with uncomplicated urinary tract infection and urogenital gonorrhoea, many of whom contract strains resistant to existing treatments.

Trust continued

However, R&D for many other types of bacterial infections is not economically sustainable under current market conditions. Governments recognise the need for financial support. We have partnered with the US Government's Biomedical Advanced Research and Development Authority and the Defense Threat Reduction Agency. We also support public-private partnerships that aim to speed up the discovery and development of new medicines to treat or prevent resistant bacterial infections through collaboration and capability building.

Through our Survey of Antibiotic Resistance (SOAR) programme, we analyse antibiotic resistance at a local level. We share our findings with healthcare professionals (HCPs) and public health bodies to inform the development of local antibiotic prescribing guidelines. We are one of the few companies sharing our AMR surveillance data publicly, through the open data platform run by the Wellcome Trust and Open Data Institute. In addition, in 2019 we trained 32,841 HCPs across 65 countries on the appropriate use of antibiotics.

In 2019, we started to implement the new global limits for reducing antibiotic discharge from manufacturing into the environment across our own antibiotic factories and suppliers. We are on track to meet these new global limits by the end of 2021. For more on how we address pharmaceuticals in the environment see the Environment section on page 41.

 GSK.com: Preparing for future disease threats

Affordability and availability

We are making our products affordable and available to more people around the world through responsible pricing, and strategic access programmes and partnerships.

Pricing

We aim to improve the health of millions of people each year by making our products available at responsible prices that are sustainable for our business.

We recognise that pricing of pharmaceutical medicines and vaccines is an important issue in both developed and developing countries, and we understand patient and payer concerns about affordability. When setting the price of our medicines in developed markets, we apply a value-based approach to balance reward for innovation with access and affordability.

We aim to bring truly differentiated, innovative products that bring highly-effective health outcomes for patients and payers, so that even those products with a high cost will bring value to patients and healthcare systems. By investing in genetics, genomics, big data and AI we are accelerating the pace at which we develop transformational medicines, prioritising those molecules with a higher probability of success – we know that genetically-validated drug candidates are twice as likely to become registered medicines, improving the productivity of our R&D investment.

We price our medicines according to the value and outcomes they bring to patients, providers and payers, while being sensitive to market and societal expectations.

In the US, the pricing of all our product launches – including our most recent launches of *Dovato*, *Nucala Autoinjector*, *Trelegy Ellipta*, *Shingrix* and *Juluca* – incorporate specific market dynamics unique to the product, as well as the profile of the new medicine or vaccine in the context of existing treatment options. Over the last five years, the average net price¹ for our products in the US has fallen by 4% per year while the average list price rose by 6.4% per year. In 2019, the average net price across our US portfolio decreased by around 5% while the average list price rose by 2.5%. At the product level, the largest single increase in list price taken was 5% and that resulted in a 4.2% increase in net price. We offer various types of patient assistance to help ensure appropriate access to our medicines.

In 2019, we provided prescribed medicines and vaccines to over 123,000 eligible uninsured patients through our Patient Assistance Programme.

In Europe, we engage with governments and payers to work towards sustainable health systems that support ongoing innovation. For example, the pricing of *Trelegy Ellipta* reflects economic value by demonstrating cost-effectiveness and innovation within an acceptable budget, and offering a potential cost-saving compared with alternatives.

In developing countries, we use innovative pricing structures as part of our access strategies to extend product reach (see pages 33 to 34). Our tiered pricing model for vaccines, for example, is based on four widely recognised World Bank GNI country classifications of high income, upper middle income, lower middle income and low income. Price ceilings and price floors exist for each tier, with ceilings and floors progressively decreasing through the tiers from high to low income countries.

In least developed and low-income countries, we do not file patents for our medicines, and do not enforce historic patents. This allows generic companies to manufacture and supply generic versions of GSK medicines in those countries.

 GSK.com: Pricing and access strategies

Product reach

We aim to use access strategies to reach 800 million underserved people in developing countries with our products by 2025. These strategies include tiered pricing, product donations and voluntary licensing agreements to extend access through generic manufacturers. Since we set the target in 2018, our products have reached over 192 million people through these access strategies.²

Our tiered pricing principles mean that we reserve our lowest vaccine prices for organisations such as Gavi, the Vaccine Alliance, which supports countries with a GNI per head of less than \$1,630. For example, our *Rotarix* vaccine is available in 39 Gavi countries to protect against rotavirus.

¹ Price after discounts, rebates or other allowances.

² Total excludes reach through albendazole donations which will be assessed in 2025.

Trust continued

In 2019, we provided our pneumococcal vaccine, *Synflorix*, to 10 Gavi-eligible countries at a discounted price, reaching over 20 million people.¹ We are committed to delivering 720 million doses of *Synflorix* to Gavi via the current Advanced Market Commitments contract.

In 2019, we distributed around 120,000 doses of our vaccine *Cervarix* in Zimbabwe in support of its multi-age cohort vaccination programme protecting around 54,000 girls against human papillomavirus.¹ We also delivered over 200 million doses of oral polio vaccine to UNICEF in support of the Global Polio Eradication Initiative, reaching over 40 million children.¹

We continue to innovate to help improve access to vaccines in low-resource settings, and in 2020, we introduced the new multi-monodose blow-fill seal presentation of our vaccine against rotavirus. This was introduced for the first time, in Myanmar, with the support of Gavi. This new presentation helps reduce cold chain volume by 30%, resulting in lower cold chain and transportation costs.

In July 2019, ViiV Healthcare marked the fifth anniversary of its voluntary licensing agreements with the Medicines Patent Pool and Aurobindo Pharma. These agreements currently allow 18 generic manufacturers to produce and sell low cost single or fixed dose combination products containing dolutegravir for adults and children in countries with the highest burden of HIV. This totals 94 and 121 countries for the adult and paediatric agreements respectively, in addition to any country where there is no granted patent in force. By the end of 2019, at least 6.9 million people living with HIV, across 85 countries in the developing world, had access to a generic dolutegravir-containing product, made possible because of these licensing agreements.

In 2019, ViiV Healthcare continued to donate several antiretroviral medicines to Venezuela, a country facing a profound shortage of basic medicines. We were the first pharmaceutical company to donate antiretrovirals to the people living with HIV in this humanitarian crisis. Since February 2018 we have donated over 275,000 packs of antiretrovirals. GSK has also donated over 360,000 vaccines to Colombia to protect Venezuelan migrants in transit or residing in the national territory against rotavirus, pneumococcus, diphtheria, pertussis and tetanus.

Since 1999, we have donated over 9 billion albendazole tablets to the WHO – including 890 million in 2019 – to support efforts to end lymphatic filariasis (LF) and control intestinal worms (soil transmitted helminths) in school-age children. This has benefited patients in 92 countries around the world. GSK remains committed to continuing to donate albendazole tablets until LF is eliminated as a public health problem globally.

Through our partnerships with Americares, Direct Relief, IHP UK and MAP International, nearly 178,000 units of GSK medicines were distributed for humanitarian and emergency response in 51 countries.

 [GSK.com](https://www.gsk.com): Pricing and access strategies

Healthcare access

We aim to partner to improve disease prevention, awareness and access to healthcare services for 12 million people by 2025. Since we set the target in 2018 we have reached nearly 8 million people through these partnerships.

Since 2010, ViiV Healthcare has invested over £60 million into more than 750 Positive Action grants to address HIV stigma and support HIV education and prevention. In 2019 alone, our Positive Action for Children programme directly reached almost 640,000 people. We are committed to supporting partnerships to end AIDS and further ViiV Healthcare's mission of leaving no person living with HIV behind.

We are partnering with Comic Relief to complement our efforts to combat malaria through R&D (see page 31). We have 25 projects in Africa and South East Asia which aim to improve malaria awareness and prevention efforts, and get treatment to the people who need it. Together, through partnerships with local and international organisations, we reached more than 1.1 million people in 2019, including health workers, private providers, and vulnerable populations such as pregnant women and children under five.

In 2019, through our partnerships with Amref Health Africa, CARE International and Save the Children, we helped to train over 18,000 frontline health workers, and approximately two million people were directly reached with a health worker, healthcare service or health facility.²

Our partnership with Save the Children aims to help reduce child mortality. In 2019, the partnership reached approximately 114,000 children under five (almost 3 million children since 2013) with interventions including: widening immunisation coverage, accelerating access treatments and strengthening healthcare systems. In 2019, we also launched a new programme in Nigeria focused on preventing infectious disease in children.

In 2019, 3,500 children received free, life-changing surgery and comprehensive cleft care through our partnership with Smile Train. Together with the World Dental Federation and Smile Train, we have launched a new two-year project to improve oral health guidance and ongoing care for children with clefts. In India, we also funded the Smile Train Toll-Free Cleft help-line, which provides people with information about cleft treatment and support.

¹ People reached/protected is calculated by dividing the total number of doses supplied to Gavi or UNICEF by the number of doses needed to complete a full schedule of vaccination allowing for WHO estimates of wastage.

² Health worker data is estimated based on 2018 reach through the same partner programmes and level of funding. Final 2019 data is expected to be available in April 2020.

Trust continued

Our Allied Against Dengue campaign in India and South East Asia was created to bring together key stakeholders and partners to prevent and treat outbreaks of dengue fever, a potentially fatal mosquito-borne disease. In 2019, we trained over 3,700 healthcare workers and reached over 147,000 people through a range of programmes to mobilise communities and promote behaviour change.

Our global contribution to community health programmes amounted to £263 million¹ in 2019. This includes cash, product donations and the volunteering time of our employees to help improve healthcare access.

⊕ GSK.com: Prevention, awareness and infrastructure
ViVHealthcare.com: Positive Action programmes

Modern employer

As a modern employer, we believe that a strong employee experience is critical to attract, retain and motivate the best people to support our business now and in the future. We launched our modern employer ambition in 2018, focusing on inclusion and diversity, health and wellbeing and employee development. The aim is to ensure our people are empowered to be themselves, feel good and keep growing at GSK.

Engaged people

Employee engagement is an important barometer to gauge how our people feel about working at GSK. We aim to achieve and maintain a competitive employee engagement score by 2022.

We survey our employees to get feedback about how we are doing on our long-term priorities and culture change. In 2019, we had a good response rate for both surveys (81% in April and 78% in September) and we achieved our highest engagement score in ten years in April (80%), and maintained a strong score in September (78%).

We continue to drive engagement through Let's Talk sessions with our executive teams and Workplace – our collaborative online platform. This enables two-way informal communication and collaboration, discussing topics that matter to both employees and GSK, sharing knowledge and perspectives to support greater understanding and faster, more effective decision-making across the organisation. In any given month, 71% of our employees are actively connecting to the platform to get their work done and 77% are reading content from the company and business unit groups.

Inclusion and diversity

We believe strongly in inclusion and diversity. Not only is it the right way to do business, but it also leads to business success, unleashing the enormous potential of the differing knowledge, experiences and styles of our people, enhancing our ability to respond to the differing needs of our patients and consumers.

Our employees should be able to bring their authentic selves to work. We were encouraged by the results of our employee survey in September 2019, which included the question 'I can be my authentic self when working at GSK' which received a favourable score of 76%, and 81% said that they feel respected at work.

At GSK, we have four diversity councils (covering gender, ethnicity, LGBT+ and disability), each chaired by an executive team member. The councils support our inclusion and diversity agenda, with input from our employee resource groups.

We are committed to improving ethnic representation at all levels in GSK, and work with our new ethnicity council to remove barriers, increase understanding and ensure equal opportunities.

Our goal is to be recognised in global LGBT+ indices and in 2019 LGBT+ rights group, Stonewall, recognised GSK in its Top Global Employers list. In the UK, Stonewall also named our employee resource group for LGBT+ employees and allies as the best in the UK. In the US, GSK was named Best Place to Work for LGBT equality for the fourth consecutive year in Human Rights Campaign's Corporate Equality Index.

In addition, we are signatories to the UK Department for International Development's Charter for Change, joining other organisations with a common aim to ensure rights, freedoms, dignity and inclusion for people with disabilities.

Gender diversity

Our goal is that by 2022 we will have over 37% female representation in senior roles.

The percentage of women in management has continued to rise at GSK. In 2019, women represented 47% of all management roles (45% in 2018), and 36% of senior management roles – VP and above – up from 33% in 2018. The latest Hampton-Alexander Review of FTSE 100 companies found that GSK had the third highest proportion of women on the Board (an increase from sixth in 2018) with 45.5% female representation. It also found that we had exceeded the target of 33% women on the Board and in the direct reports to the Corporate Executive Team.

GSK is one of 12 prominent healthcare and life science companies to join the Healthcare Businesswomen's Association Gender Parity Collaborative in the US. This was launched in 2018 to foster measurable gender parity progress in the industry.

We are improving gender balance by encouraging and supporting more women to develop as leaders. In 2019, we provided 130 high-performing female managers with coaching and support through our Accelerating Difference programme. We also recruit and support women early in their careers, with women representing 38% of our apprentices and 58% of our graduates in 2019. As a result of our efforts to develop our female employees during the year, three women from GSK were included in the Women's Engineering Society Top 50 Women in Engineering: current and former apprentices, and GSK India was named by Avtar as among the best companies for women to work for.

¹ Figure includes contributions from the Tesaro portfolio.

Trust continued

We have a long-standing commitment to fair and equal pay. We conduct country-based reviews and ensure all markets have clear guidance, tools and support to ensure pay equity. If unexplainable differences are detected, these are addressed through our compensation processes.

We published our third UK gender pay gap report for 2019. Our gender pay gap for all permanent UK-based GSK employees is 2.43% (mean), outperforming the national average of 16.2%. We remain committed to improving gender balanced representation and the application of fair and equitable pay practices to ensure equal opportunities and equal pay for equal work.

Women in management (%)

	2019	2018	2017	2016
SVP/VP	36	33	31	30
Director	44	43	43	42
Manager	49	48	47	46
All employees	47	45	44	43

Employees by gender (number)

	Male	Female	Total
Board	6	5	11
Management*	9,861	8,619	18,480
All employees	54,690	44,747	99,437

* Management: senior managers as defined in the Companies Act 2006 (Strategic Report and Directors' Report) Regulations 2013 which includes persons responsible for planning, directing or controlling the activities of the company, or a strategically significant part of the company, other than the Board, including directors, or undertakings included in the consolidated accounts.

Health, wellbeing and development

We aim to be a leading company in supporting employee health, wellbeing and development.

Health and wellbeing

Our global, comprehensive preventive healthcare package for our employees – and their eligible dependants – includes up to 40 preventative healthcare services at little or no extra cost to participants. We provide programmes to help our people take control of their health, manage their energy levels and adopt healthier behaviours.

In 2019, more than 15,000 employees took part in our energy and resilience programmes. We also expanded our personalised digital health platform from the original 5,000 employees in Belgium, to over 10,000 employees in Singapore, Mexico, Spain, France, Switzerland, Australia and New Zealand.

We understand how important it is that employees have flexibility to manage their lives, so everyone can thrive and do great things at work and home. Our largest markets have formal flexible working and carer policies and all our markets are reviewing their competitiveness in this area. Our aim is to differentiate ourselves. For example, in 2019 the US implemented care of family member paid leave, which is above industry standards in the US.

For the fourth year in a row, GSK increased participation levels in the Virgin Pulse Global Challenge with over 17,000 participants across 67 countries. We were once again named the Most Active Organisation, with our people collectively taking more than 20 billion steps.

We consider mental wellbeing to be just as important as physical wellbeing and raised awareness of this issue on World Mental Health Day, encouraging people to seek support through our 24-hour, confidential Employee Assistance Programme and other resources. We have also launched 'Mental Health Matters' training for line managers. This is helping them to increase their awareness, skills and knowledge, so they can better support their teams.

Preventing injuries and illnesses at work is also fundamental to our people's health and wellbeing. Approximately 20,000 employees drive on company sales business and in 2019, unfortunately one of our commercial salesforce died in a motor vehicle accident in Kenya. To try to prevent these sorts of tragic accidents from happening, we run a driver safety programme to help employees protect themselves and their families, combining online learning with practical road safety activities. In 2019, roughly 19,000 drivers across 65 countries were trained on driver safety. Our reportable injury and illness rate continued to decline from 0.23 per 100,000 hours worked in 2018, to 0.22 in 2019. This remains comparable with other leading companies in our sector.

Employee development

We want our people to keep growing at every stage of their working lives.

We expect all of our employees to have a development plan agreed with their manager. To support our employees to take ownership of their development, all employees have access to a new development portal with resources that are most relevant to their roles, development needs and interests.

In addition, GSK continues to meet its commitment as a member of the 5% Club, a group of UK companies committed to hiring young people in development programmes into at least 5% of UK roles. We currently have 799 people on our graduate and MBA programmes globally and 398 in apprenticeships in UK, US, Canada, Ireland, Singapore and Belgium.

We have a strong focus on improving the effectiveness of our people managers. One80 is part of our performance system and is critical to holding managers accountable for how they manage the performance and development of their team. Employees provide feedback on their manager through 14 questions which measure leadership effectiveness in three key areas: knowing their people, delivering results and maximising potential. In 2019, 9,000 managers participated in One80 and more than 60,000 employees provided feedback to their manager.

We also introduced a new leadership development programme for first-line leaders. This training consists of five virtual modules, with a strong emphasis on conversations that matter, developing for performance, and leading high performing teams. The programme was piloted in 2019 with 845 leader participants. The programme will be rolled out across GSK in 2020 in support of continued leadership development.

⊕ GSK.com: Employee engagement • Learning and development

Trust continued

Reliable supply

Ensuring a high-quality, safe and reliable supply of our products for patients and consumers is a priority for all three of our businesses (see pages 22, 26 and 29). Product shortages can happen for a variety of reasons, including supply disruptions and unexpected demand.

Our robust quality management systems support continuous improvement, helping us to maintain high standards for product quality and safety and comply with relevant regulations, including those on Good Manufacturing Practice, Good Laboratory Practice, Good Pharmacovigilance Practice and Good Clinical Practice. Of the 196 external regulatory inspections at our Pharmaceutical, Vaccines and Consumer Healthcare manufacturing sites and local operating companies in 2019, most found no issues or resulted in only minor observations. We address every issue, however minor, and regulatory authorities have accepted our proposed plans for corrective actions.

In late summer 2019, GSK was contacted by regulatory authorities regarding the detection of NDMA, a potential human carcinogen, in Zantac (ranitidine) products. Based on information received and correspondence with regulatory authorities, GSK made the decision in mid-September to initiate a voluntary recall (pharmacy/retail level recall) of Zantac products in all markets as a precautionary action. Since then, a number of recalls have been initiated by API suppliers, as well as other pharmaceutical companies who hold market authority in various countries, including the US. GSK discontinued making and selling prescription Zantac tablets in 2017 and discontinued making and selling over-the-counter Zantac in 1998 in the US. Several regulatory authorities have reviewed the findings and/or are conducting their own tests including the FDA. We are continuing to work with them.

In 2019, we conducted 1,542 audits of our suppliers' quality processes and 225 audits of clinical studies run by, or on behalf of GSK, to assess their quality and safety. Where we identify areas that require improvement, we engage with the relevant third parties to develop improvement plans and track their progress. If significant issues are identified and remain unresolved, we may choose to suspend or terminate work with a third party.

Detecting, assessing, understanding and preventing adverse effects or any other drug-related problem (pharmacovigilance) is important in evaluating the safety of pharmaceutical products. We work with the WHO and other partners to enhance systems for reporting these. Through external collaborations such as TransCelerate, the European Federation of Pharmaceutical Industries and Associations and the Innovative Medicines Initiative, we are working with others to promote harmonised approaches and procedures for the clinical development and safety evaluation of drugs, and to implement key regulations.

Counterfeit products present a risk to patient safety. We support efforts to prevent the manufacture and distribution of counterfeit GSK products by working closely with government bodies, international organisations (such as the World Customs Organization and the WHO), customs authorities and industry associations. We also conduct our own investigations and work with enforcement agencies to tackle counterfeit GSK products.

GSK is implementing serialisation to drive traceability across the supply chain. Through increased supply chain visibility and increased communications with government systems, we are helping both to raise the visibility of our products to prevent theft, counterfeiting and stock diversion, and also to allow our systems to authenticate product at the point of dispense.

 [GSK.com](https://www.gsk.com): Patient safety and reliable supply

Ethics and values

We are committed to creating an ethical, values-driven culture, in which any issues are responded to swiftly and transparently. We expect everyone at GSK to live our values and expectations, speak up if they have any concerns, engage appropriately with stakeholders and respect human rights. We also extend these ethical expectations to the third parties with whom we work.

Living our values and expectations

Together, our values (patient focus, integrity, respect and transparency) and expectations (courage, accountability, development and teamwork) help us to create the culture we want. In our 2019 employee survey, 86% of employees agreed that their work environment encouraged ethical behaviour even in the face of pressures to meet business objectives.

Every GSK employee and complementary worker is required to complete the Living Our Values and Expectations mandatory training annually. In 2019, 98.5% of our employees and 92.4% of our complementary workers completed the training, covering content including our Code of Conduct, human safety information reporting and reporting misconduct.

Employees who fail to complete the course may face disciplinary action, as defined and permitted by local labour laws.

Throughout 2019, we assessed 17 different parts of the business against a values maturity matrix to understand how well our values and expectations are embedded. Additionally, individual areas of the business have been using the insights from those assessments to inform plans that further integrate our values into ways of working at GSK.

Trust continued

Examples include increasing opportunities for engagement with leadership teams to improve trust, and strengthening our people managers' capability to lead employees through times of change while delivering at pace.

Our mandatory anti-bribery and corruption (ABAC) training is more tailored, consisting of two modules – one for high-risk employees and one for everyone else. Both modules focus on principles to help employees deepen their understanding of where ABAC risks may lie, recognising conflicts of interest, and how to report and mitigate any risks or conflicts. As of December 2019, 97% of employees and 90% of contract workers completed ABAC training.

 [GSK.com: Ethics and values](#)

Reporting and investigating concerns

We encourage people to speak up if they have any concerns relating to unethical conduct or behaviour that is inconsistent with our values – or if they simply want to ask a question about how to apply our Code of Conduct.

Anyone inside or outside GSK can raise concerns or speak to an independent third party through our integrity lines, confidentially or anonymously, without fear of retaliation. We take every reported concern very seriously and review each one to understand whether a formal investigation is warranted. If our investigations show that an employee has breached our policies, we take appropriate disciplinary action.

In 2019, 2,423 employees were accused of misconduct (2,842 in 2018). We reviewed all of these cases, and initiated 1,891 formal investigations (1,805 in 2018) with most relating to behaviour in the workplace. As a result, 798 employees were disciplined for policy violations (940 in 2018), of whom 202 were dismissed or voluntarily left the organisation (115 in 2018) and 596 received a documented warning (656 in 2018). In other instances, action short of a documented warning was taken.

Employees disciplined in 2019: breakdown of types of policy violation (%)

Policy area	2019	2018
Behaviour in the workplace	35%	17%
Mandatory training completion	18%	29%
Good manufacturing and distribution practices	17%	10%
Marketing and promotional activities	8%	8%
Expenses	5%	3%
Other*	17%	33%

* Representative of remaining policy violation types.

Increased focus on completing mandatory training and improved classification of concerns altered the distribution of policy violations when compared to 2018.

Political engagement

Everyone working for, or on behalf of, GSK must follow our Code of Conduct in their interactions with political stakeholders. Additionally, our selection process for public policy groups includes criteria to ensure those groups share our values.

We spent \$4.4 million on federal lobbying activities in the US in 2019, which are registered on the US Federal Lobbying Register. The spend includes the cost of operating our office in Washington DC, and the cost of travel and consulting. The cost of representing our interests to EU institutions, published on the EU Transparency Register, was €1.64 million.¹ We also publish a list of our memberships in trade associations that may lobby indirectly on our behalf.

GSK does not make corporate political contributions. Our US employees may support individual candidates or political groups financially through a Political Action Committee, which contributed \$265,185 to state and federal candidates in 2019. A breakdown of this spend is available online.

 [GSK.com: Public policy and patient advocacy](#) • [Trade association membership list](#) • [Criteria for working with Public Policy Groups](#)

Human rights

GSK is committed to upholding the Universal Declaration of Human Rights and the core standards set out by the International Labour Organization. We strive to ensure that respect for human rights is embedded and integrated across our global business and conduct regular assessments, informed by external experts, of the human rights impacts associated with our activities.

Building on the findings of our 2018 corporate-level human rights assessment, over the past year we have focused on strengthening our approach to managing labour rights risks in the supply chain. We carried out an initial review of labour rights risks associated with our sourcing activities and, with the support of fair labour NGO Verité, are now building on this work to identify parts of our supply chain that represent the greatest potential for modern slavery risks. We also updated our third-party labour rights standards to include the expectation that recruitment costs should be borne by the employer and that no worker should pay for a job (a practice that can lead to forced labour).

Progress in each of our other priority human rights areas (access to healthcare, research practices, patient safety, environment, health and safety, and privacy) is outlined in the relevant sections of this report.

 [GSK.com: Human rights](#) • [Modern Slavery Act statement](#)

¹ These are the latest available figures, 2019 figures are expected to be available in April 2020 for submission to the EU's Transparency Register.

Trust continued

Working with third parties


Our Third-Party Oversight programme strengthens our supply chain risk management by driving improvements in our global network of third parties. This includes suppliers, distributors and other organisations with which there is a transfer of value. We want to ensure that the third parties we work with share our values and ethical and business standards. Our third-party risk assessment and mitigation programme has been embedded globally and continues to be further simplified and refined to make it easier to engage third parties appropriately.

During 2019, over 14,000 risk assessments were completed, and more than 800 third parties identified as high risk have undergone detailed independent assessments by EcoVadis.

During 2019, we continued to work with our third-party suppliers to reduce Environment, Health and Safety (EHS) risks and conducted over 40 audits on EHS and ethics. We also expanded our third-party EHS team to include dedicated EHS professionals within the team based in the countries where our priority suppliers are located.

Priority suppliers are those with whom we have significant spend, that support significant revenue and/or are medically or R&D critical to the business. This has enabled us to provide more proactive support through engagement visits designed to build capability in areas of improvement identified through EcoVadis assessments or audits.

Our Buying Goods & Services transformation programme is also delivering improved guidance, integration and compliance for internal GSK users and our third parties. The programme includes a new sourcing platform, launched in 2019, making it easier for our suppliers to engage with us.

 [GSK.com: Ethics and values](https://www.gsk.com/ethics-and-values)

Data and engagement

Data is becoming increasingly central to our business and the healthcare industry more broadly. Our digital, data and analytics strategy harnesses the power of data and technology to strengthen our business and make a real difference to patients around the world. We believe this will help our scientists develop innovative medicines more quickly, and with higher probability of success than ever before. It will enhance clinical studies and improve interaction with healthcare providers, customers and consumers.

Using data responsibly and transparently

With the privilege of using individuals' personal information comes the responsibility of treating this data ethically. We are committed to using data responsibly and transparently, and engaging with patients and healthcare providers to help meet patient needs. This includes managing data carefully, sharing the results of our clinical studies, integrating patient insights into our product development, and providing healthcare professionals with relevant and accurate information when they need it.

Data privacy

We recognise that people are increasingly concerned about the protection and appropriate use of personal information, particularly when this is related to health. New regulations around the world have also increased requirements on how companies use personal information. Loss or inappropriate use of personal information could have a serious impact, both for individuals affected and for businesses, and we take our responsibility for data privacy seriously.

We have developed a comprehensive approach to privacy, including training that drives an understanding that everyone at GSK is personally responsible for the correct handling of personal information. We apply a set of privacy principles to ensure that our use of personal information is kept to the minimum necessary and is fair, transparent, accurate and secure.

In 2019, we combined our privacy training with the mandatory Code of Conduct training. Approximately 32,000 individuals completed our Privacy Foundation training, which includes new hires, contingent workers, and those returning from leave of absence. This explains our privacy principles to help them understand how to apply them in their daily work. It also raises awareness of why privacy matters for all those who handle personal data.

Personnel who handle personal information in R&D and HR globally have received tailored privacy training to understand their obligations under the Binding Corporate Rules, which enable the internal transfer of EU HR and R&D data across all GSK affiliates. Throughout 2019, people in key roles across the organisation continued to undergo certification from the International Association of Privacy Professionals (IAPP) to increase expertise and enable us to make informed decisions about handling personal data. The number of people with this certification at GSK has increased from 47 in 2018 to 66 in 2019.

Trust continued

The protection of individuals' data and privacy is a high priority in our exclusive collaboration with 23andMe. This collaboration combines 23andMe's genetic expertise and advanced data science skills with GSK's extensive scientific capabilities and scale, to enhance the discovery and development of entirely new medicines and potential cures. 23andMe customers can choose to participate in research and contribute their information to the unique and dynamic database for the purpose of advancing scientific research. Participation is voluntary and customers are required to consent affirmatively to their data being used for research. Should they choose to participate, their information is aggregated so no individual will be identifiable to GSK.

Clinical trial transparency

As part of our long-standing commitment to data transparency for our clinical studies, we have published 2,605 clinical study reports (108 in 2019) and 6,106 summaries of results (123 in 2019) – both positive and negative – from our studies on our clinical study register.¹

We also share anonymised patient-level data from our studies with external researchers. We have listed 2,477 studies for data sharing via www.vivli.org and www.clinicalstudydatarequest.com. We launched this six years ago to facilitate innovative data-driven research, and it is now used by multiple other study sponsors and funders. External researchers are granted data access based on a review of the scientific merit of their research proposal by an independent panel. Access to GSK study data has been approved for 157 proposals since 2013.

⊕ GSK.com and online: GSK Privacy Notice • GSK Clinical Study Register

Patient and scientific engagement

To improve the delivery of ground-breaking new therapies, we are strengthening our focus on patients' needs by seeking their insights across the business. We continue to support several initiatives that are empowering patients to get more involved in the development of medicines through training, tools and dialogue – such as the European Patients' Academy on Therapeutic Innovation (EUPATI).

In 2019, we held Patient Advocacy Leaders Summits in Portugal, Japan and Switzerland. Representatives of patient organisations also provide insights through our European Health Advisory Board and our Respiratory Health Board. We now have new patient panels covering hepatitis, chronic kidney disease and rheumatoid arthritis, as well as an Oncology Patient Council.

To improve engagement with patients involved in our clinical studies, we have developed patient engagement plans for key assets and set up a dedicated patient panel as a key part of our internal governance process. This allows patients to input into the development of our research protocols, to improve patient experience during the study, and we keep them informed about the results after the study is completed.

We ensure the inclusion of diverse populations in our clinical studies so the data we generate represents as many people as possible. By including individuals of different demographics by age (elderly/frail and paediatric groups), sex, ethnicity and race, we can capture potential variability in the responses to our medicines and vaccines. This helps us to characterise a more robust benefit-risk profile, generate greater insight for the prescribing information and ensure the right patient gets the right medicine – this is particularly important as we move towards precision medicine.

In 2019, we made changes to our in-house trials to improve the diversity of participants, including ensuring teams develop plans on target populations (based on sex, age, race or ethnicity) that need to be targeted for recruitment at each stage of the lifecycle of the molecule. We also asked our third-party preferred vendors to provide a plan for how they will deliver improved recruitment and retention of diverse populations for our full-service outsourced trials.

Through our engagement with healthcare professionals (HCPs), we aim to provide information on our products in the way that best suits them. For a limited time after we have new medicines or significant new data, we allow payment to experts to speak about the scientific evidence, the diseases they treat and their own clinical experience. We disclose annually the individual level of payments to HCPs when legally permitted, or otherwise on an aggregate basis.

In 2019, we also updated our salesforce incentives policy as our portfolio has evolved, with a growing shift towards innovative specialty care medicines. This is an area requiring high levels of expertise to deliver information to specialised HCPs, and one where there is strong competition for talent. See page 22 for further details of this policy change.

⊕ GSK.com: Operating responsibly

¹ New methodology introduced for 2019.

Trust continued

Environment

We are committed to reducing our environmental impact by one quarter by 2030, cutting greenhouse gas emissions, reducing water impact and redirecting waste to beneficial use. This commitment is underpinned by five environmental commitments for 2030 (set against a 2016 baseline) to:

- reduce operational carbon emissions (Scope 1 and 2) by 20%;
- reduce value chain carbon emissions (Scope 3) by 25% per £billion revenue;
- source 60% of electricity from renewable sources, with an interim target of 30% by 2020;
- reduce total water use at each high-risk site by 30%;
- ensure all waste is repurposed to beneficial uses.

Carbon

We are committed to playing our part to address climate change. Our overall value chain carbon footprint is made up of Scope 1 and 2 emissions from our own operations (8%) and Scope 3 emissions from our supplier base (48%), logistics (4%) and the use of our products (40%) – mostly metered dose inhalers.

We are accredited by the Science Based Targets initiative for a set of Scope 1, 2 and 3 targets, in line with a level of decarbonisation required to keep the global temperature increase to 2°C. We made good progress against these commitments in 2019.

In 2019, we lowered our Scope 1 and 2 emissions¹ by 4% through continued deployment of energy efficiency programmes across our operating sites. Globally, around 5% of our electricity came from renewable sources. We plan to expand this and by 2020, through a combination of green certificates and on-site renewable generation, over 30% of our global electricity needs will be decarbonised across the UK, US and Europe.

In 2018 (our latest available data)², absolute Scope 3 emissions decreased by 10% vs 2017 and by 4% per £1 billion revenue, mainly from reduced emissions associated with raw materials. This represents a reduction of 17% per £1 billion revenue since our 2016 baseline year. We recognise achievements by our suppliers to reduce their environmental impacts through our annual Supplier Environmental Sustainability Awards. In 2019, the winners were a supplier that encourages excellence in agricultural practices in India, and a UK energy provider that creates clean energy and is inspiring the next generation of scientists and engineers to be innovative in tackling climate change.

1 All reductions are against our existing portfolio, excluding the Pfizer sites that joined in August.

2 2019 figures are expected to be available in 2020.

3 Carbon emissions are calculated according to the *Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard* (revised edition).

4 2017 and 2018 figures for scope 2 emissions from electricity restated based on the updated IEA emission factors published in 2018.

5 For one year's treatment, use of propellant-based inhalers results in a carbon footprint of 228kg CO₂e compared with 9.6kg CO₂e from using *Ellipta* dry powder inhalers.

Carbon emissions³ plus intensity ratios (as per regulations)

'000 tonnes CO ₂ e	2019	2018	2017
Scope 1 emissions	800	825	892
Scope 2 emissions	523	549	607
Scope 3 emissions	Available in 2020 report	16,335	18,152
Intensity ratios			
Scope 1 and 2 emissions/ sales revenue (tonnes CO ₂ e/£m)	39.2	44.6	49.6
Scope 1 and 2 emissions/ FTE (tonnes CO ₂ e/FTE) ⁴	13.3	14.4	15.2
Scope 3 emissions/£bn revenue (million tonnes CO ₂ e/£bn revenue)	Available in 2020 report	0.53	0.6

Emissions from the use of our inhaler products fell by 6% in 2019 mainly from a reduction in the amount of *Ventolin* produced. Our new portfolio of inhaled medicines is delivered via the *Ellipta* dry powder inhaler (DPI), which has a lifecycle carbon footprint around 24 times lower than a propellant-based inhaler.⁵

We support efforts to promote low carbon inhalers where possible. In the UK, for example, the NHS has adopted a commitment to increase DPI prescribing in its Long-Term Plan, and in 2019 GSK ran a public information campaign on the different footprint of inhalers (www.lowcarboninhalers.co.uk), encouraging patients to discuss inhaler options with their healthcare professional. GSK is also supporting similar low carbon inhaler initiatives in Belgium and Sweden.

We benchmark our performance externally, and in 2019 we scored B in CDP Climate.

Climate resilience

In 2019, we carried out scenario analyses for five products and their supply chains against the Task Force on Climate-related Financial Disclosures (TCFD) framework guidelines. We used a business as usual scenario and a low carbon scenario to identify potential areas of risk and opportunity that climate change presents to our business (see page 46).

Trust continued

Water

Our goal is to reduce our total water use at each high-risk site by 30% by 2030. While climate change must be tackled at a global level, water challenges are much more localised. All our vaccine, pharmaceutical and consumer healthcare manufacturing sites have completed risk assessments and are implementing actions to ensure compliance with our water stewardship standard by 2020. These assessments identified 10 high-risk sites that used 0.7 million cubic metres of water in 2019 (6% of our total water use). This risk rating is based on water scarcity, local water quality, health and social risks, and regulatory and reputational risks.

These sites are working on strategies to reduce their water impact, and are making good progress. For example, our site in Cape Town, South Africa (an area affected by drought) initiated water recovery and rainwater harvesting projects. Their water saving measures across the year saved 1,740m³ water – 9% of the site's annual water use. One of our sites in Karachi, Pakistan has also successfully implemented projects to reduce water used in cooling towers and to shorten cleaning cycles where excess water was being used. These activities decreased the amount of water used for cleaning by 60%, and helped reduce the site's water footprint by 4%.

Waste

By the end of 2020, we aim for 100% of our sites to send zero waste to landfill. This avoids harmful environmental impacts from landfill and keeps materials, such as solvents, in circulation for use in new products. In 2019, less than 3% of our waste was sent to landfill (excluding the newly-joined Pfizer consumer healthcare sites), with 73 sites achieving and maintaining zero waste to landfill. We have cut the amount of waste we produce by 14% since 2016, generating a total of 117,000 tonnes in 2019. This includes 23,000 tonnes of hazardous waste and 3,100 tonnes sent to landfill.

Our longer-term goal is that, by 2030, 100% of our waste will be directed to beneficial use, either to recycling, or incinerating waste with energy recovery. In 2019, 79% of our waste was recycled or incinerated with energy recovery.

Paper and palm oil

We are committed to moving towards deforestation-free sourcing for all key commodities purchased directly by GSK or indirectly on our behalf by 2030. This is a challenge due to the complex nature of our supply chains, but we have reached 94% for paper packaging and 70% for palm oil from sustainable sources by volume. We are working with the Roundtable for Sustainable Palm Oil to purchase book & claim credits, and with the Rainforest Alliance to audit and assure our supply chain. To date, we have focused on paper packaging, palm oil and palm oil derivatives, and have developed supplier selection criteria, as well as sourcing standards in conjunction with the Rainforest Alliance.

Plastic

The packaging of our products plays an important role in delivering safe, stable and trusted medicines, vaccines and consumer healthcare products. However, we recognise the impact that plastic packaging has on the environment.

We are working on a plan to reduce our plastic packaging, making it recyclable, and exploring how we increase use of recycled plastic content, recognising that medical regulations around the world place significant constraints on the use of recycled materials. Our Vaccines business is removing PVC from all packaging by the end of 2020 and we have developed a new pump for *Flonase/Sensimist* which reduces the amount of plastic used in the device by 12%.

While we have completed a review of our plastic use across the business – which found that 70% of our plastic footprint is associated with our Consumer Healthcare products – this took place before the integration of the Pfizer consumer healthcare business. We are now updating this to include the impact of the joint venture. We are also implementing initiatives to reduce, and remove where possible, single use plastics across all GSK offices worldwide and have already eliminated 2.1 million items of plastic from our food and refreshment outlets.

Pharmaceuticals in the environment

We are committed to ensuring that our compounds do not adversely affect people or the environment. We carry out environmental testing on all our pharmaceuticals, and use this data in risk assessments to evaluate potential for harm. We take steps to minimise the risk of any active pharmaceutical ingredients, including antibiotics, entering the environment as a result of our manufacturing processes.

GSK is part of the AMR Industry Alliance launched in 2017 and is a signatory to the Industry Roadmap for Progress on Combating AMR. For more on our efforts to combat AMR, see page 32. We have publicly committed to minimise antibiotic discharge in our supply chain and to ensure that manufacturing-related discharges are negligible by the end of 2021. In 2019, through the Pharmaceutical Supply Chain Initiative, we shared guidance and best practice on managing antibiotic discharges from manufacturing with our suppliers.

⊕ GSK.com: Environment

Risk management

Our risk management framework is well embedded and continually reviewed. Board-level oversight is provided by our Audit and Risk Committee, assisted by our Risk Oversight and Compliance Council.

The framework enables the Board to identify, evaluate and manage principal risks and is designed to support our long-term priorities. The framework provides for an effective hierarchy of Risk Management and Compliance Boards within each of our businesses which promotes the 'tone from the top', establishes the risk culture and oversees the effective cascade and escalation of information regarding our internal controls. Along with our values, expectations and Speak Up processes, it ensures that the risks associated with our business activities are actively and effectively identified and mitigated and provides reasonable assurance against material misstatement or loss. We conduct an annual confirmation exercise to ensure that our risk management approach is consistent across GSK, which reinforces leader accountability.

During 2019, the Audit and Risk Committee considered GSK's risks and the strategies to address them. In doing so it drew on annual business unit risk and assurance update reports, strategy papers for our most significant risks, and an annual risk review.

Each principal risk is overseen by a CET-level risk owner to ensure proportionate controls are in place, with clear plans assigned to address any gaps.

GSK considers both current and emerging risks as part of its risk management framework. GSK defines emerging risks as those which are on the three-year horizon. We may not yet have adequate information about their impact or likelihood and therefore these may warrant further investigation before inclusion in our list of principal risks.

Emerging risk assessments are performed as part of the remit of our Risk Management and Compliance Boards at all levels of the organisation. Additionally, at the global level we perform an annual PESTLE analysis of the political, economic, social, technological, legal and environmental trends from the external environment to identify emerging risks.

Each year, the CET conducts a formal risk review to consider emerging risks and whether sufficient information is available to support their inclusion in our principal risks list. This review is supported by extensive analysis of external trends and insights, senior level interviews and recommendations from GSK's key risk intelligence groups and risk management boards.

In 2019 the CET agreed to escalate two new risks to standalone principal risks for 2020 – Environmental sustainability and Non-promotional engagement. Work is also underway to establish appropriate reporting for a Transformation risk in recognition of the significant transformation associated with our intention to separate GSK's Consumer Healthcare business.

We list our principal risks on pages 44 and 45, with our assessment of the external macro environment and the risk exposure following mitigation. The risks are not in order of significance.

Risks associated with the proposed separation of GSK's Consumer Healthcare business

A separation of our Consumer Healthcare business may be dependent on a number of factors that are outside GSK's control, including any required shareholder and regulatory approvals, favourable conditions in public equity markets and public or private debt markets and changes in applicable law and regulation. Therefore, there can be no certainty that a separation will be completed as proposed (or at all).

In addition, if a separation is completed, there can be no assurance that either GSK or Consumer Healthcare will realise the expected benefits of separation or that the separation will not adversely affect GSK or Consumer Healthcare or the value or liquidity of their respective shares.

Risks associated with the coronavirus outbreak

The potential impact of the coronavirus outbreak on GSK's trading performance and supply continuity remains uncertain.

Up to the date of this Report, the outbreak has not had a material impact on the trading results of the Group. However, we continue to monitor the situation closely, including the potential impacts on trading results, our supply continuity and our employees.

The situation could change at any time and there can be no assurance that the coronavirus outbreak will not have a material adverse impact on the future results of the Group.

⊕ Viability statement, see page 47

⊕ ARC Report, see page 96

⊕ Principal risks and uncertainties, see page 275

⊕ Internal Control Framework, see page 105

Risk management continued

Risk	Assessment and mitigation activities	
Patient safety		The macro risk level remains high. Developments in data interrogation present potential benefits for Patient safety but the volume of data to be analysed presents a significant challenge which intensifies when coupled with fragmented regulatory requirements. There are increasing expectations that technology will deliver safer innovative medicines with less risks.
		GSK's exposure remains unchanged. We have deployed a new operating model for safety activities involving a simpler central safety organisation and outsourcing of local pharmacovigilance activities. Both deployments have passed successful audits indicating we should expect a lower risk in steady state during H2 2020.
Product quality		The macro risk level remains unchanged despite continued concerns over drug shortages and security and the uncertainty and complexity associated with Brexit.
		GSK's exposure remains unchanged. The benefits of our ongoing investment and improvement initiatives in manufacturing facilities, operating systems and training are reflected in our quality performance metrics and inspection outcomes.
Financial controls and reporting		The macro risk level has increased. There is significant political uncertainty and increasing societal expectations of financial reporting and the role of auditors, as well as highly sophisticated fraudsters enabled by the speed of technological change.
		GSK's exposure has been maintained at current levels despite the increase in external risk exposure as a result of the benefits of our previous transformation programmes, the strengthening of controls by leveraging technology and centralising processes, enhancing monitoring and maintaining effective tax and treasury strategies.
Anti-bribery and corruption (ABAC)		The macro risk level remains unchanged as we continue to see legal frameworks similar to the UK and US develop in emerging economies; high standards are expected of individuals and corporations aided by improved technology and increased enforcement.
		The GSK exposure remains unchanged. We have appropriate controls in place such as training, awareness raising, and strong monitoring around transactions and payments to third parties. We plan to continue with pre and post-transaction ABAC due diligence, increasing the capabilities in the business on monitoring, oversight and red flag resolution of third parties. We continue to understand and assess our money-laundering risk exposure and mitigate any existing risk.
Commercial practices		The macro risk level is increasing with increased pricing pressure, greater retailer and online competition from a broader set of competitors, an evolving digital landscape and increased scrutiny of marketing practices in the industry.
		GSK's exposure has marginally increased as we integrate Tesaro and our Consumer Healthcare Joint Venture with Pfizer. We continue to invest in proportionate controls, training and monitoring as we embed our new HCP engagement model and salesforce incentives programme (see page 22).

Risk management continued

Risk	Assessment and mitigation activities
Privacy	<p data-bbox="493 450 539 499">⬆</p> <p data-bbox="584 450 1426 566">The macro risk level has increased due to the diversity of data privacy legislation and limited harmonisation occurring, despite Europe's adoption of GDPR. Multi-nationals have challenges to standardise their data privacy approach with the high local variation and rise of enforcement by regulators.</p> <p data-bbox="493 584 539 633">➡</p> <p data-bbox="584 584 1426 667">GSK's exposure remains constant following the successful deployment of our Privacy Operating Model in the EU and prioritised deployment in the rest of the world progressing well.</p>
Research practices	<p data-bbox="493 696 539 745">⬆</p> <p data-bbox="584 696 1465 813">The macro risk level has increased as regulators are adapting to new technological advancements as well as introducing changes regarding data privacy, animal welfare and human biological samples which have yet to be fully announced and the requirements for implementation understood.</p> <p data-bbox="493 831 539 880">➡</p> <p data-bbox="584 831 1465 947">GSK's exposure remains unchanged. Increasing regulatory expectations are being offset by risk mitigation actions to embed and monitor additional controls and further enhance and monitor the quality culture, with a particular focus on data integrity and access and benefit sharing (Nagoya Protocol).</p>
Third party oversight	<p data-bbox="493 976 539 1025">⬆</p> <p data-bbox="584 976 1453 1059">The macro risk level has increased due to growing numbers of countries with varying regulation and manufacturing standards requiring local production, which increases the number of third parties we have to assess and continuously oversee.</p> <p data-bbox="493 1077 539 1126">➡</p> <p data-bbox="584 1077 1453 1167">The GSK exposure remains unchanged. Our third-party risk assessment and mitigation programme has been embedded and continues to be further simplified and refined to make it easier to engage third parties appropriately.</p>
Environment, health and safety and sustainability	<p data-bbox="493 1196 539 1245">⬆</p> <p data-bbox="584 1196 1469 1339">The macro risk level has increased due to greater emphasis on environmental controls from regulators, activists and stakeholders across our direct operations and supply chain. An emerging area of focus is post-consumption waste associated with medicines. There are ever-more stringent regulations and standards in developed as well as developing countries.</p> <p data-bbox="493 1357 539 1406">➡</p> <p data-bbox="584 1357 1469 1447">The GSK risk exposure remains unchanged as we continue to focus on more appropriate control over our supply chain, particularly of our active pharmaceutical ingredient (API) suppliers.</p>
Information security	<p data-bbox="493 1476 539 1525">⬆</p> <p data-bbox="584 1476 1465 1563">The macro risk level continues to increase as a result of an increasing digital footprint, reflecting a large multi-national organisation, combined with more sophisticated hacking threats.</p> <p data-bbox="493 1581 539 1630">➡</p> <p data-bbox="584 1581 1465 1697">The GSK risk exposure remains unchanged with the development of controls to increase cyber operations and threat intelligence capabilities; mitigation to protect critical information systems and applications, and enhancements to security of operational technology systems and networks offsetting some risk.</p>
Supply continuity	<p data-bbox="493 1727 539 1776">➡</p> <p data-bbox="584 1727 1458 1814">The macro risk level remains unchanged with the ongoing evolution of stringent regulatory expectations including continued regulatory focus on contract manufacturers. Brexit continues to provide uncertainty.</p> <p data-bbox="493 1832 539 1881">➡</p> <p data-bbox="584 1832 1458 1977">The GSK risk exposure level remains unchanged. We have improved risk management of our supplier portfolio, reduced the complexity of our networks and improved our crisis and continuity management framework. However, reduced inventories, threats posed by cyberattacks and global emergencies such as the coronavirus outbreak, and the quality of incoming materials present ongoing supply risks.</p>

Risk management continued

Climate-related financial disclosure

Here we provide GSK's first voluntary disclosure against the recommendations of the Taskforce for Climate-related Financial Disclosure (TCFD), an initiative of the Financial Stability Board, which promotes the disclosure of climate change risk.

Governance

The Board has oversight and responsibility for the management of climate change risks with support from the CET. The Board's Corporate Responsibility Committee (CRC) oversees GSK's Environmental Sustainability enterprise risk and progress against our environmental targets (see CRC Report on page 109).

Regis Simard, President, Pharmaceuticals Supply Chain, has management responsibility for environment, health & safety and sustainability (including climate change risk). He is on the CET and reports directly to the CEO.

Strategy

Trust is one of our three long-term priorities and reducing our environmental impact is an important part of the Trust priority (see metrics and targets).

To gain a better understanding of how climate change might impact our business, in 2019, we completed scenario analyses for five key products from across our Vaccines, Pharmaceuticals and Consumer Healthcare businesses. The two scenarios were:

- **business-as-usual:** we assumed little to no mitigation leading to 3-5°C of warming by 2100;
- **low-carbon:** we assumed that the global temperature increase by 2100 is limited to well below 2°C by rapid changes in legislation and technology.

The study was conducted by an independent third party and used internationally recognised data sets such as those from the Intergovernmental Panel on Climate Change. The potential physical risks of a changing climate such as flooding, as well as the risks associated with a transition to a low-carbon economy such as international climate policy and carbon pricing were analysed. The analysis looked at the implications for GSK manufacturing facilities, suppliers and raw materials providers for each of the five products. The assessment did not consider any actions that GSK might take to mitigate or adapt to the findings.

The analysis showed that in both scenarios there is likely to be some financial risks which would need to be managed, but none that would materially impact our business model. The key impacts for both scenarios were:

- Flood-related disruptions at our own manufacturing sites and in our supply chain;
- Water stress leading to increased expenditure and disruption at both our own manufacturing sites and in our supply chain;
- Higher temperatures affecting the quality and availability of some raw materials;
- Increased costs of fossil fuels.

These findings represent an initial assessment and we plan to use them to understand the impacts further and to develop action plans to help mitigate these risks, embed sustainability into strategy and review opportunities.

Risk management

In 2019, Environmental Sustainability, which includes climate change risks, became a standalone Principal Risk to the business for 2020 (previously managed as a sub-risk of Environment, Health & Safety and Sustainability) (see page 43).

Risks related to climate change are managed at different levels of the organisation, depending on the nature of the risk.

Risks and opportunities associated with GSK's energy, water and waste reduction programmes are managed by the Climate Change and Energy Reduction Team, with representatives from each of GSK's three business units and relevant support functions meeting quarterly.

Operational risks and opportunities at asset or site level are identified, assessed and managed by GSK's business units through their risk management teams.

Metrics and targets

Our goal is to reduce our environmental impact by one quarter by 2030. This goal is underpinned by five environmental targets for carbon (Scopes 1, 2 and 3) renewable electricity sources, water and waste (see pages 41 and 42).

We have been accredited by the Science Based Targets Initiative for a set of Scope 1, 2 and 3 targets in line with the decarbonisation required to keep global temperature increases to 2°C.

We are also committed to moving towards deforestation-free sourcing for all key commodities and are working with partners such as the Roundtable for Sustainable Palm Oil and the Rainforest Alliance.

More detail on the progress we are making towards achieving our targets can be found on page 42, and in our public response to the CDP questionnaire.

Risk management continued

Viability statement

In accordance with provision 31 of the 2018 revision of the Code, GSK has assessed the prospects of the Company over a longer period than the 12 months required by the 'Going Concern' provision. The Directors confirm that they have a reasonable expectation that GSK will continue to operate and meet its liabilities, as they fall due, over the next three years. The Directors' assessment has been made with reference to GSK's current position and prospects, our strategy, the Board's risk appetite and GSK's principal risks and how these are managed, as detailed on pages 44 and 45 in the Strategic report.

The Board reviews our internal controls and risk management policies and approves our governance structure and code of conduct. It also appraises and approves major financing, investment and licensing decisions, and evaluates and monitors the performance and prospects of GSK as a whole. The focus is largely on improving our long-term financial performance through delivery of our company and three business strategies and aligned Innovation, Performance and Trust priorities.

The Board reviews GSK's strategy and makes significant capital investment decisions over a long-term time horizon, based on a multi-year assessment of return on capital, the performance of the company and three business units, and the market opportunity in the pharmaceutical, vaccines and consumer sectors. This approach is aligned to GSK's model of achieving balanced growth by investing in high quality, innovative products for patients, consumers and healthcare providers. However, since many internal and external parameters become increasingly unpredictable over longer time horizons, GSK focuses its detailed, bottom-up Plan on a three-year cycle. The Plan is reviewed at least annually by the Directors, who approve business forecasts showing expected financial impact. The Directors believe that a three-year assessment period for the Viability statement is most appropriate as it aligns with the company's well established business planning processes that balance the long-term nature of investments in the pharmaceutical, vaccines and consumer sectors with an assessment of the period over which analysis of near-term business performance is realistically visible.

The Plan has been stress tested in a series of robust operational and principal risk downside scenarios as part of the Board's review on risk. These include the potential effects of Brexit, which are not expected to be material, although there may be some short-term disruption. The downside scenarios consider GSK's cash flows, sustainability of dividends, funding strategy, insurance provision and recovery as well as other key financial ratios over the period. These metrics have been subject to sensitivity analysis, which involves flexing a number of the main assumptions underlying the forecasts both individually and in combination, along with mitigating actions that could realistically be taken to avoid or reduce the impact or occurrence of the underlying risk.

The following hypothetical downside scenarios have been evaluated:

Scenario 1: Business performance risks. These include key performance risks, including lower sales from new products; greater adverse impact from generic competition and other competitive launches to other GSK products; as well as possible supply and manufacturing challenges.

Scenario 2: External and macroeconomic risks. This scenario reflects incremental risks to the business driven by outside factors, such as more intense competition, increased pricing pressure in both the US and Europe as well as the potential impact of material negative changes in the macro-economic and healthcare environment.

Scenario 3: Principal risks. This scenario includes a severe assessment of the potential loss impact from the principal risks related to patient safety, product quality, supply chain continuity as well as anti-bribery and corruption and any consequent regulatory actions or fines, all of which could fundamentally threaten our operations. This would include any potential severe impact of coronavirus if this were to materialise. These risks are managed through mitigating activities described on pages 275 to 287.

Scenario 4: Put option exercise. This scenario evaluates the additional funding requirements assuming the earliest potential exercise of the outstanding put option held by our partner in the HIV business.

The future separation of the Consumer Healthcare Joint Venture with Pfizer, if approved by the Board, may potentially occur within the period covered by the viability assessment. We have considered this scenario and have concluded that there is no material impact to viability for the Group or resultant separate companies over the three-year period of this assessment.

The three-year review also makes certain assumptions about the normal level of capital recycling likely to occur and considers whether additional financing facilities will be required and the respective level of funding flexibility and headroom.

The results of this stress testing show that certain combinations of these hypothetical scenarios could increase funding demands on GSK and require mitigating changes to the Group's funding strategy. However, in light of the liquidity available to the Group and based on this analysis, the Directors have a reasonable expectation that, even under these most severe stress tests, the company will be able to continue in operation and meet its liabilities as they fall due over the three-year period of assessment.

Risk management continued

Our preparations for Brexit

In preparing for the UK's exit from the EU (Brexit), our overriding priority has been to maintain continuity of supply of our medicines, vaccines and consumer healthcare products to people in the UK and EU. We took a risk-based approach to planning and mitigation and now have in place a new post-Brexit operating model. As part of the new model we have arranged for the retesting and certification of our medicines and consumer products in Europe where required and have completed relevant marketing authorisation transfers, updated packaging and secured additional warehousing for our products. We continue to support our employees in obtaining settled status or equivalent in both the UK and Europe. Normal change processes will be used to manage outstanding tax and customs activities, which depend on the new borders being in place between the UK and EU.

We anticipate subsequent and ongoing costs arising from Brexit could include further customs duties and will include the cost of duplicate testing and release of our products. We continue to estimate these potential costs at approximately £50 million per year. As more details emerge on how our business will need to adapt to the future UK-EU relationship, the assumptions underlying these forecasts could change, with consequent adjustments up or down. As part of the Brexit process, GSK has been engaging with Governments in both the UK and EU27, as well as Brussels institutions, to discuss our preparations, alongside our ambitions for the new UK/EU relationship. We will continue to review our plans and any potential financial impact as negotiations and regulations develop and we remain ready for all outcomes in December 2020. Over the longer term, we continue to believe that Brexit will not have a material impact on our business.

Non-financial information statement

The following aligns to the non-financial reporting requirements contained in sections 414CA and 414CB of the Companies Act 2006.

Description of the business model		Human rights		Policy, due diligence and outcomes	
How we create value	09	Human rights	38	Summary of our principal risks	44
Social matters		Data and engagement	39	Principal risks and uncertainties	275
Global health	31	Third parties	39	Viability statement	47
Health security	32	Anti-corruption and bribery		Audit & Risk Committee report	96
Affordability and availability	33	Living our values and expectations	37	Non-financial key performance indicators	
Employees		Reporting and investigating concerns	38	Key performance indicators	11
Employee engagement	35	Anti-bribery and corruption	38	Our policies	
Diversity	35	Environmental matters		All of our public policies, codes and standards are available on gsk.com	
Wellbeing and development	36	Carbon, water and waste	41		
Gender pay gap	36				
Living our values and expectations	37				
Board diversity	36				

Group financial review

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Group financial review

Reporting framework

Total and Adjusted results

The Group financial review discusses the operating and financial performance of the Group, its cash flows and financial position and our resources. The results for each year are compared primarily with the results of the preceding year.

Total results

Total reported results represent the Group's overall performance.

GSK also uses a number of adjusted, non-IFRS, measures to report the performance of its business. Adjusted results and other non-IFRS measures may be considered in addition to, but not as a substitute for or superior to, information presented in accordance with IFRS. Adjusted results are defined below and other non-IFRS measures are defined on page 52.

GSK believes that Adjusted results, when considered together with Total results, provide investors, analysts and other stakeholders with helpful complementary information to understand better the financial performance and position of the Group from period to period, and allow the Group's performance to be more easily compared against the majority of its peer companies. These measures are also used by management for planning and reporting purposes. They may not be directly comparable with similarly described measures used by other companies.

GSK encourages investors and analysts not to rely on any single financial measure but to review GSK's Annual Reports, including the financial statements and notes, in their entirety.

GSK is committed to continuously improving its financial reporting, in line with evolving regulatory requirements and best practice.

Adjusted results

Adjusted results exclude the following items from Total results, together with the tax effects of all of these items:

- amortisation of intangible assets (excluding computer software)
- impairment of intangible assets (excluding computer software) and goodwill
- Major restructuring costs, which include impairments of tangible assets and computer software, (under specific Board-approved programmes that are structural, of a significant scale and where the costs of individual or related projects exceed £25 million) including integration costs following material acquisitions
- transaction-related accounting or other adjustments related to significant acquisitions
- proceeds and costs of disposals of associates, products and businesses; significant legal charges (net of insurance recoveries) and expenses on the settlement of litigation and government investigations; other operating income other than royalty income, and other items.

Costs for all other ordinary course smaller scale restructuring and legal charges and expenses are retained within both Total and Adjusted results.

As Adjusted results include the benefits of Major restructuring programmes but exclude significant costs (such as significant legal, major restructuring and transaction items), they should not be regarded as a complete picture of the Group's financial performance, which is presented in its Total results. The exclusion of other Adjusting items may result in Adjusted earnings being materially higher or lower than Total earnings. In particular, when significant impairments, restructuring charges and legal costs are excluded, Adjusted earnings will be higher than Total earnings.

GSK is undertaking a number of Major restructuring programmes in response to significant changes in the Group's trading environment or overall strategy, or following material acquisitions. Costs, both cash and non-cash, of these programmes are provided for as individual elements are approved and meet the accounting recognition criteria. As a result, charges may be incurred over a number of years following the initiation of a Major restructuring programme.

The Group has also initiated a two-year Separation Preparation programme to prepare GSK for separation into two new leading companies in biopharma and consumer healthcare.

From time to time, the Group divests non-core investments, products and businesses and records the profit or loss on disposal as an Adjusting item. The most notable divestment in the past five years was the disposal of the Oncology business as one element of the three-part transaction with Novartis in 2015.

Significant legal charges and expenses are those arising from the settlement of litigation or government investigations that are not in the normal course and are materially larger than more regularly occurring individual matters. They also include certain major legacy matters.

Reconciliations between Total and Adjusted results, providing further information on the key Adjusting items for 2018 and 2019 are set out on page 62 and for the five years to 2019 are set out on pages 266 to 268.

GSK provides earnings guidance to the investor community on the basis of Adjusted results. This is in line with peer companies and expectations of the investor community, supporting easier comparison of the Group's performance with its peers. GSK is not able to give guidance for Total results as it cannot reliably forecast certain material elements of the Total results, particularly the future fair value movements on contingent consideration and put options that can and have given rise to significant adjustments driven by external factors such as currency and other movements in capital markets.

Group financial review continued

Reporting framework continued

Historical record of Adjusting items

The reconciliations between Total and Adjusted operating profit over the last five years can be summarised as follows:

	2019 £m	2018 £m	2017 £m	2016 £m	2015 £m
Total operating profit	6,961	5,483	4,087	2,598	10,322
Intangible asset amortisation	777	580	591	588	563
Intangible asset impairment	83	116	688	20	206
Major restructuring	1,105	809	1,056	970	1,891
Transaction-related items	345	1,977	1,599	3,919	2,238
Divestments, significant legal and other items	(299)	(220)	(119)	(424)	(9,561)
US tax reform	–	–	666	–	–
Adjusted operating profit	8,972	8,745	8,568	7,671	5,659

The analysis of the impact of transaction-related items on operating profit for each of the last five years is as follows:

	2019 £m	2018 £m	2017 £m	2016 £m	2015 £m
Novartis Consumer Healthcare Joint Venture put option	–	658	986	1,133	83
Contingent consideration on former Shionogi-ViiV Healthcare JV (including Shionogi preferential dividends)	31	1,188	556	2,162	1,874
ViiV Healthcare put options and Pfizer preferential dividends	(234)	(58)	(126)	577	–
Contingent consideration on former Novartis Vaccines business	76	58	101	69	108
Release of fair value uplift on acquired Pfizer inventory	366	–	–	–	–
Other adjustments	106	131	82	(22)	173
Transaction-related items	345	1,977	1,599	3,919	2,238

Full reconciliations between Total and Adjusted results for 2015–2019 are set out on pages 266 to 268. Further explanations on the Adjusting items for 2019 are reported on page 62.

Non-controlling interests in ViiV Healthcare

Trading profit allocations

Because ViiV Healthcare is a subsidiary of the Group, 100% of its operating results (turnover, operating profit, profit after tax) are included within the Group income statement and then a portion of the earnings is allocated to the non-controlling interests owned by the other shareholders, in line with their respective equity shareholdings (Pfizer 11.7% and Shionogi 10%). Each of the shareholders, including GSK, is also entitled to preferential dividends determined by the performance of certain products that each shareholder contributed. As the relative performance of these products changes over time, the proportion of the overall earnings of ViiV Healthcare allocated to each shareholder will change. In particular, the increasing proportion of sales of dolutegravir-containing products has a favourable impact on the proportion of the preferential dividends that is allocated to GSK. Adjusting items are allocated to shareholders based on their equity interests. GSK was entitled to approximately 85% of the Total earnings and 82% of the Adjusted earnings of ViiV Healthcare for 2019. Remeasurements of the liabilities for the preferential dividends allocated to Pfizer and Shionogi are included within other operating income.

Acquisition-related arrangements

As consideration for the acquisition of Shionogi's interest in the former Shionogi-ViiV Healthcare joint venture in 2012, Shionogi received the 10% equity stake in ViiV Healthcare.

ViiV Healthcare also agreed to pay additional future cash consideration to Shionogi, contingent on the future sales performance of the products being developed by that joint venture, principally dolutegravir. Under IFRS 3 'Business combinations', GSK was required to provide for the estimated fair value of this contingent consideration at the time of acquisition and is required to update the liability to the latest estimate of fair value at each subsequent period end. The liability for the contingent consideration recognised in the balance sheet at the date of acquisition was £659 million. Subsequent remeasurements are reflected within other operating income/expense and within Adjusting items in the income statement in each period, and at 31 December 2019, the liability, which is discounted at 8.5%, stood at £5,103 million, on a post-tax basis.

Cash payments to settle the contingent consideration are made to Shionogi by ViiV Healthcare each quarter, based on the actual sales performance of the relevant products in the previous quarter. These payments reduce the balance sheet liability and hence are not recorded in the income statement. The cash payments made to Shionogi by ViiV Healthcare in 2019 were £865 million.

Because the liability is required to be recorded at the fair value of estimated future payments, there is a significant timing difference between the charges that are recorded in the Total income statement to reflect movements in the fair value of the liability and the actual cash payments made to settle the liability.

Group financial review continued

Reporting framework continued

The cash payments are reflected in the cash flow statement partly in operating cash flows and partly within investing activities. The tax relief on these payments is reflected in the Group's Adjusting items as part of the tax charge. The part of each payment relating to the original estimate of the fair value of the contingent consideration on the acquisition of the Shionogi-ViiV Healthcare joint venture in 2012 of £659 million is reported within investing activities in the cash flow statement and the part of each payment relating to the increase in the liability since the acquisition is reported within operating cash flows.

Movements in contingent consideration payable to Shionogi were as follows:

	2019 £m	2018 £m
Contingent consideration at beginning of the year	5,937	5,542
Remeasurement through income statement	31	1,188
Cash payments: operating cash flows	(767)	(703)
Cash payments: investing activities	(98)	(90)
Contingent consideration at end of the year	5,103	5,937

Of the contingent consideration payable (on a post-tax basis) to Shionogi at 31 December 2019, £730 million (31 December 2018 – £815 million) is expected to be paid within one year.

Exit rights

Pfizer may request an IPO of ViiV Healthcare at any time and if either GSK does not consent to such IPO or an offering is not completed within nine months, Pfizer could require GSK to acquire its shareholding. Under the original agreements, GSK had the unconditional right, so long as it made no subsequent distribution to its shareholders, to withhold its consent to the exercise of the Pfizer put option and, as a result, in accordance with IFRS, GSK did not recognise a liability for the put option on its balance sheet. However, during Q1 2016, GSK notified Pfizer that it had irrevocably given up this right and accordingly recognised the liability for the put option on the Group's balance sheet during Q1 2016 at an initial value of £1,070 million. Consistent with this revised treatment, at the end of Q1 2016 GSK also recognised liabilities for the future preferential dividends anticipated to become payable to Pfizer and Shionogi on the Group's balance sheet.

The closing balances of the liabilities related to Pfizer's shareholding are as follows:

	2019 £m	2018 £m
Pfizer put option	1,011	1,240
Pfizer preferential dividend	4	15

Under the original agreements, Shionogi could also have requested GSK to acquire its shareholding in ViiV Healthcare in six-month windows commencing in 2017, 2020 and 2022. GSK had the unconditional right, so long as it made no subsequent distribution to its shareholders, to withhold its consent to the exercise of the Shionogi put option and, as a result, GSK did not recognise a liability for the put option on its balance sheet.

However, during Q1 2016, GSK notified Shionogi that it had irrevocably given up this right and accordingly recognised the liability for the put option on the Group's balance sheet during Q1 2016 at an initial value of £926 million. In Q4 2016, Shionogi irrevocably agreed to waive its put option and as a result GSK de-recognised the liability for this put option on the Group's balance sheet directly to equity. The value of the liability was £1,244 million when it was de-recognised.

GSK also has a call option over Shionogi's shareholding in ViiV Healthcare, which under the original agreements was exercisable in six-month windows commencing in 2027, 2030 and 2032. GSK has now irrevocably agreed to waive the first two exercise windows, but the last six-month window in 2032 remains. As this call option is at fair value, it has no value for accounting purposes.

Free cash flow

Free cash flow is defined as the net cash inflow from operating activities less capital expenditure on property, plant and equipment and intangible assets, contingent consideration payments, net finance costs, and dividends paid to non-controlling interests plus proceeds from the sale of property, plant and equipment and intangible assets, and dividends received from joint ventures and associates. It is used by management for planning and reporting purposes and in discussions with and presentations to investment analysts and rating agencies. Free cash flow growth is calculated on a reported basis. A reconciliation of net cash inflow from operations to free cash flow is set out on page 65.

CER and AER growth

In order to illustrate underlying performance, it is the Group's practice to discuss its results in terms of constant exchange rate (CER) growth. This represents growth calculated as if the exchange rates used to determine the results of overseas companies in Sterling had remained unchanged from those used in the comparative period. CER% represents growth at constant exchange rates. £% or AER% represents growth at actual exchange rates.

Pro-forma growth

The acquisition of the Pfizer consumer healthcare business completed on 31 July 2019 and so GSK's reported results include five months of results of the former Pfizer consumer healthcare business from 1 August 2019.

The Group has presented pro-forma growth rates at CER for turnover, Adjusted operating profit and operating profit by business taking account of this transaction. Pro-forma growth rates at CER for 2019 are calculated comparing reported results for 2019, calculated applying the exchange rates used in the comparative period, with the results for 2018, adjusted to include the equivalent five months of results of the former Pfizer consumer healthcare business, as consolidated (in US\$) and included in Pfizer's US GAAP results.

Group financial review continued

Our approach to tax

We understand our responsibility to pay an appropriate amount of tax, and fully support efforts to ensure that companies are appropriately transparent about how their tax affairs are managed. Tax is an important element of the economic contribution we bring to the countries in which we operate. We do not engage in artificial tax arrangements – those without business or commercial substance. We do not seek to avoid tax by the use of 'tax havens' or transactions we would not fully disclose to a tax authority. We have a zero tolerance approach to tax evasion and the facilitation of tax evasion.

We have a substantial business and employment presence in many countries around the globe and we pay a significant amount of tax, including corporation and other business taxes, as well as tax associated with our employees. At the same time, we have a responsibility to our shareholders to be financially efficient and deliver a sustainable tax rate. As part of this approach we look to align our investment strategies to those countries where we already have substantial economic activity, and where government policies promote regimes which are attractive to business investment and R&D activity and are transparent in their intent and available to all relevant tax payers. Examples include the UK Patent Box and Research and Development Expenditure Credit.

Tax risk is managed through robust internal policies and processes to ensure that we have alignment across our business and compliance with tax legislation. Our Audit & Risk Committee and the Board are responsible for approving our tax policies and risk management approach. We seek to maintain open, positive relationships with governments and tax authorities worldwide and we welcome constructive debate on taxation policy.

In 2019, the Group corporate tax charge was £953 million (2018 – £754 million) on profits before tax of £6,221 million (2018 – £4,800 million) representing an effective tax rate of 15.3% (2018 – 15.7%). We made cash tax payments of £1,512 million in the year (2018 – £1,326 million). In addition to the taxes we pay on our profits, we pay duties, levies, transactional and employment taxes.

Our Adjusted tax rate for 2019 was 16.0% (2018 – 19.0%). The rate has benefitted from the settlement of open tax positions in key territories. Subject to any material changes in our product mix, or other material changes in tax regulations or laws in the countries in which we operate, the Group's average effective Adjusted tax rate in the medium term is expected to be around 19%.

The Group's Total tax rate of 15.3% (2018 – 15.7%) for 2019 was lower than the Adjusted tax rate as the Total tax charge includes the tax effect of fair value accounting movements on the Group's put option liabilities to ViiV Healthcare and on hedges against shares in Hindustan Unilever Limited to be received on disposal of *Horlicks* and other Consumer Healthcare brands, and a re-assessment of estimates of uncertain tax positions following the settlement of a number of open issues with tax authorities.

In 2019, an ongoing public focus on the tax affairs of multinational companies has included a major project of the Organisation for Economic Co-operation and Development (OECD) on 'Addressing the Tax Challenges of the Digitalisation of the Economy'. GSK welcomes the OECD's efforts to identify a long-term, sustainable and consensus driven solution to the tax challenges resulting from digitalisation and has been active in providing relevant business input to assist in the successful delivery of the aims of the project. In order to create a long-lasting, stable and certain business environment for both taxpayers and Governments, a multilateral consensus-based approach, grounded in clearly defined and accepted principles, is critical and the incentive to innovate must not be diluted.

A continued focus on tax reform during 2019 has been driven by the OECD's Base Erosion and Profit Shifting (BEPS) project and European Commission initiatives such as fiscal state aid investigations and the introduction of 'Mandatory Disclosure' rules. The outputs from the OECD BEPS projects clarified the important principle that tax should be paid on profits throughout the supply chain, where the profit-making activity takes place. GSK is subject to taxation throughout its supply chain.

GSK supports the BEPS proposals, in particular the implementation of the OECD's recommendations on 'Country by Country Reporting', including the exchange of this data between tax authorities. This data, validated against existing information held on taxpayers, will support their ability to ensure that multinational groups pay an appropriate amount of tax.

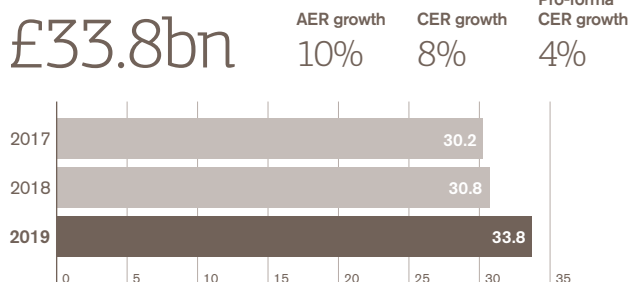
The detailed tax implications of Brexit are dependent on the outcome of negotiations between the UK and EU, and are therefore currently unknown. We continue to work with the Government to ensure the UK retains a trading relationship with the EU that allows us to supply our products as swiftly as we do today to patients and consumers, with zero tariffs on goods, minimal customs procedures and no VAT cash flow cost on cross-border trade. The direct tax implications, in particular, are expected to be limited for GSK while the indirect tax implications may be more significant, including potential customs duty costs and additional transaction or administrative costs associated with managing import and export obligations on the movement of goods between the UK and the EU and between the UK/EU and the rest of the world. Our approach to Brexit is set out on page 48.

Our Tax Strategy is set out in detail within the Public Policy positions section of our website. Further details about our corporate tax charges for the year are set out on page 189.

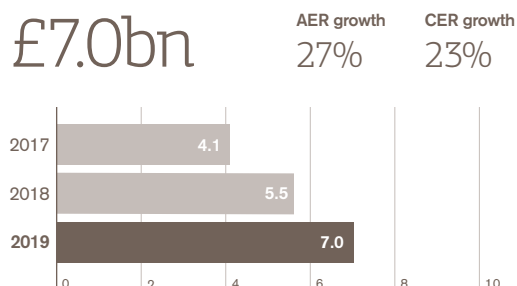
Group financial review continued

Financial performance

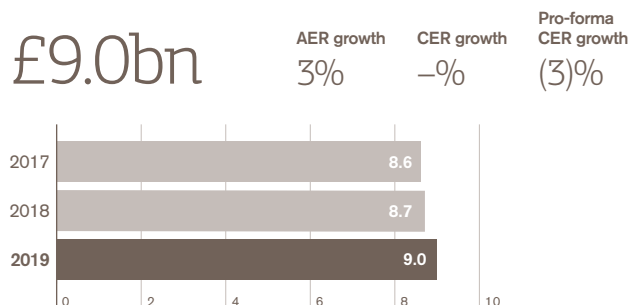
Group turnover (£bn)



Total operating profit (£bn)



Adjusted operating profit (£bn)



GSK uses a number of adjusted, non-IFRS, measures to report the performance of its business. Adjusted results and other non-IFRS measures may be considered in addition to, but not as a substitute for or superior to, information presented in accordance with IFRS. Adjusted results and other non-IFRS measures are defined on pages 50 to 52.

The Total results of the Group are set out below.

	2019		2018		Growth	
	£m	% of turnover	£m	% of turnover	£%	CER%
Turnover	33,754	100	30,821	100	10	8
Cost of sales	(11,863)	(35.1)	(10,241)	(33.2)	16	16
Selling, general and administration	(11,402)	(33.8)	(9,915)	(32.2)	15	13
Research and development	(4,568)	(13.5)	(3,893)	(12.6)	17	15
Royalty income	351	1.1	299	1.0	17	17
Other operating income/(expense)	689	1.9	(1,588)	(5.2)		
Operating profit	6,961	20.6	5,483	17.8	27	23
Net finance costs	(814)		(717)			
Profit on disposal of interest in associates	—		3			
Share of after-tax profits of associates and joint ventures	74		31			
Profit before taxation	6,221		4,800		30	25
Taxation	(953)		(754)			
Profit after taxation for the year	5,268		4,046		30	26
Profit attributable to shareholders	4,645		3,623			
Earnings per share (p)	93.9		73.7		27	23
Earnings per ADS (US\$)	2.40		1.96			

The Adjusted results for the Group are set out below.

Reconciliations between Total results and Adjusted results for 2019 and 2018 are set out on page 62.

	2019		2018		Growth	
	£m	% of turnover	£m	% of turnover	£%	CER%
Turnover	33,754	100	30,821	100	10	8
Cost of sales	(10,079)	(29.9)	(9,178)	(29.8)	10	10
Selling, general and administration	(10,715)	(31.7)	(9,462)	(30.7)	13	12
Research and development	(4,339)	(12.9)	(3,735)	(12.1)	16	14
Royalty income	351	1.1	299	1.0	17	17
Adjusted operating profit	8,972	26.6	8,745	28.4	3	—
Adjusted profit attributable to shareholders	6,131		5,869		4	1
Adjusted earnings per share (p)	123.9		119.4		4	1

Group financial review continued

Financial performance continued

Group turnover

Group turnover by business

	2019 £m	2018 £m	Growth £%	Growth CER%
Pharmaceuticals	17,554	17,269	2	–
Vaccines	7,157	5,894	21	19
Consumer Healthcare	8,995	7,658	17	17
Group turnover	33,706	30,821	9	8
Corporate and other unallocated turnover	48	–		
	33,754	30,821	10	8
Pro-forma growth				4

Group turnover by geographic region

	2019 £m	2018 £m	Growth £%	Growth CER%
US	13,890	11,982	16	12
Europe	8,069	7,973	1	2
International	11,795	10,866	9	9
	33,754	30,821	10	8

Group turnover for the year increased 10% AER, 8% CER to £33,754 million, with growth delivered by Vaccines and Consumer Healthcare, and Pharmaceuticals flat at CER. Pro-forma turnover growth for the Group was 4% CER.

Pharmaceuticals turnover in the year was £17,554 million, up 2% AER, but flat at CER. HIV sales were up 3% AER, 1% CER, to £4,854 million and Respiratory sales were up 18% AER, 15% CER, to £3,081 million. Sales of Established Pharmaceuticals were £8,776 million, down 7% AER, 8% CER.

Vaccines turnover grew 21% AER, 19% CER to £7,157 million, primarily driven by growth in sales of *Shingrix*. Meningitis vaccines also contributed significantly to growth.

Pharmaceuticals and Vaccines Innovation sales (sales of products launched in the last five years) amounted to £3.8 billion in 2019, driven by sales of *Shingrix*, *Trelegy Ellipta* and *Nucala*.

Consumer Healthcare sales grew 17% AER, 17% CER to £8,995 million. On a pro-forma basis, sales grew 2%, driven by strong performance in the Oral health category, partly offset by a decline in Skin health.

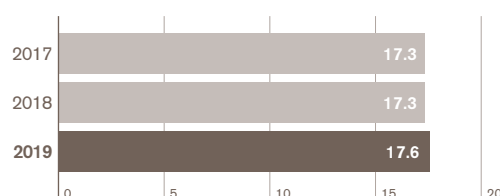
Consumer Healthcare Innovation sales (sales of products new to market in the last three years) amounted to 12% of Consumer Healthcare sales, reflecting continued focus on Oral health innovations.

Pharmaceuticals

Turnover (£bn)

£17.6bn AER growth 2% CER growth –%

52% of Group turnover



Pharmaceuticals turnover

	2019 £m	2018 (revised) £m	Growth £%	Growth CER%
Respiratory	3,081	2,612	18	15
HIV	4,854	4,722	3	1
Immuno-inflammation	613	472	30	25
Oncology	230	–	–	–
Established Pharmaceuticals	8,776	9,463	(7)	(8)
	17,554	17,269	2	–

Pharmaceuticals turnover in the year was £17,554 million, up 2% AER, but flat at CER. HIV sales were up 3% AER, 1% CER, to £4,854 million, with growth in *Juluca* and *Dovato* partly offset by declines in *Triumeq* and *Tivicay*. Respiratory sales were up 18% AER, 15% CER, to £3,081 million, on growth of *Trelegy Ellipta* and *Nucala*. Sales of Established Pharmaceuticals were £8,776 million, down 7% AER, 8% CER, including the impact of loss of exclusivity of *Advair*.

In the US, sales declined 1% AER, 4% CER. Continued growth of *Nucala*, *Trelegy Ellipta* and *Benlysta* was more than offset by the decline in Established Products including the loss of exclusivity of *Advair*. Excluding *Advair* and *Relvar/Breo Ellipta*, which were impacted by genericisation of the ICS/LABA market, growth was 13% AER, 9% CER. In Europe, sales grew 1% AER, 2% CER, with strong growth in Respiratory partly offset by a decline in Established Pharmaceuticals. International grew 5% AER, 4% CER, with growth in all therapy areas.

Group financial review continued

Financial performance continued

Respiratory

Total Respiratory sales were up 18% AER, 15% CER, with strong growth in all regions. *Ellipta* product sales grew 13% AER, 10% CER, with Europe up 26% AER, 27% CER and International up 29% AER, 27% CER on *Trelegy* and *Relvar/Breo* growth. *Nucala* was up 36% AER, 37% CER in Europe and 56% AER, 50% CER in International. In the US, *Trelegy Ellipta* and *Nucala* growth offset the decline in *Relvar/Breo Ellipta* on post generic ICS/LABA price pressure.

Sales of *Nucala* were £768 million in the year and grew 36% AER, 33% CER, with US sales of £453 million up 33% AER, 28% CER, including the impact of the new at-home use application.

Sales of *Ellipta* products were up 13% AER, 10% CER to £2,313 million driven by growth in Europe and International regions. In the US, sales grew 4% AER, but were flat at CER, reflecting continued competitive pricing pressures for ICS/LABAs, post generic *Advair*. In Europe, sales grew 26% AER, 27% CER, and in International by 29% AER, 27% CER. Sales of *Trelegy Ellipta* contributed £518 million globally in the year, driven by an increase in US market share.

Relvar/Breo Ellipta sales were down 11% AER, 13% CER, driven by the US, where *Relvar/Breo Ellipta* declined 34% AER, 37% CER as a result of competitive pricing pressures and the impact of generic *Advair* on the US ICS/LABA market. In Europe and International, *Relvar/Breo Ellipta* continued to grow, up 11% AER, 12% CER in Europe, and 21% AER, 19% CER in International.

HIV

HIV sales grew 3% AER, 1% CER to £4,854 million in the year. The dolutegravir franchise grew 5% AER, 2% CER, delivering sales of £4,633 million. The remaining portfolio, £221 million and 5% of total HIV sales, declined 27% AER, 27% CER and reduced the overall HIV growth by two percentage points at AER and one percentage point at CER.

Sales of dolutegravir products were £4,633 million, with *Triumeq* and *Tivicay* delivering sales of £2,549 million and £1,662 million, respectively. The two-drug regimens, *Juluca* and *Dovato*, delivered sales of £422 million in the year with combined growth more than offsetting the decline in the three-drug regimen, *Triumeq*, which reflected the impact of competition as well as the transition of the business to the new portfolio.

In the US, following the launch of *Dovato* in April 2019, combined sales of the two-drug regimens were £350 million. Total dolutegravir sales grew 4% AER but were flat at CER, reflecting a year-on-year share decline as the business transitions to the new two-drug portfolio, offset by a net price benefit. In Europe, total dolutegravir sales were flat at AER and flat at CER, with strong growth in market share offsetting price erosion and higher clawback payments. *Dovato* and *Juluca* reported combined sales of £65 million. International grew strongly with total dolutegravir sales growth of 22% AER, 22% CER, driven by *Tivicay* and *Triumeq*.

Oncology

Sales of *Zejula*, were £229 million in the period from the date of acquisition, comprising £134 million in the US and £95 million in Europe.

Immuno-inflammation

Sales of *Benlysta* in the year were up 30% AER, 25% CER to £613 million, including sales of the sub-cutaneous formulation of £268 million. In the US, *Benlysta* grew 27% AER, 23% CER to £535 million.

Established Pharmaceuticals

Sales of Established Pharmaceuticals in the year were £8,776 million, down 7% AER, 8% CER.

Established Respiratory products declined 10% AER, 11% CER to £3,900 million, with the decline in *Advair/Seretide* partly offset by higher sales of *Ventolin*, *Flovent* and allergy products. In the US, a generic version of *Advair* was launched in February, resulting in a 54% AER, 56% CER decline in the year. In Europe, *Seretide* sales were down 16% AER, 16% CER to £502 million, reflecting continued competition from generic products and the transition of the Respiratory portfolio to newer products. In International, sales of *Seretide* were flat at AER but down 1% CER. Globally, *Ventolin* grew by 27% AER, 25% CER, driven by the strong uptake of an authorised generic version in the US.

The remainder of the Established Pharmaceuticals portfolio declined 5% AER, 6% CER to £4,876 million, including *Lamictal* down 8% AER, 10% CER to £566 million on generic competition and lower sales of *Viread* in International. These declines were partly offset by *Augmentin*, up 6% AER, 6% CER to £602 million in the year, driven by strong growth in International.

Group financial review continued

Financial performance continued

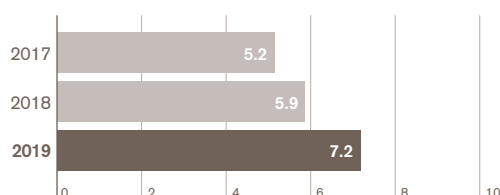
Vaccines

Turnover (£bn)

£7.2bn

21% of Group turnover

AER growth 21% CER growth 19%



Vaccines turnover

	2019 £m	2018 £m	Growth £%	Growth CER%
Meningitis	1,018	881	16	15
Influenza	541	523	3	1
Shingles	1,810	784	>100	>100
Established Vaccines	3,788	3,706	2	1
	7,157	5,894	21	19

Vaccines turnover grew 21% AER, 19% CER to £7,157 million, primarily driven by growth in sales of *Shingrix*. Meningitis vaccines also contributed to growth mainly due to *Bexsero* demand and share gains in the US together with stronger demand in International. Established Vaccines grew 2% AER, 1% CER to £3,788 million, primarily reflecting strong growth in *Boostrix*, Hepatitis vaccines, *Synflorix* and *Infanrix/Pediarix*, partly offset by lower *Cervarix* sales in International and supply constraints in MMRV vaccines.

Meningitis

Meningitis sales grew 16% AER, 15% CER to £1,018 million. *Bexsero* sales grew 16% AER, 16% CER to £679 million, driven by demand and share gains in the US together with stronger demand in International and Europe, partly offset by the completion of the vaccination of catch-up cohorts in certain markets in Europe. *Menveo* grew 15% AER, 13% CER, primarily reflecting improved supply and higher demand in International.

Influenza

Fluarix/FluLaval sales were up 3% AER, 1% CER to £541 million, reflecting strong sales execution in the US, partly offset by increased price competition in the US and lower demand in Europe.

Shingles

Shingrix recorded sales of £1,810 million, primarily driven by continued strong uptake and the favourable benefit of prior-period rebate adjustments in the US. Germany and Canada also contributed to growth.

Established Vaccines

Sales of DTPa-containing vaccines (*Infanrix*, *Pediarix* and *Boostrix*) grew 10% AER, 8% CER. *Infanrix/Pediarix* sales grew 8% AER, 6% CER to £733 million, reflecting favourable year-on-year US CDC stockpile movements and stronger demand in International, partly offset by competitive pressures in Europe. *Boostrix* sales were up 13% AER, 11% CER to £584 million mainly due to strong demand in International together with share gains and higher demand in the US.

Hepatitis vaccines grew 8% AER, 6% CER to £874 million, primarily due to favourable year-on-year CDC stockpile movements and the continued benefit from a competitor supply shortage in the US, partly offset by supply constraints and lower demand in Europe.

Synflorix sales grew 10% AER, 11% CER to £468 million, primarily due to stronger demand in International.

Rotarix sales were up 7% AER, 6% CER to £558 million, reflecting stronger demand in International and the US together with favourable phasing in International.

MMRV vaccines sales declined 24% AER, 23% CER to £232 million, largely driven by supply constraints in Europe and International.

Cervarix sales were down 64% AER, 64% CER to £50 million, reflecting lower demand and expected returns due to competitive pressure in China, together with lower demand elsewhere in International.

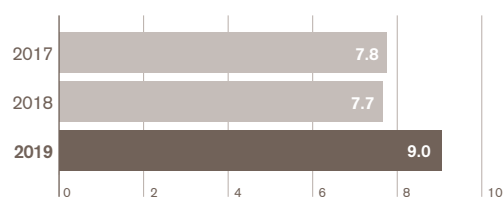
Group financial review continued

Financial performance continued

Consumer Healthcare

Turnover (£bn)

£9.0bn	AER growth 17%	CER growth 17%	Pro-forma CER growth 2%
27% of Group turnover			



Consumer Healthcare turnover

	2019 £m	2018 £m	Growth £%	Growth CER%
Wellness	4,526	3,940	15	14
Oral health	2,673	2,496	7	7
Nutrition	1,176	643	83	81
Skin health	620	579	7	7
	8,995	7,658	17	17

	2019 £m	2018 £m	Growth £%	Growth CER%
US	2,583	1,828	41	36
Europe	2,456	2,340	5	6
International	3,956	3,490	13	14
	8,995	7,658	17	17
Pro-forma growth				2

Consumer Healthcare sales grew 17% AER, 17% CER in 2019 to £8,995 million. On a pro-forma basis, sales grew 2%, driven by strong performance in the Oral health category, partly offset by a decline in Skin health. At a regional level, growth was driven by the US and International following the acquisition of the Pfizer portfolio, while on a pro-forma basis growth was driven primarily by the International region with strong performance in India and China.

Divestments and the phasing out of low-margin contract manufacturing had a negative impact on pro-forma growth of approximately one percentage point.

Sales of the Consumer Healthcare business included five months of Pfizer brand sales arising after the creation of the joint venture. The Pfizer brands have been included in the existing categories and geographic regions used to report Consumer Healthcare sales. GSK expects to revise this category structure for reporting from Q1 2020 onwards.

Wellness

Wellness sales grew 15% AER, 14% CER to £4,526 million for the year. On a pro-forma basis, sales were flat, with growth in Pain relief offset by a decline in Respiratory and the phasing out of low-margin contract manufacturing. Pain relief benefited from continued strong performance of *Panadol* and *Advil* with the latter reflecting ongoing recovery from now resolved supply issues. *Voltaren* saw weaker performance and was also impacted by retail stock movements. Respiratory sales declined as growth in *Flonase* was more than offset by weaker performance in *Theraflu*, following a strong cold and flu comparator in 2018. Growth was also impacted by a decline in other Respiratory brands.

Oral health

Oral health sales grew 7% AER, 7% CER to £2,673 million. *Sensodyne* saw double-digit, broad-based growth, with strong performance in the US and India benefiting from new product innovations. Gum health grew in double digits with broad-based growth, while Denture care grew in mid-single digits. Oral health growth was also impacted by a decline in sales of non-strategic brands.

Nutrition

Nutrition sales grew 83% AER, 81% CER to £1,176 million, largely due to the inclusion of the Pfizer vitamins, minerals and supplements portfolio. On a pro-forma basis, sales were flat, reflecting the strong performance of *Horlicks*, offset by declines in other Nutrition products due to the alignment of in-market inventory levels of some Pfizer brands. Growth was also impacted by the divestment of *Horlicks* and *Maxinutrition* in the UK.

Skin health

Skin health sales grew 7% AER, 7% CER to £620 million, largely due to the addition of *ChapStick* from the Pfizer portfolio. On a pro-forma basis, sales declined in mid-single digits, largely due to divestments of small tail brands in the US and UK.

Group financial review continued

Financial performance continued

Cost of sales

	2019 £m	2018 £m	Growth £%	Growth CER%
Total cost of sales	(11,863)	(10,241)	16	16
Adjusted cost of sales	(10,079)	(9,178)	10	10

Total cost of sales as a percentage of turnover was 35.1%, 1.9 percentage points higher at AER and 2.4 percentage points higher in CER terms compared with 2018. This reflected an increase in the costs of Major restructuring programmes, primarily as a result of write-downs in a number of manufacturing sites, the unwind of the fair market value uplift on inventory arising on completion of the Consumer Healthcare Joint Venture with Pfizer and increased amortisation of intangible assets.

Excluding these and other Adjusting items, Adjusted cost of sales as a percentage of turnover was 29.9%, 0.1 percentage points higher at AER and 0.5 percentage points higher at CER compared with 2018. On a pro-forma basis, Adjusted cost of sales as a percentage of turnover was 29.9%, 0.3 percentage points higher at CER, than in 2018. This reflected continued adverse pricing pressure in Pharmaceuticals, particularly in Respiratory, an unfavourable product mix in Pharmaceuticals and a number of non-restructuring related write-downs in manufacturing sites. This was partly offset by a more favourable product mix in Vaccines, primarily due to growth of *Shingrix* in the US, a favourable impact of inventory adjustments in Vaccines and a further contribution from integration and restructuring savings in Pharmaceuticals and Consumer Healthcare.

Selling, general and administration

	2019 £m	2018 £m	Growth £%	Growth CER%
Total selling, general and administration	(11,402)	(9,915)	15	13
Adjusted selling, general and administration	(10,715)	(9,462)	13	12

Total SG&A costs as a percentage of turnover were 33.8%, 1.6 percentage points higher at AER and 1.6 percentage points higher at CER compared with 2018. This included increased significant legal charges arising from the settlement of existing matters and provisions for ongoing litigation, costs related to the acquisition of the Pfizer consumer healthcare business and a reversal of an indemnity receivable from Novartis following a tax settlement, with an equivalent release of a tax provision which was reflected in the tax charge, as well as increased restructuring costs.

Excluding these and other Adjusting items, Adjusted SG&A costs as a percentage of turnover were 31.7%, 1.0 percentage point higher at AER than in 2018 and 1.0 percentage point higher on a CER basis. On a pro-forma basis, Adjusted SG&A costs as a percentage of turnover was 31.7%, 0.8 percentage points higher at CER, compared with 2018.

The growth in Adjusted SG&A costs of 13% AER, 12% CER and 7% CER on a pro-forma basis reflected increased investment resulting from the acquisition of Tesaro and in promotional product support, particularly for new launches in Vaccines, Respiratory and HIV, as well as increased costs for a number of legal settlements.

This was partly offset by the continuing benefit of restructuring in Pharmaceuticals and the tight control of ongoing costs, particularly in non-promotional spending across all three businesses.

Research and development

	2019 £m	2018 £m	Growth £%	Growth CER%
Total research and development	(4,568)	(3,893)	17	15
Adjusted research and development	(4,339)	(3,735)	16	14

Total R&D expenditure was £4,568 million, 13.5% of turnover, up 17% AER, 15% CER. Adjusted R&D expenditure was £4,339 million, 12.9% of turnover, 16% higher at AER, 14% higher at CER than in 2018. On a pro-forma basis, Adjusted R&D expenditure grew 13% CER compared with 2018.

Pharmaceuticals R&D expenditure was £3,348 million, up 19% AER, 16% CER, with a significant increase in study and clinical trial material investment in Oncology compared with 2018. This reflected the progression of assets from the Tesaro acquisition, primarily *Zejula* and dostarlimab, and a number of other programmes, including belantamab mafodotin, NY-ESO, ICOS and bintrafusp alfa, as well as increased spending on the progression of key non-Oncology assets, such as aGM-CSF for rheumatoid arthritis. This was partly offset by savings from the early phase portfolio reprioritisation in late 2018. R&D expenditure in Vaccines and Consumer Healthcare was £718 million and £273 million, respectively.

Royalty income

Royalty income was £351 million (2018 – £299 million), up 17% AER, 17% CER, primarily reflecting increased royalties on sales of Gardasil.

Other operating income/(expense)

Net other operating income of £689 million (2018 – £1,588 million expense) primarily reflected the profit on disposal of rabies and tick-borne encephalitis vaccines (£306 million) and a number of other asset disposals, together with an increase in value of the shares in Hindustan Unilever Limited to be received on the disposal of *Horlicks* and other Consumer Healthcare brands. The cumulative increase in value since the signing of the proposed transaction was £240 million.

Other income also included accounting credits of £127 million (2018 – £1,846 million expense) arising from the remeasurement of the contingent consideration liabilities related to the acquisitions of the former Shionogi-ViiV Healthcare joint venture and the former Novartis Vaccines business and the liabilities for the Pfizer put option and Pfizer and Shionogi preferential dividends in ViiV Healthcare. This included a remeasurement charge of £31 million (2018 – £1,188 million) for the contingent consideration liability due to Shionogi, primarily arising from the unwind of the discounting, partly offset by changes in exchange rate assumptions and sales forecasts. 2018 also included a remeasurement charge of £658 million in relation to the Consumer Healthcare put option.

Group financial review continued

Financial performance continued

Operating profit

Total operating profit was £6,961 million in 2019 compared with £5,483 million in 2018. Reduced remeasurement charges on the contingent consideration liabilities, no Consumer Healthcare put option charge, increased profits on disposals and an increase in value of the shares in Hindustan Unilever Limited to be received on the disposal of *Horlicks* and other Consumer Healthcare brands were partly offset by increased charges for Major restructuring, primarily arising from write-downs in a number of manufacturing sites and costs to integrate the Consumer Healthcare Joint Venture, and increased significant legal charges.

Excluding these and other Adjusting items, Adjusted operating profit was £8,972 million, 3% higher than 2018 at AER but flat at CER on a turnover increase of 8% CER. The Adjusted operating margin of 26.6% was 1.8 percentage points lower at AER, and 2.1 percentage points lower on a CER basis than in 2018. On a pro-forma basis, Adjusted operating profit was 3% lower at CER on a turnover increase of 4% CER. The Adjusted pro-forma operating margin of 26.6% was 1.9 percentage points lower on a CER basis than in 2018.

The reduction in pro-forma Adjusted operating profit primarily reflected continuing price pressure, particularly in Respiratory, including the impact of the launch of a generic version of *Advair* in the US in February 2019, investment in R&D including a significant increase in Oncology investment, partly on the assets from the Tesaro acquisition, and investments in promotional product support, particularly for new launches in Vaccines, HIV and Respiratory. This was partly offset by the benefit from sales growth, particularly in Vaccines, a more favourable mix in Vaccines and Consumer Healthcare, favourable inventory adjustments in Vaccines and the continued benefit of restructuring with tight control of ongoing costs across all three businesses.

Contingent consideration cash payments which are made to Shionogi and other companies reduce the balance sheet liability and hence are not recorded in the income statement. Total contingent consideration cash payments in 2019 amounted to £893 million (2018 – £1,137 million), including payments to Shionogi of £865 million (2018 – £793 million).

Operating profit by business

Pharmaceuticals operating profit was £4,595 million, down 20% AER, 22% CER with turnover flat at CER. The operating margin of 26.2% was 7.1 percentage points lower at AER than in 2018 and 7.2 percentage points lower on a CER basis. This primarily reflected the increase in cost of sales percentage due to the continued impact of lower prices, particularly in Respiratory, including the impact of the launch of a generic version of *Advair* in the US in February 2019, an unfavourable product mix, primarily as a result of the decline in *Advair* and growth in lower margin products, a significant increase in Oncology R&D and investment in new product support and targeted priority markets, together with a number of non-restructuring related write-downs in manufacturing sites and higher legal costs.

This was partly offset by the continued benefit of restructuring and tight control of ongoing costs and the benefits of re-prioritisation of the R&D portfolio.

Vaccines operating profit was £2,966 million, 53% AER, 46% CER higher than in 2018 on a turnover increase of 19% CER. The operating margin of 41.4% was 8.5 percentage points higher at AER than in 2018 and 7.3 percentage points higher on a CER basis. This was primarily driven by enhanced operating leverage from strong sales growth, particularly *Shingrix* in the US, improved product mix and higher royalty income. Increased SG&A investment to support business growth was partly offset by income from one-off settlements.

Consumer Healthcare operating profit was £1,874 million, up 24% AER, 22% CER higher on a turnover increase of 17% CER. On a pro-forma basis, operating profit was £1,874 million, 4% CER higher on a turnover increase of 2% CER. The operating margin of 20.8% was 1.0 percentage point higher at AER and 0.9 percentage points higher on a CER basis than in 2018. The pro-forma operating margin of 20.8% was 0.5 percentage points higher on a CER basis. This primarily reflected continued manufacturing restructuring savings, improved growth from higher margin power brands and the divestment of lower margin tail products, as well as tight control of other operating expenses, partly offset by increased investment in promotion.

Net finance costs

	2019 £m	2018 (revised) £m
Finance income		
Interest and other income	79	74
Fair value movements	19	7
	98	81
Finance expense		
Interest expense	(840)	(715)
Unwinding of discounts on provisions	(8)	(15)
Remeasurements and fair value movements	(1)	3
Finance expense on lease liabilities	(39)	(2)
Other finance expense	(24)	(69)
	(912)	(798)

Total net finance costs were £814 million compared with £717 million in 2018. Adjusted net finance costs were £810 million compared with £698 million in 2018. The increase primarily reflected higher debt levels following the acquisition from Novartis of its stake in the Consumer Healthcare Joint Venture in June 2018 and the acquisition of Tesaro in January 2019, as well as an adverse comparison with a one-off accounting adjustment of £20 million to amortisation of interest charges in 2018. This was partly offset by the benefit from older bonds being refinanced at lower interest rates, a fair value gain on interest rate swaps and interest of £23 million in Q3 2018 on an historic tax settlement. Following the introduction of IFRS 16, 'Leases', finance costs included an unwind of the discount on the lease liability of £39 million in the year.

Group financial review continued

Financial performance continued

Share of after-tax profits of associates and joint ventures

The share of after-tax profits of associates was £74 million (2018 – £31 million). This included a one-off adjustment of £51 million to reflect GSK's share of increased after-tax profits of Innoviva primarily as a result of a non-recurring income tax benefit.

Profit before tax

Taking account of net finance costs and the share of profits of associates, profit before taxation was £6,221 million compared with £4,800 million in 2018.

Taxation

	2019 £m	2018 £m
UK current year charge	149	234
Rest of world current year charge	1,407	1,426
Charge in respect of prior periods	(420)	(492)
Total current taxation	1,136	1,168
Total deferred taxation	(183)	(414)
Taxation on total profits	953	754

The charge of £953 million represented an effective tax rate on Total results of 15.3% (2018 – 15.7%) and reflected the different tax effects of the various Adjusting items. Tax on Adjusted profit amounted to £1,318 million and represented an effective Adjusted tax rate of 16.0% (2018 – 19.0%), reflecting the impact of the settlement of a number of open issues with tax authorities.

Issues related to taxation are described in Note 14, to the financial statements 'Taxation'. The Group continues to believe it has made adequate provision for the liabilities likely to arise from periods which are open and not yet agreed by tax authorities. The ultimate liability for such matters may vary from the amounts provided and is dependent upon the outcome of agreements with relevant tax authorities.

Non-controlling interests

The allocation of Total earnings to non-controlling interests amounted to £623 million (2018 – £423 million). The increase was primarily due to an increased allocation of ViiV Healthcare profits of £482 million (2018 – £251 million) and higher net profits in some of the Group's other entities with non-controlling interests. This was partly offset by the lower allocation of Consumer Healthcare profits of £70 million (2018 – £117 million) following the buyout of Novartis' interest in June 2018 and the completion of the new Consumer Healthcare Joint Venture with Pfizer on 31 July 2019, and which included the unwind of the fair value uplift on acquired inventory.

The allocation of Adjusted earnings to non-controlling interests amounted to £787 million (2018 – £674 million). The increase in allocation reflected an increased allocation of Consumer Healthcare profits of £204 million (2018 – £118 million), an increased allocation of ViiV Healthcare profits of £512 million (2018 – £501 million) and higher net profits in some of the Group's other entities with non-controlling interests.

Earnings per share

Total earnings per share was 93.9p, compared with 73.7p in 2018. The increase in earnings per share primarily reflected reduced remeasurement charges on the contingent consideration liabilities and put options, an increase in the value of the shares in Hindustan Unilever Limited to be received on the disposal of *Horlicks* and other Consumer Healthcare brands, a reduced effective tax rate and the increased share of after-tax profit of the associate Innoviva.

Adjusted EPS of 123.9p compared with 119.4p in 2018, up 4% AER, 1% CER, with Adjusted operating profit flat at CER. The improvement primarily resulted from a reduced effective tax rate and an increased share of after-tax profits of associates as a result of a non-recurring income tax benefit in Innoviva, partly offset by increased net finance costs and a higher non-controlling interest allocation of Consumer Healthcare profits.

Dividends

The Board declared four interim dividends resulting in a total dividend for the year of 80 pence, in line with the dividend declared for 2018. See Note 16 to the financial statements, 'Dividends'.

Dividend policy

GSK recognises the importance of dividends to shareholders and aims to distribute regular dividend payments that will be determined primarily with reference to the free cash flow generated by the business after funding the investment necessary to support the Group's future growth.

The Board intends to maintain the dividend for 2020 at the current level of 80p per share, subject to any material change in the external environment or performance expectations. Over time, as free cash flow strengthens, it intends to build free cash flow cover of the annual dividend to a target range of 1.25 – 1.50x, before returning the dividend to growth.

Outlook

Our outlook for 2020 reflects our expectations for growth in key new products, and the start of a two-year period in which we will continue to increase investment in these products and in our R&D pipeline, alongside implementation of our new programme which will prepare the Group for separation.

In 2020 we expect Adjusted EPS to decline in the range of -1% to -4% at CER. This guidance excludes any impact in 2020 from any further material divestments beyond those previously announced and any potential impact on our business from the coronavirus outbreak.

All expectations, guidance and targets regarding future performance and dividend payments should be read together with 'Cautionary statement regarding forward-looking statements' and 'Assumptions related to 2016-2020 outlook' on the inside back cover.

Group financial review continued

Adjusting items

Adjusted results reconciliation 31 December 2019	Total results £m	Intangible asset amortisation £m	Intangible asset impairment £m	Major restructuring £m	Transaction- related £m	Divestments, significant legal and other items £m	Adjusted results £m
Turnover	33,754						33,754
Cost of sales	(11,863)	713	30	658	383	–	(10,079)
Gross profit	21,891	713	30	658	383	–	23,675
Selling, general and administration	(11,402)		4	332	104	247	(10,715)
Research and development	(4,568)	64	49	114		2	(4,339)
Royalty income	351						351
Other operating (expense)/income	689			1	(142)	(548)	–
Operating profit	6,961	777	83	1,105	345	(299)	8,972
Net finance costs	(814)			5		(1)	(810)
Share of after-tax profits of associates and joint ventures	74						74
Profit before taxation	6,221	777	83	1,110	345	(300)	8,236
Taxation	(953)	(156)	(17)	(208)	(124)	140	(1,318)
<i>Tax rate</i>	<i>15.3%</i>						<i>16.0%</i>
Profit after taxation	5,268	621	66	902	221	(160)	6,918
Profit attributable to non-controlling interests	623				164		787
Profit attributable to shareholders	4,645	621	66	902	57	(160)	6,131
Earnings per share	93.9p	12.6p	1.3p	18.2p	1.2p	(3.3)p	123.9p
Weighted average number of shares (millions)	4,947						4,947

Adjusted results reconciliation 31 December 2018	Total results £m	Intangible asset amortisation £m	Intangible asset impairment £m	Major restructuring £m	Transaction- related £m	Divestments, significant legal and other items £m	Adjusted results £m
Turnover	30,821						30,821
Cost of sales	(10,241)	536	69	443	15	–	(9,178)
Gross profit	20,580	536	69	443	15	–	21,643
Selling, general and administration	(9,915)		2	315	98	38	(9,462)
Research and development	(3,893)	44	45	49		20	(3,735)
Royalty income	299						299
Other operating (expense)/income	(1,588)			2	1,864	(278)	–
Operating profit	5,483	580	116	809	1,977	(220)	8,745
Net finance costs	(717)			4	(3)	18	(698)
Profit on disposal of associates	3					(3)	–
Share of after-tax profits of associates and joint ventures	31						31
Profit before taxation	4,800	580	116	813	1,974	(205)	8,078
Taxation	(754)	(109)	(19)	(170)	(239)	(244)	(1,535)
<i>Tax rate</i>	<i>15.7%</i>						<i>19.0%</i>
Profit after taxation	4,046	471	97	643	1,735	(449)	6,543
Profit attributable to non-controlling interests	423				251		674
Profit attributable to shareholders	3,623	471	97	643	1,484	(449)	5,869
Earnings per share	73.7p	9.6p	2.0p	13.1p	30.2p	(9.2)p	119.4p
Weighted average number of shares (millions)	4,914						4,914

Group financial review continued

Adjusting items continued

Major restructuring and integration

Within the Pharmaceuticals sector, the highly-regulated manufacturing operations and supply chains and long life-cycle of the business mean that restructuring programmes, particularly those that involve the rationalisation or closure of manufacturing or R&D sites, are likely to take several years to complete.

Major restructuring costs are those related to specific Board-approved Major restructuring programmes and are excluded from Adjusted results. Major restructuring programmes, including integration costs following material acquisitions, are those that are structural and are of a significant scale where the costs of individual or related projects exceed £25 million. Other ordinary course smaller-scale restructuring costs are retained within Total and Adjusted results.

Total Major restructuring charges incurred in 2019 were £1,105 million (2018 – £809 million), analysed as follows:

	2019			2018		
	Cash £m	Non- cash £m	Total £m	Cash £m	Non- cash £m	Total £m
2018 major restructuring programme (incl. Tesaro)	227	572	799	279	90	369
Consumer Healthcare Joint Venture integration programme	248	4	252	–	–	–
Combined restructuring and integration programme	10	44	54	330	110	440
	485	620	1,105	609	200	809

Cash charges primarily arose from restructuring of the manufacturing organisation, R&D and some administrative functions as well as the integration of Tesaro under the 2018 major restructuring programme and integration costs under the Consumer Healthcare Joint Venture integration programme. Non-cash charges under the 2018 major restructuring programme primarily related to announced plans to restructure the manufacturing network.

Total cash payments made in 2019 were £645 million, £316 million for the existing Combined restructuring and integration programme (2018 – £528 million) and £164 million (2018 – £9 million) under the 2018 major restructuring programme including the settlement of certain charges accrued in previous quarters and a further £165 million relating to the Consumer Healthcare Joint Venture integration programme.

The analysis of Major restructuring charges by business was as follows:

	2019 £m	2018 £m
Pharmaceuticals	651	563
Vaccines	58	104
Consumer Healthcare	321	72
	1,030	739
Corporate and central functions	75	70
Total Major restructuring charges	1,105	809

The analysis of Major restructuring charges by Income statement line was as follows:

	2019 £m	2018 £m
Cost of sales	658	443
Selling, general and administration	332	315
Research and development	114	49
Other operating income/(expense)	1	2
Total Major restructuring charges	1,105	809

The Combined restructuring and integration programme delivered incremental annual cost savings in the year of £0.3 billion. The 2018 major restructuring programme delivered incremental cost savings in the year of £0.2 billion.

Total cash charges for the Combined restructuring and integration programme are now expected to be approximately £4.0 billion with non-cash charges of £1.4 billion. The total of £5.4 billion represents a reduction of £0.3 billion from the originally approved £5.7 billion. The programme has now delivered approximately £4.2 billion of annual savings, including an estimated currency benefit of £0.2 billion. The programme is expected to deliver by the end of 2020 total annual savings of £4.3 billion on a constant currency basis, including an estimated benefit of £0.2 billion from currency on the basis of 2019 average exchange rates. The programme is substantially complete and therefore GSK will cease external reporting of total costs and benefits of the Combined restructuring and integration programme from 2020 onwards.

The Group acquired Tesaro in January 2019, and is expected to incur around £50 million of integration and restructuring cash costs, leading to annual cost-saving benefits of around £50 million. This has been added to and reported as part of the existing 2018 major restructuring programme.

The 2018 major restructuring programme, now including Tesaro, is expected to cost £1.75 billion over the period to 2021, with cash costs of £0.85 billion and non-cash costs of £0.9 billion, and is expected to deliver annual savings of around £450 million by 2021 (at 2019 rates). These savings are intended to be fully re-invested to help fund targeted increases in R&D and commercial support of new products.

The completion of the new Consumer Healthcare Joint Venture with Pfizer is expected to realise substantial cost synergies, generating total annual cost savings of £0.5 billion by 2022 for expected cash costs of £0.7 billion and non-cash charges of £0.3 billion, plus additional capital expenditure of £0.2 billion. Up to 25% of the cost savings are intended to be reinvested in the business to support innovation and other growth opportunities.

The Group has initiated a two-year Separation Preparation programme to prepare for the separation of GSK into two companies: New GSK, a biopharma company with an R&D approach focused on science related to the immune system, the use of genetics and new technologies, and a new leader in Consumer Healthcare.

Group financial review continued

Adjusting items continued

The programme aims to:

- drive a common approach to R&D with improved capital allocation
- align and improve the capabilities and efficiency of global support functions to support New GSK
- further optimise the supply chain and product portfolio, including the divestment of non-core assets. A strategic review of prescription dermatology is underway
- prepare Consumer Healthcare to operate as a standalone company

The programme will target delivery of £0.7 billion of annual savings by 2022 and £0.8 billion by 2023, with total costs estimated at £2.4 billion, of which £1.6 billion is expected to be cash costs. The proceeds of anticipated divestments are largely expected to cover the cash costs of the programme. Additional one-time costs to prepare Consumer Healthcare for separation are estimated at £600-700 million, excluding transaction costs.

Transaction-related adjustments

Transaction-related adjustments resulted in a net charge of £345 million (2018 – £1,977 million). This included a net £127 million accounting credit for the remeasurement of the contingent consideration liabilities related to the acquisitions of the former Shionogi-ViiV Healthcare joint venture and the former Novartis Vaccines business and the liabilities for the Pfizer put option and Pfizer and Shionogi preferential dividends in ViiV Healthcare.

Charge/(credit)	2019 £m	2018 £m
Consumer Healthcare Joint Venture put option	–	658
Contingent consideration on former Shionogi-ViiV Healthcare Joint Venture (including Shionogi preferential dividends)	31	1,188
ViiV Healthcare put options and Pfizer preferential dividends	(234)	(58)
Contingent consideration on former Novartis Vaccines business	76	58
Release of fair value uplift on acquired Pfizer inventory	366	–
Other adjustments	106	131
Total transaction-related charges	345	1,977

The £31 million charge relating to the contingent consideration for the former Shionogi-ViiV Healthcare joint venture represented an increase in the valuation of the contingent consideration due to Shionogi, primarily as a result of a £435 million unwind of the discount, partly offset by updated exchange rate assumptions and adjustments to sales forecasts. The £234 million credit relating to the ViiV Healthcare put options and Pfizer preferential dividends represented a reduction in the valuation of the put option as a result of adjustments to multiples and sales forecasts as well as updated exchange rate assumptions.

Other adjustments included transaction costs arising on completion of the Consumer Healthcare Joint Venture with Pfizer, as well as a reversal of an indemnity receivable from Novartis following a tax settlement, with an equivalent release of a tax provision. An explanation of the accounting for the non-controlling interests in ViiV Healthcare is set out on page 51.

Divestments, significant legal charges and other items

Divestments and other items included a profit on disposal of rabies and tick-borne encephalitis vaccines (£306 million), a gain in the year of £143 million arising from the increase in value of the shares in Hindustan Unilever Limited to be received on the disposal of *Horlicks* and other Consumer Healthcare brands, as well as equity investment impairments and certain other Adjusting items together with the profit on a number of asset disposals. A charge of £251 million (2018 – £33 million) for significant legal matters included the settlement of existing matters as well as provisions for ongoing litigation. Significant legal cash payments were £294 million (2018 – £39 million).

Pro-forma growth reconciliations

The tables below set out reconciliations between reported CER growth rates and pro-forma CER growth rates and between reported margin percentages and pro-forma margin percentages.

Group	Reported growth rate CER%	Adjustment to include August to December 2018 results of Pfizer consumer healthcare business	Pro-forma growth rate CER%
Group			
Turnover	8	(4)	4
Adjusted cost of sales	10	(5)	5
Adjusted selling, general and administration	12	(5)	7
Adjusted research and development	14	(1)	13
Adjusted operating profit	–	(3)	(3)
Consumer Healthcare			
Turnover	17	(15)	2
Wellness sales	14	(14)	–
Nutrition sales	81	(81)	–
Skin health sales	7	(12)	(5)
Operating profit	22	(18)	4

The 2018 pro-forma financial information used as the basis for the pro-forma growth rates has been calculated as follows:

Group	GSK reported results 2018 £bn	August to December 2018 results of Pfizer consumer healthcare business £bn	Pro-forma results 2018 £bn
Group			
Turnover	30.8	1.2	32.0
Adjusted cost of sales	(9.2)	(0.4)	(9.6)
Adjusted selling, general and administration	(9.5)	(0.4)	(9.9)
Adjusted research and development	(3.7)	(0.1)	(3.8)
Adjusted operating profit	8.7	0.3	9.0
Consumer Healthcare			
Turnover	7.7	1.1	8.8
Wellness sales	4.0	0.5	4.5
Nutrition sales	0.6	0.5	1.1
Skin health sales	0.6	0.1	0.7
Operating profit	1.5	0.3	1.8

Group financial review continued

Cash generation and conversion

A summary of the consolidated cash flow statement is set out below.

	2019 £m	2018 £m
Net cash inflow from operating activities	8,020	8,421
Net cash outflow from investing activities	(5,354)	(1,553)
Net cash outflow from financing activities	(1,840)	(6,389)
Increase/(decrease) in cash and bank overdrafts	826	479
Cash and bank overdrafts at beginning of year	4,087	3,600
Increase in cash and bank overdrafts	826	479
Exchange adjustments	(82)	8
Cash and bank overdrafts at end of year	4,831	4,087
Cash and bank overdrafts at end of year comprise:		
Cash and cash equivalents	4,707	3,874
Cash and cash equivalents reported in assets held for sale	507	485
Overdrafts	(383)	(272)
	4,831	4,087

Capital expenditure and financial investment

Cash payments for tangible and intangible fixed assets amounted to £2,163 million (2018 – £1,796 million) and disposals realised £603 million (2018 – £453 million). Cash payments to acquire equity investments amounted to £258 million (2018 – £309 million), primarily relating to Lyell Immunopharma, and sales of equity investments realised £69 million (2018 – £151 million).

Free cash flow

Free cash flow is the amount of cash generated by the Group after meeting our obligations for contingent consideration, interest, tax and dividends paid to non-controlling interests, and after capital expenditure on property, plant and equipment and intangible assets.

	2019 £m	2018 £m
Free cash inflow	5,073	5,692

The reduction in free cash flow primarily reflected the adverse timing of payments for returns and rebates, as well as the initial step-down impact from US Advair generic competition, increased capital expenditure including the acquisition of intangible assets, higher restructuring payments and higher significant legal costs. This was partly offset by improved operating profits including currency benefits, a reduction in inventory and a lower increase in trade receivables, lower contingent consideration payments compared with 2018, which included a milestone payment to Novartis, lower dividend payments to non-controlling interests and the reclassification of lease payments from operating to financing activities following the transition to IFRS 16.

Total cash payments to Shionogi in relation to the ViiV Healthcare contingent consideration liability in the year were £865 million (2018 – £793 million), of which £767 million was recognised in cash flows from operating activities and £98 million was recognised in contingent consideration paid within investing cash flows. These payments are deductible for tax purposes.

Reconciliation of net cash inflow from operating activities to free cash flow

A reconciliation of net cash inflow from operating activities, which is the closest equivalent IFRS measure to free cash flow, is shown below.

	2019 £m	2018 £m
Net cash inflow from operating activities	8,020	8,421
Purchase of property, plant and equipment	(1,265)	(1,344)
Purchase of intangible assets	(898)	(452)
Proceeds from sale of property, plant and equipment	95	168
Proceeds from disposal of intangible assets	404	256
Interest paid	(895)	(766)
Interest received	82	72
Dividends from associates and joint ventures	7	39
Contingent consideration paid (reported in investing activities)	(113)	(153)
Contribution from non-controlling interests	–	21
Distributions to non-controlling interests	(364)	(570)
Free cash flow	5,073	5,692

Future cash flow

Over the long term, we expect that future cash generated from operations will be sufficient to fund our operating and debt servicing costs, normal levels of capital expenditure, obligations under existing licensing agreements, expenditure arising from restructuring programmes and other routine outflows including tax, pension contributions and dividends, subject to the 'Principal risks and uncertainties' discussed on pages 275 to 287. We may from time to time have additional demands for finance, such as for acquisitions, including potentially acquiring increased ownership interests in the ViiV Healthcare business where minority shareholders hold put options. We have access to multiple sources of liquidity from short and long-term capital markets and financial institutions for such needs, in addition to the cash flow from operations.

Investment appraisal and capital allocation

We have a strong framework for capital allocation, including a board to govern the allocation of capital between our businesses. We utilise a consistent cash return on invested capital (CROIC) methodology to prioritise investment across the Group as a whole, so that we can more effectively compare the returns from each of the businesses as we allocate capital between them. We also consider the impact on EPS and our credit profile where relevant.

Group financial review continued

Financial position and resources

	2019 £m	2018 £m
Assets		
Non-current assets		
Property, plant and equipment	10,348	11,058
Right of use assets	966	–
Goodwill	10,562	5,789
Other intangible assets	30,955	17,202
Investments in associates and joint ventures	314	236
Other investments	1,837	1,322
Deferred tax assets	4,096	3,887
Derivative financial instruments	103	69
Other non-current assets	1,020	1,576
Total non-current assets	60,201	41,139
Current assets		
Inventories	5,947	5,476
Current tax recoverable	262	229
Trade and other receivables	7,202	6,423
Derivative financial instruments	421	188
Liquid investments	79	84
Cash and cash equivalents	4,707	3,874
Assets held for sale	873	653
Total current assets	19,491	16,927
Total assets	79,692	58,066
Liabilities		
Current liabilities		
Short-term borrowings	(6,918)	(5,793)
Contingent consideration liabilities	(755)	(837)
Trade and other payables	(14,939)	(14,037)
Derivative financial instruments	(188)	(127)
Current tax payable	(629)	(965)
Short-term provisions	(621)	(732)
Total current liabilities	(24,050)	(22,491)
Non-current liabilities		
Long-term borrowings	(23,590)	(20,271)
Corporation tax payable	(189)	(272)
Deferred tax liabilities	(3,810)	(1,156)
Pensions and other post-employment benefits	(3,457)	(3,125)
Other provisions	(670)	(691)
Derivative financial instruments	(1)	(1)
Contingent consideration liabilities	(4,724)	(5,449)
Other non-current liabilities	(844)	(938)
Total non-current liabilities	(37,285)	(31,903)
Total liabilities	(61,335)	(54,394)
Net assets	18,357	3,672
Total equity	18,357	3,672

Acquisition of Pfizer consumer healthcare business

As the acquisition of the Pfizer consumer healthcare business was a non-cash transaction, it resulted in an increase in net assets of £15.0 billion, including intangible assets of £12.4 billion and goodwill of £3.9 billion. This reflected the recognition of Pfizer's non-controlling interest in the Consumer Healthcare Joint Venture of £6.9 billion and a gain in retained earnings of £8.1 billion representing the difference between fair value and book value of the 32% of GSK's Consumer Healthcare business transferred to Pfizer.

Property, plant and equipment

Our business is science-based, technology-intensive and highly regulated by governmental authorities. We allocate significant financial resources to the renewal and maintenance of our property, plant and equipment to minimise risks of interruption to production and to ensure compliance with regulatory standards. A number of our processes use hazardous materials.

The total cost of our property, plant and equipment at 31 December 2019 was £21,599 million, with a net book value of £10,348 million. Of this, land and buildings represented £4,037 million, plant and equipment £4,425 million and assets in construction £1,886 million. In 2019, we invested £1,640 million in new property, plant and equipment. This was mainly related to a large number of projects for the renewal, improvement and expansion of facilities at various worldwide sites to support new product development and launches as well as to improve the efficiency of existing supply chains. Property is mainly held freehold. New investment is financed from our liquid resources. At 31 December 2019, we had contractual commitments for future capital expenditure of £413 million. We believe that our property and plant facilities are adequate for our current needs.

We observe stringent procedures and use specialist skills to manage environmental risks from our activities. Environmental issues, sometimes dating from operations now modified or discontinued, are reported under 'Environment' on page 41 and in Note 46 to the financial statements, 'Legal proceedings'.

Right of use assets

Right of use assets amounted to £966 million at 31 December 2019 compared with £1,071 million on 1 January 2019, following the implementation of IFRS 16. The decrease in the year reflected the impact of depreciation and disposals of £214 million and £64 million respectively, partly offset by additions, including from business combinations, of £211 million.

Goodwill

Goodwill increased to £10,562 million at 31 December 2019, from £5,789 million, primarily reflecting additions of £3,854 million arising from the acquisition of the Pfizer consumer healthcare business and £1,169 million from the acquisition of Tesaro, Inc.

Group financial review continued

Financial position and resources continued

Other intangible assets

Other intangible assets include the cost of intangibles acquired from third parties and computer software. The net book value of other intangible assets as at 31 December 2019 was £30,955 million (2018 – £17,202 million). The increase primarily reflected additions of £12,357 million from the acquisition of the Pfizer consumer healthcare business and £3,092 million from the acquisition of Tesaro, Inc.

Investments in associates and joint ventures

We held investments in associates and joint ventures with a carrying value at 31 December 2019 of £314 million (2018 – £236 million). The market value at 31 December 2019 was £396 million (2018 – £487 million). The largest of these investments was in Innoviva Inc., which had a book value at 31 December 2019 of £261 million (2018 – £189 million) and a market value of £343 million. See Note 21 to the financial statements, 'Investments in associates and joint ventures'.

Other investments

We held other investments with a carrying value at 31 December 2019 of £1,837 million (2018 – £1,322 million). The highest value investments held at 31 December 2019 were in 23andMe, which had a book value at 31 December 2019 of £227 million (2018 – £229 million), Progyny, Inc, which had a book value of £213 million (2018 – £21 million) and Theravance Biopharma, Inc., which had a book value at 31 December 2019 of £189 million (2018 – £194 million). The other investments included equity stakes in companies with which we have research collaborations, and which provide access to biotechnology developments of potential interest and interests in companies that arise from business divestments.

Derivative financial instruments: assets

We had current derivative financial assets held at fair value of £421 million (2018 – £188 million) and non-current derivative financial assets held at fair value of £103 million (2018 – £69 million). £240 million of current derivative financial assets related to a derivative embedded in the agreement to divest *Horlicks* and other nutritional brands to Unilever plc. See Note 40 for further information. The majority of the remainder of these financial instruments related to foreign exchange contracts both designated and not designated as accounting hedges.

Inventories

Inventory of £5,947 million increased from £5,476 million in 2018 primarily reflecting the higher inventory in Consumer Healthcare following the Pfizer acquisition in the year, partly offset by the impact of exchange movements.

Trade and other receivables

Trade and other receivables of £7,202 million increased from £6,423 million in 2018, primarily reflecting the impact of higher sales, particularly in Vaccines, partly offset by better collections and exchange movements.

Deferred tax assets

Deferred tax assets amounted to £4,096 million (2018 – £3,887 million) at 31 December 2019.

Derivative financial instruments: liabilities

We held current and non-current derivative financial liabilities at fair value of £189 million (2018 – £128 million). This primarily related to foreign exchange contracts both designated and not designated as accounting hedges.

Trade and other payables

At 31 December 2019, trade and other payables were £14,939 million compared with £14,037 million at 31 December 2018. The increase primarily reflected higher payables in Consumer Healthcare following the Pfizer acquisition in the year, partly offset by exchange movements.

Provisions

We carried deferred tax provisions and other short-term and non-current provisions of £5,101 million at 31 December 2019 (2018 – £2,579 million). Other provisions at the year-end included £198 million (2018 – £219 million) related to legal and other disputes and £505 million (2018 – £641 million) related to Major restructuring programmes. Provision has been made for legal and other disputes, indemnified disposal liabilities, employee related liabilities and the costs of the restructuring programme to the extent that at the balance sheet date a legal or constructive obligation existed and could be reliably estimated.

Pensions and other post-employment benefits

We account for pension and other post-employment arrangements in accordance with IAS 19. The net deficits were £1,921 million (2018 – £995 million) on pension arrangements and £1,418 million (2018 – £1,379 million) on unfunded post-employment liabilities. See Note 30 to the financial statements, 'Pensions and other post-employment benefits'.

Other non-current liabilities

Other non-current liabilities amounted to £844 million at 31 December 2019 (2018 – £938 million).

Contingent consideration liabilities

Contingent consideration amounted to £5,479 million at 31 December 2019 (2018 – £6,286 million), of which £5,103 million (2018 – £5,937 million) represented the estimated present value of amounts payable to Shionogi relating to ViiV Healthcare and £339 million (2018 – £296 million) represented the estimated present value of contingent consideration payable to Novartis related to the Vaccines acquisition.

The liability due to Shionogi included £222 million in respect of preferential dividends. The liability for preferential dividends due to Pfizer at 31 December 2019 was £4 million (2018 – £15 million). An explanation of the accounting for the non-controlling interests in ViiV Healthcare is set out on page 51.

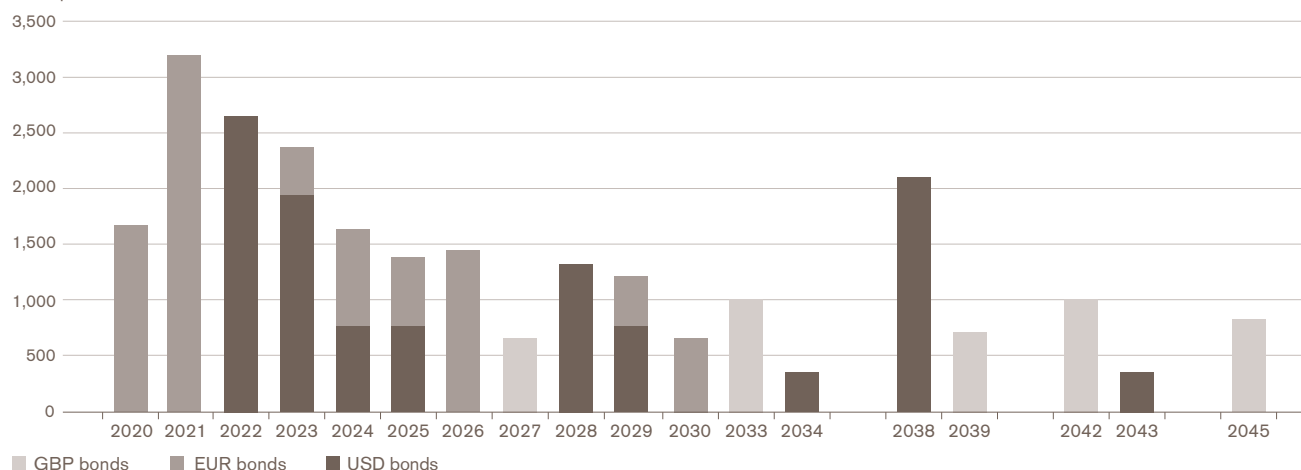
Of the contingent consideration payable (on a post-tax basis) at 31 December 2019, £755 million (2018 – £837 million) is expected to be paid within one year. The consideration payable is expected to be paid over a number of years. As a result, the total estimated liabilities are discounted to their present values, on a post-tax basis using post-tax discount rates. The Shionogi-ViiV Healthcare contingent consideration liability is discounted at 8.5% and the Novartis Vaccines contingent consideration liability is discounted partly at 8% and partly at 9%.

Group financial review continued

Financial position and resources continued

Maturity profile of bond debt

£m equivalent



Net debt

	2019 £m	2018 £m
Cash, cash equivalents and liquid investments	4,786	3,958
Cash, cash equivalents reported in assets held for sale	507	485
Borrowings – repayable within one year	(6,918)	(5,793)
Borrowings – repayable after one year	(23,590)	(20,271)
Net debt	(25,215)	(21,621)

At 31 December 2019, net debt was £25.2 billion, compared with £21.6 billion at 31 December 2018. This comprised gross debt of £30.5 billion and cash and liquid investments of £5.3 billion, including £0.5 billion reported within Assets held for sale. Net debt increased due to the £3.9 billion acquisition of Tesaro Inc as well as £0.2 billion of Tesaro net debt, together with the £1.3 billion impact from the implementation of IFRS 16, the dividend paid to shareholders of £4.0 billion and other net investing activities of £0.1 billion, partly offset by £0.7 billion net favourable exchange impacts from the translation of non-Sterling denominated debt and exchange on other financing items and £5.1 billion of free cash flow.

At 31 December 2019, GSK had short-term borrowings (including overdrafts and lease liabilities) repayable within 12 months of £6.9 billion, with loans of £3.2 billion repayable in the subsequent year.

At 31 December 2019, GSK's cash and liquid investments were held as follows:

	2019 £m	2018 £m
Bank balances and deposits	2,565	1,853
Bank balances and deposits reported in assets held for sale	507	485
US Treasury and Treasury repo only money market funds	102	449
Liquidity funds	2,040	1,572
Cash and cash equivalents	5,214	4,359
Liquid investments – Government securities	79	84
	5,293	4,443

Cash and liquid investments of £3.6 billion (2018 – £2.9 billion) were held centrally at 31 December 2019.

The analysis of cash and gross debt after the effects of hedging is as follows.

	2019 £m	2018 £m
Cash and liquid investments	5,293	4,443
Gross debt – fixed ¹	(25,064)	(21,603)
– floating	(5,444)	(4,432)
– non-interest bearing	–	(29)
Net debt	(25,215)	(21,621)

¹ Includes £2.1 billion equivalent of notes swapped from floating to fixed rates via interest rate swaps.

Movements in net debt

	2019 £m	2018 £m
Net debt at beginning of year	(21,621)	(13,178)
Implementation of IFRS 16	(1,303)	–
Net debt at beginning of year, as adjusted	(22,924)	(13,178)
Increase in cash and bank overdrafts	826	479
Decrease in liquid investments	(1)	–
Increase in long-term loans	(4,794)	(10,138)
Net repayment of short-term loans	1,065	1,986
Repayment of lease liabilities	214	28
Debt of subsidiary undertakings acquired	(524)	–
Exchange movements	1,015	(776)
Other movements	(92)	(22)
Net debt at end of year	(25,215)	(21,621)

Group financial review continued

Financial position and resources continued

Interest rate benchmark reform

'Interest rate benchmark reform – Amendments to IFRS 9, IAS 39 and IFRS 7' was issued by the IASB in September 2019. These amendments modify specific hedge accounting requirements to allow hedge accounting to continue for affected hedges during the period of uncertainty before the hedged items or hedging instruments affected by the current interest rate benchmarks are amended as a result of the ongoing interest rate benchmark reforms.

At 31 December 2019, the Group was not directly exposed to interest rate benchmark reform as it held no interest rate derivatives that referenced LIBOR and matured after the end of 2021 and all floating rate bonds were due to mature before the end of 2021.

The Group has closely monitored the market and the output from the various industry working groups managing the transition to new benchmark interest rates. This includes announcements made by LIBOR regulators, including the Financial Conduct Authority (FCA) and the US Commodity Futures Trading Commission, regarding the transition away from LIBOR (including GBP LIBOR, USD LIBOR and EURIBOR) to the Sterling Overnight Index Average Rate (SONIA), the Secured Overnight Financing Rate (SOFR), and the Euro Short-Term Rate (€STR) respectively. The FCA has made it clear that, at the end of 2021, it will no longer seek to persuade, or compel, banks to submit to LIBOR.

The Group is undertaking an interest rate benchmark transition programme to identify potential exposures within the business and deliver a smooth transition to appropriate alternative benchmark rates.

Total equity

At 31 December 2019, total equity had increased from £3,672 million at 31 December 2018 to £18,357 million.

A summary of the movements in equity is set out below.

	2019 £m	2018 £m
Total equity at beginning of year	3,672	3,489
Implementation of IFRS 15		(4)
Implementation of IFRS 9		(11)
Implementation of IFRS 16	(93)	
Total equity at beginning of year, as adjusted	3,579	3,474
Total comprehensive income for the year	3,701	4,300
Dividends to shareholders	(3,953)	(3,927)
Recognition of interest in Consumer Healthcare Joint Venture	14,969	–
Ordinary shares issued	51	74
Changes in non-controlling interests	(10)	–
De-recognition of liabilities with non-controlling interests	–	(62)
Share-based incentive plans	365	360
Tax on share-based incentive plans	19	2
Contributions from non-controlling interests	–	21
Distributions to non-controlling interests	(364)	(570)
Total equity at end of year	18,357	3,672

Share purchases

No shares were repurchased by the company during 2019. At 31 December 2019, GSK held 393.5 million shares as Treasury shares (2018 – 414.6 million shares), at a cost of £5,505 million (2018 – £5,800 million), which has been deducted from retained earnings.

No ordinary shares were purchased in the period 1 January 2020 to 24 February 2020 and the company does not expect to make any ordinary share repurchases in the remainder of 2020.

In 2019, 21.1 million Treasury shares were transferred to the Employee Share Ownership Plan (ESOP) Trusts. Shares are held by the Trusts to satisfy future exercises of options and awards under the Group share option and award schemes. A proportion of the shares held by the Trusts are in respect of awards where the rules of the scheme require us to satisfy exercises through market purchases rather than the issue of new shares. The shares held by the Trusts are matched to options and awards granted.

At 31 December 2019, the ESOP Trusts held 36.4 million (2018 – 41.5 million) GSK shares against the future exercise of share options and share awards. The carrying value of £135 million (2018 – £161 million) has been deducted from other reserves. The market value of these shares was £647 million (2018 – £619 million).

Group financial review continued

Financial position and resources continued

Contractual obligations and commitments

Financial commitments are summarised in Note 35 to the financial statements, 'Commitments'.

The following table sets out our contractual obligations and commitments at 31 December 2019 as they fall due for payment.

	Total £m	Under 1 yr £m	1-3 yrs £m	3-5 yrs £m	5 yrs+ £m
Loans	29,408	6,678	5,883	3,925	12,922
Interest on loans	8,952	780	1,409	1,159	5,604
Finance lease obligations	1,250	240	346	198	466
Future finance charges	223	41	66	42	74
Intangible assets	9,727	578	607	1,502	7,040
Property, plant & equipment	413	378	35	–	–
Investments	47	24	23	–	–
Purchase commitments	1,047	925	121	1	–
Pensions	163	75	88	–	–
Total	51,230	9,719	8,578	6,827	26,106

Commitments in respect of loans and future interest payable on loans are disclosed before taking into account the effect of derivatives.

We have entered into a number of research collaborations to develop new compounds with other pharmaceutical companies. The terms of these arrangements can include upfront fees, equity investments, loans and commitments to fund specified levels of research. In addition, we will often agree to make further payments if future 'milestones' are achieved.

As some of these agreements relate to compounds in the early stages of development, the potential obligation to make milestone payments will continue for a number of years if the compounds move successfully through the development process. Generally, the closer the product is to marketing approval, the greater the probability of success. The amounts shown above within intangible assets represent the maximum that would be paid if all milestones were achieved, and include £4.9 billion which relates to externalised projects in the discovery portfolio. There was an increase in the commitments in 2019 as a result of a number of new R&D collaborations, including with Merck KgaA and Lyell Immunopharma.

In 2018, we reached an agreement with the trustees of the UK pension schemes to make additional contributions, to assist in eliminating the pension deficit identified as part of the 31 December 2017 actuarial funding valuation. The table above includes this commitment but excludes the normal ongoing annual funding requirement in the UK of approximately £130 million. For further information on pension obligations, see Note 30 to the financial statements, 'Pensions and other post-employment benefits'.

Contingent liabilities

Other contingent liabilities are set out in Note 34 to the financial statements, 'Contingent liabilities'.

The following table sets out contingent liabilities, comprising discounted bills, performance guarantees, letters of credit and other items arising in the normal course of business, and when they are expected to expire.

	Total £m	Under 1 yr £m	1-3 yrs £m	3-5 yrs £m	5 yrs+ £m
Guarantees	32	4	11	3	14
Other contingent liabilities	65	10	17	8	30
Total	97	14	28	11	44

In the normal course of business, we have provided various indemnification guarantees in respect of business disposals in which legal and other disputes have subsequently arisen. A provision is made where an outflow of resources is considered probable and a reliable estimate can be made of the likely outcome of the dispute and this is included in Note 31 to the financial statements, 'Other provisions'.

We provide for the outcome of tax, legal and other disputes when an outflow of resources is considered probable and a reliable estimate of the outflow may be made. At 31 December 2019, other than for those disputes where provision has been made, it was not possible to make a reliable estimate of the potential outflow of funds that might be required to settle disputes where the possibility of there being an outflow was more than remote.

The ultimate liability for such matters may vary significantly from the amounts provided and is dependent upon negotiations with the relevant tax authorities and the outcome of litigation proceedings, where relevant. This is discussed further in 'Principal risks and uncertainties' on pages 275 to 287 and Note 46 to the financial statements, 'Legal proceedings'.

Group financial review continued

Treasury policies

We report in Sterling and pay dividends out of Sterling cash flows. The role of Treasury is to monitor and manage the Group's external and internal funding requirements and financial risks in support of our strategic objectives. GSK operates on a global basis, primarily through subsidiary companies, and we manage our capital to ensure that our subsidiaries are able to operate as going concerns and to optimise returns to shareholders through an appropriate balance of debt and equity. Treasury activities are governed by policies approved annually by the Board of Directors, and most recently on 16 October 2019. A Treasury Management Group (TMG) meeting, chaired by our Chief Financial Officer, takes place on a regular basis to review Treasury activities. Its members receive management information relating to these activities.

Treasury operations

The objective of GSK's Treasury activities is to minimise the post-tax net cost of financial operations and reduce its volatility in order to benefit earnings and cash flows. GSK uses a variety of financial instruments to finance its operations and derivative financial instruments to manage market risks from these operations. Derivatives principally comprise foreign exchange forward contracts and swaps which are used to swap borrowings and liquid assets into currencies required for Group purposes, as well as interest rate swaps which are used to manage exposure to financial risks from changes in interest rates.

Derivatives are used exclusively for hedging purposes in relation to underlying business activities and not as trading or speculative instruments.

Capital management

GSK's financial strategy, implemented through the Group's financial architecture, supports GSK's strategic priorities and is regularly reviewed by the Board. We manage the capital structure of the Group through an appropriate mix of debt and equity. We continue to manage our financial policies to a credit profile that particularly targets short-term credit ratings of A-1 and P-1 while maintaining single A long-term ratings consistent with those targets.

GSK's long-term credit rating with Standard and Poor's is A+ (negative outlook) and with Moody's Investor Services ('Moody's') is A2 (negative outlook). Our short-term credit ratings are A-1 and P-1 with Standard and Poor's and Moody's respectively.

Liquidity risk management

GSK's policy is to borrow centrally in order to meet anticipated funding requirements. Our cash flow forecasts and funding requirements are monitored by the TMG on a regular basis. Our strategy is to diversify liquidity sources using a range of facilities and to maintain broad access to financial markets.

Each day, we sweep cash from a number of global subsidiaries to central Treasury accounts for liquidity management purposes.

Interest rate risk management

GSK's objective is to minimise the effective net interest cost and to balance the mix of debt at fixed and floating interest rates over time. The policy on interest rate risk management limits the net amount of floating rate debt to a specific cap, reviewed and agreed no less than annually by the Board.

Foreign exchange risk management

Our objective is to minimise the exposure of overseas operating subsidiaries to transaction risk by matching local currency income with local currency costs where possible. Foreign currency transaction exposures arising on external and internal trade flows are selectively hedged. GSK's internal trading transactions are matched centrally and we manage inter-company payment terms to reduce foreign currency risk. Where possible, we manage the cash surpluses or borrowing requirements of subsidiary companies centrally using forward contracts to hedge future repayments back into the originating currency.

In order to reduce foreign currency translation exposure, we seek to denominate borrowings in the currencies of our principal assets and cash flows. These are primarily denominated in US Dollars, Euros and Sterling. Borrowings can be swapped into other currencies as required.

Borrowings denominated in, or swapped into, foreign currencies that match investments in overseas Group assets may be treated as a hedge against the relevant assets. Forward contracts in major currencies are also used to reduce exposure to the Group's investment in overseas Group assets. The TMG reviews the ratio of borrowings to assets for major currencies regularly.

Counterparty risk management

We set global counterparty limits for each of our banking and investment counterparties based on long-term credit ratings from Moody's and Standard and Poor's. Treasury's usage of these limits is monitored daily by a Treasury Compliance Officer (TCO) who operates independently of Treasury. Any breach of these limits would be reported to the CFO immediately.

The TCO also monitors the credit rating of these counterparties and, when changes in ratings occur, notifies Treasury so that changes can be made to investment levels or to authority limits as appropriate. In addition, relationship banks and their credit ratings are reviewed regularly and a report is presented annually to the TMG for approval.

Group financial review continued

Critical accounting policies

The consolidated financial statements are prepared in accordance with IFRS, as adopted for use in the European Union, and also with IFRS as issued by the International Accounting Standards Board (IASB), following the accounting policies approved by the Board and described in Note 2 to the financial statements, 'Accounting principles and policies'.

We are required to make estimates and assumptions that affect the amounts of assets, liabilities, revenue and expenses reported in the financial statements. Actual amounts and results could differ from those estimates.

The critical accounting policies relate to the following areas:

- Turnover
- Taxation (Note 14)
- Legal and other disputes (Notes 31 and 46)
- Contingent consideration and put option liabilities (Notes 28 and 32)
- Pensions and other post-employment benefits (Note 30).

Information on the judgements and estimates made in these areas is given in Note 3 to the financial statements, 'Key accounting judgements and estimates'.

Turnover

In respect of the Turnover accounting policy, our largest business is US Pharmaceuticals, and the US market has the most complex arrangements for rebates, discounts and allowances. The following briefly describes the nature of the arrangements in existence in our US Pharmaceuticals business:

- We have arrangements with certain indirect customers whereby the customer is able to buy products from wholesalers at reduced prices. A chargeback represents the difference between the invoice price to the wholesaler and the indirect customer's contractual discounted price. Accruals for estimating chargebacks are calculated based on the terms of each agreement, historical experience and product growth rates
- Customer rebates are offered to key managed care and Group Purchasing Organisations and other direct and indirect customers. These arrangements require the customer to achieve certain performance targets relating to the value of product purchased, formulary status or pre-determined market shares relative to competitors. The accrual for customer rebates is estimated based on the specific terms in each agreement, historical experience and product growth rates

- The US Medicaid programme is a state-administered programme providing assistance to certain poor and vulnerable patients. In 1990, the Medicaid Drug Rebate Program was established to reduce State and Federal expenditure on prescription drugs. In 2010, the Patient Protection and Affordable Care Act became law. We participate by providing rebates to states. Accruals for Medicaid rebates are calculated based on the specific terms of the relevant regulations or the Patient Protection and Affordable Care Act
- Cash discounts are offered to customers to encourage prompt payment. These are accrued for at the time of invoicing and adjusted subsequently to reflect actual experience
- We record an accrual for estimated sales returns by applying historical experience of customer returns to the amounts invoiced, together with market-related information such as stock levels at wholesalers, anticipated price increases and competitor activity.

A reconciliation of gross turnover to net turnover for the US Pharmaceuticals business is as follows:

	2019		2018		2017	
	£m	Margin %	£m	Margin %	£m	Margin %
Gross turnover	18,471	100	18,227	100	16,365	100
Market-driven segments	(5,976)	(32)	(5,147)	(28)	(4,040)	(25)
Government mandated and state programmes	(4,264)	(23)	(4,594)	(25)	(3,933)	(24)
Cash discounts	(356)	(2)	(361)	(2)	(330)	(2)
Customer returns	(141)	(1)	(98)	(1)	(97)	(1)
Prior year adjustments	247	1	98	1	86	1
Other prior year items	–	–	(59)	–	(23)	–
Other items	(579)	(3)	(613)	(4)	(460)	(3)
Total deductions	(11,069)	(60)	(10,774)	(59)	(8,797)	(54)
Net turnover	7,402	40	7,453	41	7,568	46

Market-driven segments consist primarily of Managed Care and Medicare plans with which we negotiate contract pricing that is honoured via rebates and chargebacks. Mandated segments consist primarily of Medicaid and Federal Government programmes which receive government-mandated pricing via rebates and chargebacks.

Group financial review continued

Critical accounting policies continued

The increased deductions in the market-driven segments of the gross turnover to net turnover reconciliation primarily reflected higher rebates and chargebacks on respiratory products, and on *Advair* in particular. A generic version of *Advair* was launched in February 2019, and during the year *Advair* accounted for 7% of US Pharmaceuticals turnover and approximately 27% of the total deduction for rebates and returns. The respiratory portfolio as a whole, including Established Respiratory products, accounted for approximately 79% of the total deduction in the year.

The balance sheet accruals for rebates, discounts, allowances and returns for the US Pharmaceuticals and Vaccines businesses are managed on a combined basis. At 31 December 2019, the total accrual amounted to £4,200 million (2018 – £4,356 million).

A monthly process is operated to monitor inventory levels at wholesalers for any abnormal movements. This process uses gross sales volumes, prescription volumes based on third party data sources and information received from key wholesalers. The aim of this is to maintain inventories at a consistent level from year to year based on the pattern of consumption.

On this basis, US Pharmaceuticals and Vaccines inventory levels at wholesalers and in other distribution channels at 31 December 2019 were estimated to amount to approximately four weeks of turnover. This calculation uses third party information, the accuracy of which cannot be totally verified, but is believed to be sufficiently reliable for this purpose.

Legal and other disputes

In respect of the accounting policy for Legal and other disputes, the following briefly describes the process by which we determine the level of provision that is necessary.

In accordance with the requirements of IAS 37, 'Provisions, contingent liabilities and contingent assets', we provide for anticipated settlement costs where an outflow of resources is considered probable and a reliable estimate may be made of the likely outcome of the dispute and legal and other expenses arising from claims against the Group.

We may become involved in significant legal proceedings, in respect of which it is not possible to make a reliable estimate of the expected financial effect, if any, that could result from ultimate resolution of the proceedings. In these cases, appropriate disclosure about such cases would be included in the Annual Report, but no provision would be made.

This position could change over time and, therefore, there can be no assurance that any losses that result from the outcome of any legal proceedings will not exceed by a material amount the amount of the provisions reported in the Group's financial statements.

Like many pharmaceutical companies, we are faced with various complex product liability, anti-trust and patent litigation, as well as investigations of our operations conducted by various governmental regulatory agencies. Throughout the year, the General Counsel of the Group, as head of the Group's legal function, and the Senior Vice President and Head of Global Litigation for the Group, who is responsible for all litigation and government investigations, routinely brief the Chief Executive Officer, the Chief Financial Officer and the Board of Directors on the significant litigation pending against the Group and governmental investigations of the Group.

These meetings, as appropriate, detail the status of significant litigation and government investigations and review matters such as the number of claims notified to us, information on potential claims not yet notified, assessment of the validity of claims, progress made in settling claims, recent settlement levels and potential reimbursement by insurers.

The meetings also include an assessment of whether or not there is sufficient information available for us to be able to make a reliable estimate of the potential outcomes of the disputes. Often, external counsel assisting us with various litigation matters and investigations will also assist in the briefing of the Board and senior management. Following these discussions, for those matters where it is possible to make a reliable estimate of the amount of a provision, if any, that may be required, the level of provision for legal and other disputes is reviewed and adjusted as appropriate. These matters are discussed further in Note 46 to the financial statements, 'Legal proceedings'.

Group financial review continued

Strategic report

The Strategic report was approved by the Board of Directors on
3 March 2020

Iain Mackay
Chief Financial Officer
3 March 2020