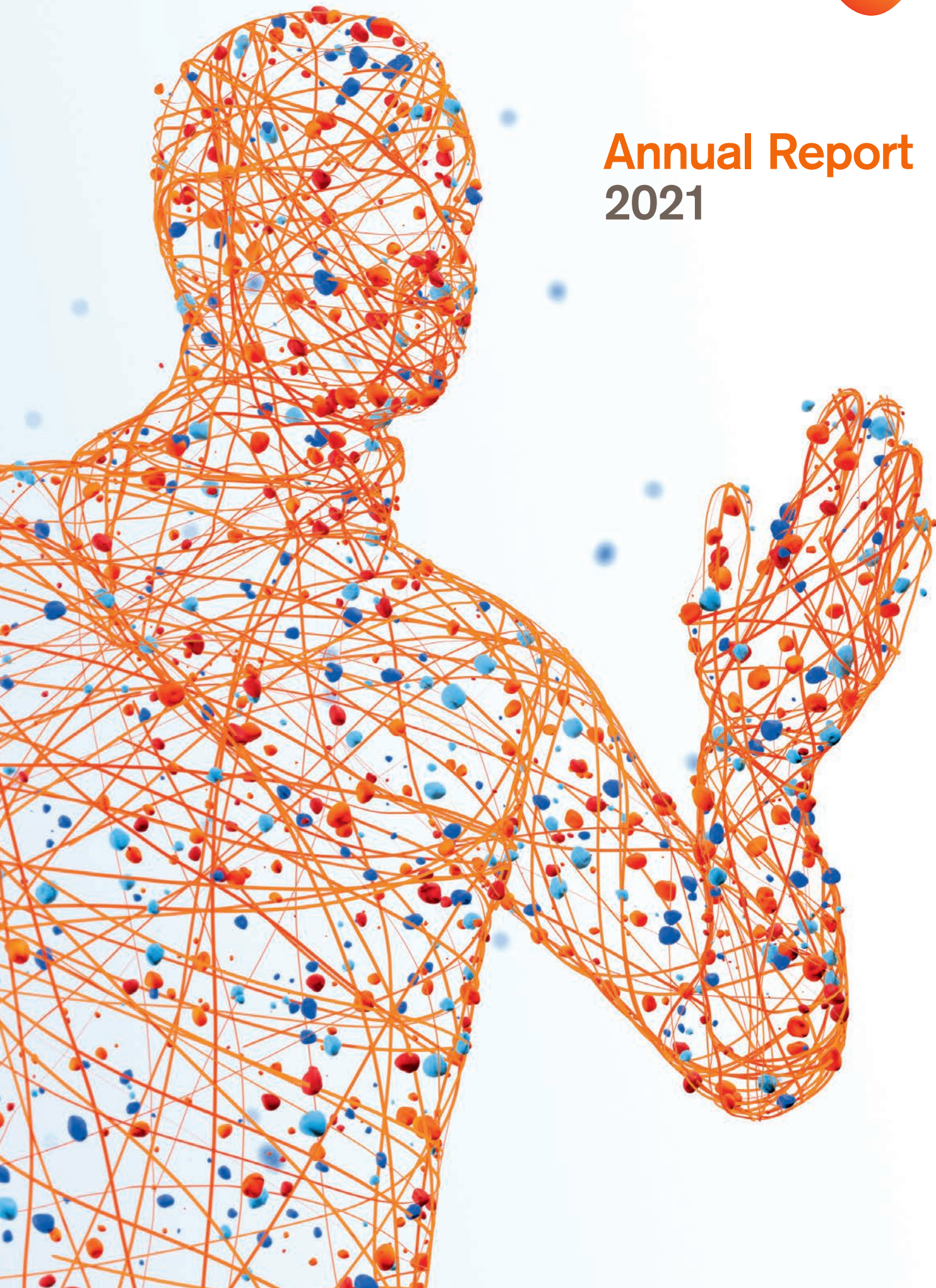




Annual Report 2021



New ambitions for patients, shareholders and our people

In 2021, we made major progress on our journey towards the most significant corporate change for GSK in more than 20 years. We are on track to separate in 2022 to create two new leading companies, both with the opportunity to impact human health at scale and deliver compelling performance for shareholders.

GSK

GSK will unite science, talent and technology to get Ahead of disease Together. We will prioritise innovation in vaccines and specialty medicines, maximising the increasing opportunities to prevent and treat disease.

Step change in growth

- Expected sales growth of more than 5% and adjusted operating profit growth of more than 10% on a compound basis 2021-26
- R&D focused on the science of the immune system, human genetics and advanced technologies
- Positively impacting the health of more than 2.5 billion people over ten years
- Leading ESG performance to be maintained

⊕ We set out our new purpose, growth commitments and R&D catalysts at an investor update in June 2021. For more detail see [gsk.com](https://www.gsk.com)

Haleon

Haleon will be a global leader 100% focused on consumer health. It will have a clear purpose to deliver better everyday health with humanity, and a focused strategy to deliver sustainable above-market growth and attractive returns to shareholders.

Strong prospects for growth

- Exceptional portfolio of category-leading brands with attractive global footprint and competitive capabilities
- Compelling strategy to outperform in a growing, £150 billion plus sector which is more relevant than ever
- 4-6% annual organic sales growth in the medium term, sustainable moderate margin expansion and high cash conversion
- Attractive growth profile with capacity to invest and deliver shareholder returns

⊕ We set out our strategy, capabilities and growth ambitions at a Consumer Healthcare capital markets day in February 2022. For more detail see [gsk.com](https://www.gsk.com)

Contents

Strategic report					
Our business model	01	Board committee information	93	Financial statements	168
2021 performance summary	02	Board architecture	94	Notes to the financial statements	172
Chair's statement	03	Board activity	95	Financial statements of	
CEO's statement	05	Board progress in 2021	96	GlaxoSmithKline plc prepared	
Financial performance	07	Board's approach to continuous engagement	99	under UK GAAP	252
Our long-term priorities	10	Board-led purpose and culture	102	Investor information	
Our culture	11	Board performance	103	Quarterly trend	258
Key performance indicators	12	Board committee reports	104	Five-year record	263
Our external environment	13	Section 172 statement	116	Product development pipeline	269
Innovation	17	Directors' report	117	Products, competition and intellectual property	272
Performance	29	Remuneration report		Principal risks and uncertainties	275
Trust	34	Chair's annual statement	120	Share capital and share price	288
Consumer Healthcare	41	Annual report on remuneration	125	Dividends	290
Stakeholder engagement	44	2022 Remuneration policy summary	143	Financial calendar 2022	291
Risk management	46	2022 Remuneration policy report	144	Annual General Meeting 2022	291
Group financial review	55	Financial statements		Tax information for shareholders	292
Corporate governance		Directors' statement of responsibilities	154	Shareholder services and contacts	294
The Board and GSK Leadership Team	83	Independent Auditor's report	156	US law and regulation	296
Chair's Governance statement	89			Group companies	299
Board roles and responsibilities	92			Glossary of terms	311

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-International Financial Reporting Standards (IFRS) measures to report the performance of our business. Total reported results represent the Group's overall performance under IFRS. 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 56 and 59 and reconciliations to the nearest IFRS measures are on pages 70 to 73.

Our business model

As we prepare for a new future, we continue to help improve the health of hundreds of millions of people around the world by discovering, developing and manufacturing innovative medicines, vaccines and consumer healthcare products.

What we do

We develop and deliver medicines, vaccines and consumer healthcare products that impact human health at scale. Our operations span the value chain from identifying, researching, developing and testing ground-breaking discoveries, to regulatory approval, manufacturing and commercialisation.

Central to our success are our people: experts in science, technology, manufacturing, regulation, intellectual property and commercialisation. We also collaborate with world-leading experts and form strategic partnerships to complement our existing capabilities.

The value we create: now and in the future

The greatest contribution we make is to improve the health of people around the world. In 2021 that included delivering 1.7 billion medicines, over 767 million vaccines¹ and 3.7 billion consumer healthcare products. Looking ahead, GSK has a clear ambition to positively impact the health of more than 2.5 billion people over the next ten years.

We create value for shareholders by investing in our business to provide shareholder returns, and in 2021 we paid a dividend of 80 pence per share. We have made new commitments to growth and a step change in performance over the next five years.

We aim to be a modern employer, developing our people and offering a broad range of benefits, including preventative healthcare services, that help us attract and retain the best people.

We employ over 90,000 people across 92 countries and work directly with 37,500 suppliers. In 2021 we paid £1.3 billion in corporation tax, as well as a significant amount of other business and employment-related taxes.

Delivering strategic transformation by prioritising Innovation, Performance and Trust

In recent years, we have transformed GSK to improve performance, strengthen capabilities and prepare for a new future. We have done this by prioritising Innovation, Performance and Trust – across the entire company – driving a multi-year programme to improve R&D productivity, commercial execution, Group structure and capital allocation. This is underpinned by a new culture with more ambition and accountability.

Innovation is critical to how we improve health and create financial value. In 2021, our total R&D expenditure was £5.3 billion, up by 3.5% AER on 2020. We have a robust late-stage R&D pipeline with many assets having the potential to be first or best in class. We continue to believe the rapid convergence of science and technology in biopharmaceuticals provides significant opportunity and is why our R&D will continue to focus on the science of the immune system, human genetics and use of advanced technologies.

Performance is delivered by investing effectively in our business and our people and executing competitively. Our ability to launch new products successfully and grow sales from our existing portfolio is key to our commercial success. Over the next five years, with 2021 as a base year, we expect GSK to deliver highly attractive growth with sales and adjusted operating profit of more than 5% and more than 10% respectively on a compound basis.

Trust underpins everything we do. We have maintained our acknowledged leadership in environmental, social and governance (ESG) issues, demonstrated by our sector-leading position in the Dow Jones Sustainability Index and our long-standing leadership in the Access to Medicine Index. We remain deeply committed to addressing the issues that matter for the sustainability of our company, including pricing and access, global health, the environment, and inclusion and diversity, working with integrity and care.

¹ Including AS03 adjuvant sales

2021 performance summary

Strong commercial execution drives growth across Pharmaceuticals, Vaccines and Consumer Healthcare (excluding divestments/brands under review)

- £34.1 billion Group turnover stable at AER, +5% CER
- Pharmaceuticals £17.7 billion +4% AER, +10% CER; new and specialty medicines £10 billion +20% AER, +26% CER
- Vaccines £6.8 billion -3% AER, +2% CER
- COVID-19 solutions sales £1.4 billion
- Consumer Healthcare £9.6 billion -4% AER, stable CER (+4% excluding brands divested/under review)

Cost discipline supports delivery of adjusted EPS growth

- Total EPS 87.6p -24% AER, -13% CER
- Adjusted EPS 113.2p -2% AER, +9% CER; contribution to growth from COVID-19 solutions +8% AER, +9% CER
- Total operating profit £6.2 billion -20% AER, -9% CER
- Adjusted operating profit £8.8 billion -1% AER, +9% CER
- Dividend of 80p

Continued momentum in R&D delivery and strengthening of pipeline

- Three major product approvals; 8 phase III starts; 22 vaccines and medicines in pivotal trials
- Strong pipeline of 21 vaccines and 43 medicines, many of which offer potential best or first-in-class opportunities for patients
- 20+ deals executed securing access to novel clinical programmes including in immuno-oncology, immuno-neurology and flu, plus technologies that expand our capabilities in human genetics and artificial intelligence/machine learning (AI/ML)

On track to create two new leading companies through demerger in mid-2022

- New GSK investor update in June 2021 set out our new purpose, growth commitments and R&D catalysts. For detail see [gsk.com](https://www.gsk.com)
- Consumer Healthcare capital markets day in February 2022 highlighted our strategic priorities, key growth drivers and detailed financial information. For detail see [gsk.com](https://www.gsk.com)

Leading ESG performance

- 1st in the pharmaceutical industry for Dow Jones Sustainability Index
- 1st in the Access to Medicine Index
- Gold recognition in S&P's Sustainability Yearbook
- A- in CDP Climate Change

Chair's statement

We made significant progress towards demerging GSK into two leading and competitive companies in mid-2022.

GSK has been delivering a programme of fundamental strategic transformation since Emma started as CEO five years ago, designed to tackle the root causes of the company's long-term underperformance, including on shareholder returns.

The Board is pleased that under Emma's leadership 2021 saw further progress against the clear priorities set to enable this: improving the pipeline and R&D productivity, sharpening commercial execution and cost discipline and tackling the Group's structure and capital allocation priorities, underpinned by a shift in culture.

Building on the significant progress made over this period, I believe we are now firmly on track to demerge GSK into two world-class companies in mid-2022 – one focused on pharmaceuticals and vaccines and one focused on consumer healthcare.

2021 delivery

The Board remains focused on ensuring GSK's fundamentals continue to be enhanced to ensure both companies are fully competitive at the point of split.

While the COVID-19 pandemic continued to mean a highly dynamic operating environment, the Board was pleased the company exceeded its earnings per share guidance set at the start of the year. This was achieved through over-delivery across the business, including excellent commercial execution in key markets and therapy areas, showing our ability to compete and grow market share. The Board was also pleased to see the commercial performance and patient impact of *Xevudy*, our leading monoclonal antibody for COVID-19 developed through our partnership with Vir Biotechnology.

Savings programmes announced in early 2020 have delivered and, as a result, GSK's cost base is now competitive versus our peers. Capital allocation priorities are clear – to invest in the R&D pipeline, new product launches, and delivering returns to shareholders.

We have made considerable advances on our distinctive approach to R&D based on the science of the immune system, human genetics and advanced technologies under our Chief Scientific Officer (CSO) Hal Barron. Tony Wood will transition into the role of CSO from August as part of a carefully considered succession plan and will build on the significant progress already made. Tony is one of the world's leading chemists and has an impressive track record of medicine development over his 30-year career in the UK and US.

Progress was started to be reflected in the share price performance during 2021. However, the Board (and management) recognise that sustaining this over the long term will depend on consistent performance, delivery and further strengthened competitiveness.

Targets for sustained performance

As well as performance in-year, the Board maintains a clear focus and oversight of the company's strategy and plans to separate which is proposed, subject to shareholder approval, to happen in mid-2022.

At the investor update in June 2021, the purpose and strategy of new GSK was set out and clear performance targets for sales and operating profit margin growth, beginning in 2022, were communicated. If achieved, these would represent top quartile performance in our sector. Similar stretching ambitions are being set for the consumer health business.

Of course, management must now deliver against the targets set. And we are clear remuneration must be tied to enhancing shareholder value. As such, we are linking executive remuneration to reward for outperformance. Further details of these proposals are laid out later in this report and there will be a chance for shareholders to vote on them at our AGM in May.

In addition to what new GSK does, the Board is fully focused on how the company operates, through a clear agenda for ESG (environmental, social, governance) leadership. GSK has a strong tradition to build on in these areas including maximising access to medicines across the world and ensuring further progress on these matters will be a priority.

Chair's statement continued

Shareholder engagement and Board transition

Through this period of considerable transition, the Board and management have maintained very significant engagement with shareholders. It is clear from this that, the vast majority support the strategy and direction the company is taking, and are clear there should be no distraction from sustained delivery. This message has been heard by the Board whose accountability first and foremost is to act in the interests of all shareholders.

A key part of this strategy is the separation of Consumer Healthcare, where there is a broad base of support among shareholders for direct ownership of this outstanding business through a demerger. Of course, the GSK Board has a fiduciary duty to remain open to consider alternative proposals to demerger that could create superior value for shareholders, but no such proposals have been received to date.

We are now in the final stages of creating what will be an exceptional company and I'm delighted with the designate appointments of Sir Dave Lewis to lead the Board and Brian McNamara as CEO. We strongly believe the new company offers an attractive profile for prospective investors, as reflected by the growth outlooks set out at the capital markets day in February 2022.

As we move closer to separation, we are also continuing to assess the skills, capabilities and experience the GSK Board will need as a pure biopharma business. I was delighted to welcome Anne Beal to the Board in May. Anne brings extensive healthcare experience as a doctor and entrepreneur combined with a passion for patient advocacy. In January, Dr Harry (Hal) C Dietz, joined the Board. Hal is a world-leading expert in human genetics and Professor of genetic medicine at the Johns Hopkins University School of Medicine in the US. I am confident that with these appointments, and the continued input of Hal Barron from August as a Non-Executive Board Director, the scientific credentials of GSK's Board are now among the strongest in the industry.

I also want to take this opportunity to thank Lynn Elsenhans, who will be stepping down at the separation of the consumer health business in mid-2022. Lynn has made an outstanding contribution to the Board and the development of current strategy over ten years, including notably as Chair of the Corporate Responsibility Committee, which is increasingly at the centre of the Board's work. She will be missed by all on the Board.

Finally, I would like to thank all employees, partners, shareholders and customers for their support and commitment through the last year and I look forward to what promises to be an exciting 2022 for GSK.



Sir Jonathan Symonds
Chair

CEO's statement

We ended 2021 strongly, and we enter 2022 with good momentum. This is going to be a landmark year for the company.

I am very pleased to report that in 2021, GSK delivered strong operational performance and pipeline progress. At the same time, we completed our multi-year programme of far reaching transformation to tackle long-standing issues impacting the company's success.

We are now ready to deliver the most significant corporate change for GSK in 20 years: creating two new, exceptional companies with ambitious targets for growth and with a clear purpose to positively impact the health and lives of billions of people.

2021 performance provides momentum

Group sales were £34 billion in 2021, up 5% CER. Our products meaningfully helped patients across a range of different disease areas, including respiratory, immuno-inflammation, oncology and HIV; protected people from viruses like shingles and meningitis; prevented hospitalisations and deaths from COVID-19; and helped improve oral health, reduce pain and treat everyday ailments.

Strong operational performance enabled us to increase investment in R&D to £5.3 billion and to realise earnings per share in excess of expectations for the year. In addition, we generated over £4.4 billion of free cash flow, supporting investments and a dividend of 80 pence per share for the year.

The improvements we have made to our commercial execution and cost base, together with strengthening portfolio and pipeline, mean we now have momentum to deliver a step-change in growth starting in 2022.

Accelerating our innovation

We continue to believe the rapid convergence of science and technology in biopharmaceuticals provides significant opportunity for GSK. It is why our R&D will continue to focus on the science of the immune system, human genetics and use of advanced technologies. This approach is delivering improvements in R&D and our pipeline.

In the last 12 months, we reported regulatory approvals for three new medicines, including the first-ever long-acting injectable PrEP treatment option for HIV, as well as starting eight phase III clinical trials. We currently have 22 assets in pivotal clinical studies at the time of reporting. We also concluded more than 20 deals with external partners, securing access to novel clinical programmes in oncology, neurology and HIV; as well innovative technologies, notably through further expansion of our capabilities in human genetics, functional genomics and use of artificial intelligence.

These achievements spearhead a strengthening pipeline, 21 vaccines and 43 medicines now in clinical development – many of which have the potential to be first or best-in-class.

Of course, one priority has been to contribute solutions to the COVID-19 pandemic. We have successfully developed a new monoclonal antibody treatment, *Xevudy*, with our partners Vir Biotechnology. This medicine has proven effective against multiple variants, including Omicron, and we are now securing rapid regulatory approvals worldwide. Through our adjuvant partnerships, we stand ready to supply new vaccines when their data reads out. More broadly, we are also increasing investment in our mRNA capability – this major new platform now validated by the pandemic.

Never has the role of vaccines been more widely appreciated or understood by the world than right now, and the opportunity for GSK to protect people and deliver growth in a broad range of vaccines remains very significant.

Much of the progress we have seen in R&D over the last four years is due to the outstanding leadership of Hal Barron, our CSO. In August, he will hand over responsibility to Tony Wood, who has been a key partner to Hal. Tony is an outstanding scientist, and with his deep expertise in science, data and new technologies, is perfectly placed to take over and capture the value and opportunities we see with GSK's R&D approach. We are also delighted that Hal will remain part of GSK as a Non-Executive Board Director.

New purpose and new ambition

With the demerger of Consumer Healthcare, we will establish a new GSK, purely focused on biopharmaceuticals. Last year, we announced a new purpose and new growth ambitions for this new company.

GSK's new purpose is to unite science, talent and technology to get Ahead of disease Together. We will do this by prioritising innovation in vaccines and specialty medicines, maximising opportunities to prevent and treat disease. Our aim is to positively impact the health of more than 2.5 billion people over the next ten years, deliver stronger and more sustainable returns to shareholders, and be a company where outstanding people thrive.

We have set ourselves ambitious five-year sales and operating profit compounded growth targets, of more than 5% and more than 10% respectively. By 2031, we aim to deliver more than £33 billion in annual sales – this, from sales of existing late-stage pipeline assets, with no contribution yet included from early-stage assets or future business development. These targets represent a new level of ambition for GSK and would deliver top-quartile sector performance.

We are embedding these commitments deeply in the company, including in incentive programmes, to drive focus and action.

CEO's statement continued

A culture for performance and support to succeed

I strongly believe GSK should be a company where people can thrive. Creating the right culture to do this and to deliver our new purpose and performance aspirations is a priority for me and my team. We are focused on GSK being a place where people are ambitious for patients, accountable for impact and do the right thing.

We also have an enormous responsibility to inspire and support our people to succeed. We continue to look for ways to invest in our people's growth and development and to help them balance their work and personal lives. This includes a strong focus on management skills, training and support for mental health and wellbeing, as well as the health and safety of all who work at GSK.

Last year, we put in place additional new programmes to support these priorities and we are committed to developing more. The same is true for our approach to inclusion, equity and diversity. We have made good progress against our 2025 aspirational targets for female and ethnically diverse representation in senior roles. We are also taking steps to ensure our clinical trials are representative of the patients we aim to help.

ESG leader

Operating responsibly is core to GSK. Our aim is to continue to deliver sector-leading ESG performance – as recognised in our latest rankings in the Dow Jones Sustainability Index, the Access to Medicine Index and Anti-Microbial Resistance benchmark. This reflects progress across our six core ESG areas: Environment, Access, Global Health, Inclusion and Diversity, Product Governance, Ethics. All of these have clear, long-term goals and ambitions, but we are not complacent and we want to go further.

We set carbon net-zero and nature positive goals in 2020 and, recognising the increasing need and importance to provide investors, and other stakeholders, with evidence of tangible ESG performance, we are developing new measures and reporting. Validated by third parties and our own audit teams, we will share this with investors later this year. I hope it will further demonstrate our commitment to best-in-class ESG performance and transparent reporting.

Haleon – a new world-leading consumer health company

Haleon is a compelling prospect. Completely dedicated to consumer health, and with a world-class portfolio of category-leading brands, it offers an attractive proposition. It brings deep human understanding together with trusted science – to deliver better everyday health with humanity. It will be a world leader and, as a new standalone company, will offer prospective investors a highly attractive financial profile of above-market sales growth, sustainable margin expansion and high cash generation.

It will have a fantastic leadership team, led by CEO designate Brian McNamara, and a Board led by Sir Dave Lewis who brings a wealth of international consumer sector experience.

The creation of Haleon reflects successful delivery of a series of progressive strategic moves we took over the last few years. Altogether, we estimate that through acquisitions, integrations of new businesses and targeted divestments, close to £15 billion of value has been created in this business.

It is now time for shareholders to access that value and invest in what we believe will be a strong, highly successful growth-orientated business, capable of delivering sustainable performance and returns.

2022 is a landmark year

The pandemic has shone a spotlight like never before on the difference our industry can make to society. To see how our people – scientists, factory teams, supply experts, those who work with healthcare professionals, and many thousands of others – have risen to the challenge of ensuring patients and people in all parts of the world continue to receive the products they need has been deeply inspiring. It reflects the very deep commitment that people working at GSK have for the people we serve and for each other.

Our people are the reason why GSK and Haleon will be successful in years to come. I want to thank them for all they have achieved in 2021 and the momentum they are delivering. I am excited and optimistic for the future. 2022 will be a landmark year for GSK and we are committed to those who rely on us and excited by what we can achieve together.



Emma Walmsley
Chief Executive Officer

Financial performance

Operating performance – 2021

Turnover

	£m	Growth £%	2021
			Growth CER%
Pharmaceuticals	17,729	4	10
Vaccines	6,778	(3)	2
Consumer Healthcare	9,607	(4)	–
Group turnover	34,114	–	5

Financial results

	£m	£%	2021
			Growth CER%
Turnover	34,114	–	5
Total operating profit	6,201	(20)	(9)
Total earnings per share	87.6p	(24)	(13)
Adjusted operating profit	8,806	(1)	9
Adjusted earnings per share	113.2p	(2)	9
Net cash from operating activities	7,952	(6)	
Free cash flow	4,437	(18)	

Turnover

Strong commercial execution drives growth across Pharmaceuticals, Vaccines and Consumer Healthcare (excluding brands divested/under review)

Group turnover was £34,114 million in the year, stable at AER but up 5% CER. Sales of COVID-19 solutions (sales of *Xevurdy* and pandemic adjuvant) contributed approximately 4 percentage points to growth in the year.

Pharmaceutical turnover in the year was £17,729 million, up 4% AER and 10% CER. Sales of *Xevurdy*, the monoclonal antibody treatment for COVID-19 of £958 million contributed approximately 6 percentage points to total Pharmaceuticals growth.

Vaccines turnover was £6,778 million in the year, down 3% AER but up 2% CER, primarily driven by pandemic adjuvant sales, partially offset by lower demand for routine adult vaccination due to COVID-19 vaccination programme deployment and disease circulation across regions. Vaccines turnover excluding pandemic vaccines decreased 9% AER, 5% CER to £6,331 million.

Consumer Healthcare turnover was £9,607 million, down 4% AER but remained stable at CER reflecting dilution from divestments given the completion of the portfolio rationalisation at the end of Q1 2021. Sales excluding brands divested/under review decreased 1% AER but increased 4% CER reflecting the underlying strength of brands across the portfolio and categories and continuing growth in e-commerce.

Operating profit

Total operating profit was £6,201 million compared with £7,783 million in 2020. This primarily reflected an unfavourable comparison to the net profit on disposal in Q2 2020 of Horlicks and other Consumer brands and resultant sale of shares in Hindustan Unilever. This was partly offset by lower major restructuring costs, lower re-measurement charges on the contingent consideration liabilities and the unwind in 2020 of the fair market value uplift on inventory arising on completion of the Consumer Healthcare Joint Venture with Pfizer.

Adjusted operating profit was £8,806 million, 1% lower than 2020 at AER, but 9% higher at CER on a turnover increase of 5% CER. The Adjusted operating margin of 25.8% was 0.3 percentage points lower at AER, 0.9 percentage points higher on a CER basis than in 2020. The increase in Adjusted operating profit primarily reflected the benefit from incremental pandemic sales, sales growth in Pharmaceuticals and tight control of ongoing costs, favourable legal settlements and benefits from continued restructuring across the business. This was offset by lower sales in Vaccines, higher supply chain costs in Vaccines and Consumer Healthcare, divestments in Consumer Healthcare and increased investment in R&D across Vaccines and Pharmaceuticals.

Earnings per share

Total EPS was 87.6p, compared with 115.5p in 2020. This primarily reflected an unfavourable comparison as 2020 benefited from the net profit on disposal of Horlicks and related transactions, partly offset by a credit of £397 million to Taxation in 2021 resulting from the revaluation of deferred tax assets, lower major restructuring costs and lower re-measurement charges on the contingent consideration liabilities. Adjusted EPS was 113.2p compared with 115.9p in 2020, down 2% AER but up 9% CER, on a 9% CER increase in Adjusted operating profit primarily reflecting incremental pandemic sales, sales increases in Pharmaceuticals, tight cost control and favourable legal settlements and lower interest costs, partly offset by lower sales in Vaccines, higher supply chain costs in Vaccines, increased R&D investment and a higher effective tax rate.

Cash flow

The net cash inflow from operating activities for the year was £7,952 million (2020 – £8,441 million). The decrease primarily reflected adverse exchange impacts, increased trade receivables, adverse timing of returns and rebates (RAR) and increased separation costs, partly offset by improved adjusted operating profit at CER and reduced tax payments including tax on disposals.

Total and Adjusted 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 59.

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.

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	Separation costs £m	Adjusted results £m
Turnover	34,114							34,114
Cost of sales	(11,603)	701	(33)	154	28	27		(10,726)
Gross profit	22,511	701	(33)	154	28	27		23,388
Selling, general and administration	(10,975)			426	25	17	282	(10,225)
Research and development	(5,278)	101	355	46				(4,776)
Royalty income	419							419
Other operating (expense)/income	(476)				1,106	(662)	32	–
Operating profit	6,201	802	322	626	1,159	(618)	314	8,806
Net finance costs	(756)			2		1		(753)
Share of after-tax profits of associates and joint ventures	33							33
Loss on disposal of interest in associates	(36)					36		–
Profit before taxation	5,442	802	322	628	1,159	(581)	314	8,086
Taxation	(346)	(159)	(81)	(114)	(196)	(470)	(49)	(1,415)
<i>Tax rate</i>	6.4%							17.5%
Profit after taxation	5,096	643	241	514	963	(1,051)	265	6,671
Profit attributable to non-controlling interests	711				295			1,006
Profit attributable to shareholders	4,385	643	241	514	668	(1,051)	265	5,665
Earnings per share	87.6p	12.9p	4.8p	10.3p	13.3p	(21.0)p	5.3p	113.2p

Intangible asset amortisation and impairment

Amortisation of intangible assets excludes computer software and capitalised development costs. Impairment of intangible assets (excluding computer software) and goodwill.

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 disposal of associates, products and businesses; significant settlement income; 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 including the impact of the revaluation of deferred tax assets and liabilities following enactment of the increase in the headline rate of UK corporation tax from 19% to 25% (effective 2023).

Separation costs

Additional costs to establish Consumer Healthcare as an independent business, as well as admission listing and demerger costs.

Adjusted results

	2021		2020		£%	Growth CER%
	£m	% of turnover	£m	% of turnover		
Turnover	34,114	100	34,099	100	–	5
Cost of sales	(10,726)	(31.4)	(10,191)	(29.9)	5	8
Gross profit	23,388	68.6	23,908	70.1	(2)	4
Selling, general and administration	(10,225)	(30.0)	(10,717)	(31.4)	(5)	(1)
Research and development	(4,776)	(14.0)	(4,603)	(13.5)	4	8
Royalty income	419	1.2	318	0.9	32	32
Operating profit	8,806	25.8	8,906	26.1	(1)	9
Net finance costs	(753)		(844)			
Share of after-tax profits of associates and joint ventures	33		33			
Profit before taxation	8,086		8,095		–	11
Taxation	(1,415)		(1,295)			
<i>Tax rate</i>	<i>17.5%</i>		<i>16.0%</i>			
Profit after taxation	6,671		6,800		(2)	9
Profit attributable to non-controlling interests	1,006		1,031			
Profit attributable to shareholders	5,665		5,769			
Earnings per share	113.2p		115.9p		(2)	9

How we performed

Cost of sales

Adjusted cost of sales as a percentage of turnover was 31.4%, 1.6 percentage points higher at AER and 0.8 percentage points higher at CER compared with 2020. This primarily reflected higher pandemic sales (*Xevudy*) as well as higher supply chain costs in Vaccines resulting from lower demand and higher inventory adjustments and higher commodity and freight costs in Consumer Healthcare, partly offset by price benefits in Pharmaceuticals, including the benefit from prior period RAR adjustments, a further contribution from restructuring savings across all three businesses and favourable mix in Vaccines.

Selling, general and administration

Adjusted SG&A costs as a percentage of turnover were 30.0%, 1.5 percentage points lower at AER than in 2020 and 1.8 percentage points lower on a CER basis. Adjusted SG&A costs decreased 5% AER, 1% CER which reflected the tight control of ongoing costs and reduced variable spending across all three businesses as a result of the COVID-19 lockdowns, and the continuing benefit of restructuring in Pharmaceuticals, Consumer Healthcare and support functions. The decrease also reflected a favourable legal settlement in 2021 compared to increased legal costs in 2020 as well as one-off benefits in pensions and insurance which were partly offset by the one-off benefit from restructuring of post-retirement benefits in 2020. This was partly offset by increased investment behind launches in HIV and Vaccines.

Research and development

Adjusted R&D expenditure was £4,776 million (14.0% of turnover), 4% higher at AER, 8% higher at CER than in 2020.

Operating profit

Adjusted operating profit was £8,806 million, 1% lower than 2020 at AER, but 9% higher at CER on a turnover increase of 5% CER. The Adjusted operating margin of 25.8% was 0.3 percentage points lower at AER, 0.9 percentage points higher on a CER basis than in 2020.

The increase in Adjusted operating profit primarily reflected the benefit from incremental pandemic sales contributing approximately 6% AER, 7% CER to Adjusted operating profit growth. Adjusted operating profit also benefited from sales growth in Pharmaceuticals including the benefit from prior period RAR adjustments and tight control of ongoing costs including reduced promotional and variable spending across all three businesses as a result of the COVID-19 lockdowns, favourable legal settlements compared to increased legal costs in 2020 and benefits from continued restructuring across the business. This was partly offset by lower sales in Vaccines, primarily *Shingrix*, higher supply chain costs in Vaccines and Consumer Healthcare, divestments in Consumer Healthcare and increased investment in R&D across Vaccines and Pharmaceuticals.

Tax

Tax on Adjusted profit amounted to £1,415 million representing an effective Adjusted tax rate of 17.5% (2020 – 16.0%).

Non-controlling interests

The allocation of Adjusted earnings to non-controlling interests amounted to £1,006 million (2020 – £1,031 million). The reduction in allocation primarily reflected a reduced allocation of ViiV Healthcare profits of £438 million (2020 – £474 million), partly offset by higher net profits in some of the Group's other entities with non-controlling interests. The allocation of Consumer Healthcare Joint Venture profits was £515 million (2020 – £515 million).

Earnings per share

Adjusted EPS was 113.2p compared with 115.9p in 2020, down 2% AER but up 9% CER, on a 9% CER increase in Adjusted operating profit primarily reflecting incremental pandemic sales, sales increases in Pharmaceuticals, tight cost control and favourable legal settlements and lower interest costs, partly offset by lower sales in Vaccines, primarily *Shingrix*, higher supply chain costs in Vaccines, increased R&D investment and a higher effective tax rate. The contribution to growth from COVID-19 solutions was approximately 8% AER, 9% CER.

Our long-term priorities

We put Innovation, Performance and Trust first to realise our ambitions for patients, shareholders and our people. In 2021 we delivered a strong performance, and we are on track for a successful demerger to create two new leading companies in 2022.

Innovation

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

2021 objectives

- Deliver Innovation sales with excellent commercial, R&D and supply chain execution in oncology, HIV and vaccines
- Accelerate and strengthen pipeline with robust commercial input, including business development

Progress

- Received three major approvals in 2021: *Apretude*, our long-acting HIV prevention medicine, *Jemperli* for endometrial cancer and *Xevudy*, for COVID-19
- Strong pipeline of 21 vaccines and 43 medicines, many of which offer potential best or first-in-class opportunities for patients and 22 of which are in pivotal trials
- 20+ deals executed securing access to novel clinical programmes including with *iTeos* in immuno-oncology, *Alector* in immuno-neurology and *Vir Biotechnology* in flu, plus technologies that expand our capabilities in human genetics and AI /ML

2022 priority objectives

- Deliver Innovation sales with excellent commercial, R&D and supply chain execution
- Further accelerate and strengthen pipeline with dedicated in-house expertise and robust commercial input, including optimised capital allocation and business development

Performance

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

2021 objectives

- Continue to prioritise spending to deliver growth and return on investment
- Continue to deliver two-year programme to prepare GSK for separation into two new leading companies
- Build a stronger, more diverse workforce for two new leading companies

Progress

- Strong commercial execution across Pharmaceuticals, Vaccines and Consumer Healthcare
- Pharmaceuticals £17.7 billion +4% AER, +10% CER with double-digit growth in new and specialty medicines +20% AER, +26% CER
- Vaccines £6.8 billion -3% AER, +2% CER
- Consumer Healthcare -4% AER, stable CER; -1% AER, +4% CER excluding divestments/brands under review
- On track to deliver separation plans in mid-2022

2022 priority objectives

- Deliver more than 5% sales growth and more than 10% adjusted operating profit on a compound basis in the next five years
- Continue to prioritise spending to deliver growth and return on investment
- Deliver a successful demerger in mid-2022

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.

2021 objectives

- Continue to deliver on-time, in-full supply of our products
- Improve manager capability to motivate, focus, develop and care for people
- Continue to deliver progress on Trust commitments

Progress

- Maintained sector-leading rankings in ESG indices, including the Dow Jones Sustainability Index, Access to Medicine Index and Antimicrobial Resistance Benchmark
- Maintained supply and manufacturing without significant disruption throughout the pandemic
- Made further progress to deliver on net zero impact on climate, and a net positive impact on nature by 2030
- Rolled out a new training programme to develop our managers to support them to be great managers and lead with care
- Continued to prioritise diversity, with good progress made against our gender and ethnicity targets to improve representation in senior roles
- WHO recommended wider use of our RTS,S vaccine for children in regions with moderate to high malaria transmission

2022 priority objectives

- Deliver leading ESG performance and effective risk management with disciplined compliance

Culture

As we move towards the creation of two new leading companies, we have been embedding a culture where we are all ambitious for patients, accountable for impact, and continue to do the right thing. We track our cultural change with a range of indicators, increasingly embedding assessments in HR processes, and the Board receives regular updates. See pages 99 and 102.

Principal risks

Our risk management framework is designed to support our long-term priorities. See pages 46 and 112.

1 Innovation sales defined on page 12

Our culture

Our culture powers our purpose to get Ahead of disease Together, drives delivery of our strategy and makes GSK a place where outstanding people thrive.

Over the past four years, we have focused on embedding a culture anchored in purpose and performance. We've made great progress, demonstrated by strong engagement and pride in GSK, which has contributed to improved R&D productivity and performance of our commercial teams and in our supply chains. At the same time, the impact of the COVID-19 pandemic has driven our teams to work more dynamically, with a deeper connection to our purpose and each other.

GSK's purpose – to unite science, talent and technology to get Ahead of disease Together – puts our people at the heart of our success. To deliver on that purpose, and help our outstanding people thrive, the focus for our culture is for GSK to be a place where we are all ambitious for patients, accountable for impact, and do the right thing.

This means helping our people to constantly strive to do things better and faster, always focused on what matters most. It means setting clear objectives and ensuring accountability for results, while giving everyone the support or space they need to succeed. As ever, this means doing everything responsibly with care and integrity, because our people, and people around the world, count on us.

We measure this progress through a range of indicators, looking at how our people experience GSK as a place to work, how they embody the culture, and how this affects our performance. Engagement remains high at 78%, settling back to 2019 levels after a boost during the early phases of the pandemic. As part of changes to make our approach to measuring culture increasingly dynamic, we will augment our annual survey with pulse surveys, so that we can more quickly identify areas of success and areas of focus. We are a company that has respect for people at its core. This gives us an opportunity to build an inclusive culture internally and to be a force for good in improving inclusion and diversity in society. We continue to focus on building a more inclusive culture, with inclusion training for our people and leaders alongside our work to evolve our policies, processes and practices.

We know that leaders and managers play a crucial role in bringing culture to life for our people, and we continue to develop our managers through focused training, to support them to be great managers: to motivate their teams, to help them focus on what matters most, to support their performance and development, and to lead with care for everyone as individuals. We measure the effectiveness of our global manager population through annual One80 feedback and continue to build and refresh the expertise in our senior leaders, with 14% of our top 115 leaders appointed in 2021. Our broader HR processes, including reward and succession planning, will continue to be based on assessments of both what we deliver and how we do it (ie our cultural behaviours).

Our approach to hybrid working – Performance with Choice – is anchored in driving individual and collective performance, while creating more flexibility for our office-based people in how and where they get their work done. This helps them perform at their best, based on their role, team and personal circumstances. As pandemic-related restrictions began to ease in many countries in 2021, all of our office-based people have either already changed the way they work or started discussing it with their manager. In 2021, all of our office-based workers (approximately a quarter of our people) worked some part of their week from home, and we continually look at ways to support our people in all role types to balance their work and personal lives.

We know that the strongest cultures need to be built from the top down, the bottom up and from the inside out to be successful. This is why this year we have been bringing people together from around the world, representing every role type, business area and region, to help us accelerate the culture across the company. We're ready and excited to continue to make progress on our culture in GSK, so together we can deliver a step change in competitive growth and build a successful company that improves the lives of people across the world.

 Consumer Healthcare culture, see page 43

Key performance indicators

To see how we are progressing against our three long-term priorities, we use ten key performance indicators.

The GSK Leadership Team (GLT) and our Board review our key performance indicators (KPIs) regularly. We also update our people on progress every quarter. We decide our people's bonuses based on relevant subsets of our ten KPIs, which we also use to reward our executives' performance (see pages 120, 129 and 131).

We track all our operating KPIs internally, and below we give data for those we report externally. Commercial sensitivities mean we can't publish data for all operating KPIs (shown as n/r). To report our business performance, we use adjusted, non-IFRS measures, including Adjusted results, free cash flow and CER growth rates (as described on pages 56 and 59).

Innovation

	2021	2020	2019
Innovation sales ^R			
Pharmaceuticals and Vaccines – sales of products launched in the last five years	£6.8bn ¹	£4.1bn ²	£3.0bn ²
Consumer Healthcare – sales from products which are new to a market in the last three years as a % of total sales	10%	11%	12%
Pipeline value and progress ^R – the value of products in our pipeline and R&D milestones achieved	n/r	n/r	n/r

Performance

	2021	2020	2019
Group turnover ^R – flat at AER, 5% CER	£34.1bn	£34.1bn	£33.8bn
Profit ^R			
Total operating profit – down 20% AER, down 9% CER	£6.2bn	£7.8bn	£7.0bn
Adjusted operating profit – down 1% AER, up 9% CER	£8.8bn	£8.9bn	£9.0bn
Total operating margin	18.2%	22.8%	20.6%
Adjusted operating margin	25.8%	26.1%	26.6%
Free cash flow ^R – down 18%	£4.4bn	£5.4bn	£5.1bn
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

	2021	2020	2019
Employee feedback – employee engagement scores from our global employee survey	78%	84%	78%
Supply service level – percentage of orders delivered on-time, 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 annual bonus, see pages 120, 129 and 131

From 2022, Executive LTI awards and annual bonus will be based on a mix of Total sales growth, Adjusted operating profit growth, pipeline and ESG targets. See pages 122, 124 and 136 to 137

1 2021 includes products that have benefited from significant lifecycle innovation

2 Comparative information reflects sales of those products that meet the definition for 2020

n/r Not reported externally due to commercial sensitivities

Our external environment

The world is changing, shaped by major social and economic trends that continue to be influenced by the COVID-19 pandemic. While the contribution of vaccines, medicines and healthcare has been clearly highlighted this year, challenges remain. We respond to this dynamic environment by working with governments, regulators and industry partners to deliver innovation to healthcare systems that demonstrates value to patients and payers.

A reopening of the global economy, driven by healthcare innovation

The events of 2021 gave a clear demonstration of the contribution our industry can make to the world. As the pandemic continued, collaborations between companies, governments, regulators and international organisations brought new vaccines and medicines to the world in record time. Regulatory processes got faster and companies invested in R&D to deliver novel products and expanded manufacturing capacity. The rollout of vaccine programmes enabled the global economy to reopen. Later in the year, regulatory approval was granted for COVID-19 treatments. GSK contributed to the global response, through our agreements with the US, EU and a number of other governments to supply our COVID-19 therapeutic, *Xevudy* (sotrovimab), and our ongoing vaccination development programmes with Sanofi, Medicago, SK Bioscience and CureVac.

At the same time, the virus continues to take lives, and the world is still dealing with the economic and social impact of the pandemic. The worst predictions of prolonged economic recession have not materialised, with global economic forecasts predicting growth of 5.9% in 2021 and 4.9% in 2022, although there is some uncertainty about the uniformity of the recovery, the management of debt, and inflationary trends.¹ Similarly, there will be continued economic and social threats posed by new variants such as Omicron. Although global healthcare spending is expected to rise, there will be competing funding demands between front-line staff costs, the ongoing need for pandemic medical products and catch-up programmes to tackle growing waiting lists. Governments and healthcare systems will have to evaluate the cost of new pharmaceutical innovation and its role in helping to address the burden of illness across all therapy areas.

Outlook for the global healthcare market

The pre-pandemic trends in the use of medicines and spending remain relatively constant. In higher income countries, the adoption of new treatments, offset by patent lifecycles and competition from generics and biosimilars, is expected to continue as the main driver of medicine spending and growth. Global medicine spending totalled \$1.4 trillion in 2021 and is expected to grow at 3-6% CAGR through 2026, reaching about \$1.8 trillion in total market size, excluding spending on COVID-19 vaccines. The US market is forecast to grow by 0-3% CAGR over the next five years. Spending in the top five European markets is expected to increase by \$51 billion. China is expected to increase its uptake of new and original medicines (growing by \$35 billion by 2026), with spending in emerging markets likely to increase by \$128 billion.² Global spending on vaccines is predicted to grow at 12-15%, reaching \$46 billion in 2025.³

It is forecast that by 2026, specialty medicines will account for nearly 60% of total expenditure in high-income markets, with the remainder, predominantly older and traditional therapies, becoming progressively lower-cost over time. The two leading global therapy areas – oncology and immunology – are forecast to grow 9-12% and 6-9% CAGR respectively through to 2026, lifted by significant increases in new treatments and medicine use. It is expected that 100 more oncology treatments will come to market over five years.²

Our position

Our 2021 performance suggests that we are well positioned to capitalise on the forecast growth in specialty medicines. Increased investment for key R&D programmes and expanded support for new and ongoing launches has resulted in sales growth driven by strong uptake of new medicines. In 2021, new and specialty medicines grew by 26% CER and we recorded double-digit sales growth in immuno-inflammation, respiratory and oncology. We see these results as very encouraging and a demonstration of strong progress against our strategic priorities. These new medicines are at the forefront of an exciting, high-value pipeline we continue to build across the prevention and treatment of disease.

1 IMF, World Economic Outlook: Recovery During a Pandemic, October 2021

2 IQVIA, The Global Use of Medicines 2022, January 2022

3 IQVIA, Global Medicine Spending and Usage Trends Outlook to 2025, April 2021

Healthcare environment: opportunities and challenges

Pricing and access

Equal access to healthcare

For governments, equal access to healthcare is a growing policy priority. The challenge of bringing COVID-19 vaccines equitably to the global population highlighted the dilemma. Industry has manufactured and distributed over 11 billion¹ vaccine doses, but they have disproportionately gone to high-income countries. Only 9.6% of people in low-income countries have received at least one dose.² Governments attempt to balance immediate access for their respective populations with global health responsibilities.

Though global initiatives such as COVAX have helped with access to vaccines, the disparity led some governments and international organisations to question intellectual property (IP) frameworks, most notably the World Trade Organization's agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) waiver provisions. However, there is concern that any moves to alter IP protections won't address the problem and could destabilise innovation within life sciences. In turn, this could threaten future collaborations like the ones that were so important in creating the vaccines and treatments used to tackle this pandemic.

The need to demonstrate the value of innovation to public and private healthcare payers is growing. Expenditure on pharmaceuticals is heavily scrutinised, with renewed calls for transparency in price setting. However, there has been significant moderation of pharmaceutical expenditure over the last decade. Across 11 major markets surveyed by IQVIA, medicines' expenditure represents only 15% of total healthcare spending and has remained relatively flat even though reliance on pharmaceuticals has increased.³

Continued genericisation of medicines across therapeutic classes, including cancer, and the increased use of biosimilars is continually improving affordability and access. However, the outlook will continue to be challenging and the demand for data and real-world evidence to support continued reimbursement of new products is likely to increase. We will work with payers to design innovative solutions that manage their risk and uncertainty.

There is also likely to be a greater emphasis on health resilience and the role that preventative care can play in improving health outcomes. Health protection interventions, including immunisation, represent significant value in terms of return on investment (this is estimated to be £34 for every pound spent in the UK).⁴

US medicines policy

There were several legislative efforts to address drug pricing in the US throughout the year and pricing became a focal point in attempts to pass the \$1.75 trillion social safety and climate package (Build Back Better Act) towards the end of the year.⁵ The drug pricing reform proposals provided for direct negotiations between the federal government's Medicare Insurance Programme and industry on the price of the ten costliest drugs for diseases, such as cancer and diabetes, that only have one supplier, with new prices taking effect in 2025. The measures sought to address out-of-pocket expenditures for seniors by capping spending at \$2,000 per person per year. Companies that raised the price of medicines above inflation for parts B and D of Medicare would be penalised. The inflation cap would also apply to private insurance markets.

Though the out-of-pocket measures should improve affordability for seniors, the industry is concerned that, taken together, the package could reduce patient choice and limit access to innovation in the future. With no agreement reached on the exact terms of the Build Back Better Act by the year end, the extent and effect of the drug reform package remained unclear.

European pharmaceutical reform

In Europe, there continues to be considerable scrutiny of drug pricing and a growing trend towards the centralised procurement of vaccines and medicines. A wide-ranging review of EU pharmaceutical legislation began as part of the EU's pharmaceutical strategy. The strategy is based on four pillars, covering access, competitiveness and innovation, crisis preparedness and a strong EU voice in the world. The review is also looking at improved regulatory procedures and the vulnerability of supply of medicines.

Last year, the European Commission centralised the procurement of COVID-19 vaccines on behalf of member states and in 2021 it concluded a joint procurement agreement to purchase monoclonal antibodies.

Beyond Europe, many countries are implementing various reforms ranging from regulatory pathways to cost containment. In China, the government has committed to accelerating patient access to health insurance cover and innovative medicines. China completed an update to its national reimbursement drug list (NRDL) in 2021 and will add new high-value medicines in the future. However, access to the NRDL can result in price reductions – on average, 61% in 2019, 51% in 2020 and 62% in 2021.⁶

Our position

We aim to bring our new medicines, vaccines and consumer healthcare products to patients across the world, no matter where they live. We have an industry-leading track record on this, as shown by our continued top ranking in the Access to Medicine Index. We are working to ensure that as medicines become more specialised, we maintain our commitment to access. We will do this by making our products widely available at responsible prices that are sustainable for our business.

1 World Economic Forum, From zero COVID-19 vaccines to 11.2 billion in a year, 4 January 2022

2 Our World in Data, Coronavirus Vaccinations, as at 19 January 2022

3 IQVIA, Drug Expenditure Dynamics 1995-2020, October 2021

4 ABPI, Economic and Societal Impacts of Vaccination, 2020

5 H.R.5376 - Build Back Better Act, 117th Congress, 2021-2022

6 PharmaExec.com, China 2021: The NRDL Readout, January 2022

Our external environment continued

Getting the balance right between responsible pricing and sustainable business is fundamental to our Innovation, Performance and Trust priorities. When setting prices for our medicines in mature markets, we use a value-based approach that balances reward for innovation with access and affordability (see page 36). We aim to provide truly differentiated, innovative products that offer effective health outcomes for patients and payers, so that all products deliver value.

⊕ For more on pricing see our ESG Performance Report

Regulatory environment

Growing flexibility and cooperation

Despite the obstacles posed by the pandemic, regulators and the industry continue to prioritise the supply of essential vaccines and medicines, while also accelerating the development of new products. New regulatory approaches have facilitated innovation, particularly in digital healthcare, cell and gene therapies, complex clinical trials, big data and real-world evidence.

Regulators have worked in close cooperation with industry, often across regulatory jurisdictions, through supranational bodies, such as the International Coalition of Medicines Regulatory Authorities. There is the potential for the permanent adoption of regulatory adaptations that support the development and approval of a broader range of new vaccines and medicines. There is also an opportunity to simplify regulatory processes.

Across regions, major regulatory initiatives have been announced, including in the UK, China, US and Europe. In the US, negotiations between the industry and the Food and Drug Administration (FDA) about the Prescription Drug User Fee Act (PDUFA) VII have concluded. Potential regulatory innovations covered in the resulting commitment letter are moving on to the legislative process. In the EU, the industry continues to prepare for the European Commission's revision of general pharmaceutical legislation. The industry is also working with the UK's Medicines and Healthcare Products Regulatory Agency (MHRA), which is establishing new and enhanced partnerships with regulators outside the EU. Following Brexit, there are still significant regulatory challenges around implementation of the Northern Ireland Protocol. The industry continues to engage with both UK and EU agencies to resolve these.

Our position

GSK closely monitors and engages, where relevant and appropriate, to improve regulation. This happens mainly in the UK, Europe, US, China and Japan.

For example, scientific innovation is moving beyond the scope of current regulation and standards, and we continue to learn from our experience with COVID-19. Working with our peers, we are engaging with governments to create a balanced regulatory framework that supports the discovery and delivery of vaccines and medicines developed through emerging technologies and techniques.

Global environment: opportunities and challenges

Changing needs

Ageing populations are increasing global demand for preventive and therapeutic health solutions, and changing the way healthcare is delivered worldwide. The acceleration of digital health and telemedicine have revolutionised the delivery of healthcare over the last two years as patients increasingly managed their own healthcare at home. The global digital health market is expected to reach \$484 billion in 2025 at a CAGR of 25%.¹ Patients are becoming more engaged with their healthcare, and companies are adopting more 'patient-centric' approaches, focused on patient outcomes, patient satisfaction and user experience.

Predictions suggest the global population will grow to 8.5 billion by 2030 (from 7.7 billion, 2019), despite the pandemic decreasing life expectancy in some countries in 2020-21. The number of over-65-year-olds is set to double between 2019 and 2050.² More people are living in cities, becoming affluent and living to an advanced age. This is particularly true in China, which is experiencing the world's fastest-ever expansion of the middle class, with projections that 1.2 billion people will be middle class by 2027.³

Advances in science and technology will help us respond to the growing demand for healthcare created by changing demographics, greater patient control and the demand for digital health.

Our position

Changing demographics will contribute to rising demand for healthcare, which we can respond to with our diverse portfolio spanning infectious diseases, HIV, oncology, immunology and respiratory disease. We aim to positively impact the health of over 2.5 billion people over the next ten years with our products. In line with our Innovation priority, we are investing in a pipeline of vaccines and specialty medicines that will meet changing healthcare needs. We believe that new technologies will enable the earlier identification of diseases and we will develop precision medicines that will target treatments to groups of patients most likely to benefit. In vaccines, technological innovation is allowing us to address unmet medical needs across all age groups.

1 Digital Health Global Market Report 2021 – COVID 19 Growth and Change, Research and Markets, March 2021

2 United Nations, World Population Prospects 2019 (Revised), 2019

3 Brookings, China's influence on the global middle class, Homi Kharas and Meagan Dooley, October 2020

Our external environment continued

Advances in science and technology

We are at an exciting time in medical discovery, fuelled by the genetic revolution of the last decade combined with the expansion of (patient-driven) healthcare data and advanced technology like artificial intelligence/machine learning (AI/ML). Advances in functional genomics, such as CRISPR gene editing, have already started to redefine what is possible in drug discovery, allowing researchers to unravel the mysteries of biology and help pinpoint novel drug targets with a higher probability of success. This is driving a phenomenon we call the 'digitisation of biology', which allows scientists to explore human biology in a way never possible before. It holds much promise for treating diseases previously out of reach, and requires AI and machine learning.

Researchers, regulators and payers are also exploring how these technologies can help improve clinical trials and generate better insights on product effectiveness – and even new combinations of products – to improve health.

Rapid advances in science and technology are fundamentally changing life sciences R&D. The pandemic has accelerated vaccine innovation, including mRNA technology. This enables the body's own cells to produce specific proteins, or antigens, so the immune system can prevent or fight infectious disease.

Our position

We are at the forefront of advances in science and technology, working to create innovative solutions to all kinds of healthcare challenges.

Advanced technology platforms – These are central to our R&D approach. We have expertise in AI and functional genomics. Our dedicated global in-house AI team is using machine learning to unlock the potential of complex genetic data with never-before-seen levels of speed, precision and scale. (See page 18 for more details).

Vaccines – We use diverse platform technologies from adjuvants that improve vaccine effectiveness through to mRNA technology. These are at the heart of our pipeline differentiation.

Collaborations – We're partnering with teams from the cutting edge of fields within and outside pharmaceuticals and vaccines to help steer new science and develop therapeutics. (See pages 17 to 27 for more details).

Responsible business

Society's expectations of businesses remain high. Companies across all sectors face increased scrutiny on the social and environmental impacts of their operations. At the same time, long-term socio-economic trends continue to drive down trust in business. Organisations must meet expectations on how they engage with – and benefit – society, the economy and the environment. Companies are partnering with policymakers and non-profit organisations on finding new collaborative solutions to complex long-term issues, such as climate change and global health inequalities.

Climate change in focus

Recent political and economic challenges may have slowed progress on the UN's Sustainable Development Goals but the need for action remains urgent. A top priority is addressing environmental issues. Extreme weather events, new scientific data on climate change and civic activism have rapidly advanced the case for sustainable energy solutions and stronger protections for the natural world and biodiversity. The Glasgow COP26 summit was the 2021 focal point for international climate change solutions. It led to the Glasgow Climate Pact, which includes new emissions pledges that, if fulfilled, will limit global warming to about 2.4 degrees above pre-industrial levels.¹ For the first time at COP a plan was also set out for reducing global use of coal – responsible for 40% of annual CO₂ emissions.²

Recognising good ESG management

Societal expectations of business continue to increase, with businesses expected to play their part in addressing some of the biggest challenges facing society. The international investment community is responding to this context by placing higher value on businesses that actively manage ESG risks and opportunities. These businesses are seen to offer a better foundation for long-term, sustainable growth; with good environmental stewardship and climate risk mitigation planning becoming a priority for investors.

Our position

Trust is essential to how we deliver on our purpose and create long-term value for both shareholders and society. We have 13 commitments that support our Trust priority and we are deeply committed to addressing the issues that matter, including pricing and access, global health, the environment, and inclusion and diversity.

During 2021, we made good progress across many of these areas. We retain a sector-leading position in the Dow Jones Sustainability Index. Our leading work in improving global health and tackling antimicrobial resistance was recognised by the Access to Medicine Foundation through top rankings in their Access to Medicine Index and AMR benchmark. The WHO recommended our malaria vaccine for wider use in children in regions with moderate to high malaria transmission. We launched new aspirational gender and ethnic diversity targets, to increase representation at senior levels, alongside a review of recruitment processes at all levels to make sure we are reaching and attracting diverse candidates. And we made strong progress on our 2030 climate and nature goals, including large-scale renewable energy investments at two major manufacturing sites, joining a coalition to curb deforestation, and investing in R&D to cut greenhouse gas emissions from our metered dose inhalers by up to 90% (see page 39).

1 Lewis S & Maslin M, Five things you need to know about the Glasgow Climate Pact, World Economic Forum, 15 November 2020

2 Ritchie H and Roser M, CO₂ emissions by fuel, Our World in Data, Last accessed 19 January 2022

Innovation

Innovation is at the core of what we do. In 2021, we continued to strengthen our pipeline of vaccines and medicines, apply our growing expertise and partnerships in technology and data, and increase the productivity of our R&D. It has been a year of new launches, regulatory approvals and important clinical studies, turning our expertise into transformational vaccines and medicines for patients.

Pharmaceuticals and Vaccines highlights

- Strong pipeline of 21 vaccines and 43 medicines, many with the potential to be first or best-in-class opportunities for patients, 22 of which are in pivotal trials
- Approval in the US for *Apretude*, our long-acting HIV preventative therapy
- *Xevudy* (sotrovimab), our monoclonal antibody treatment for COVID-19, approved or authorised for conditional/temporary use in the US, UK, EU and over 12 other countries
- Approval for *Jemperli*, as a treatment for endometrial cancer and certain solid tumours
- Positive phase III data for daprodustat for patients with anaemia of chronic kidney disease
- 20+ deals executed securing access to five novel clinical assets
- Approximately 70% of our targets in research are genetically validated, and published scientific research shows that genetically validated targets are at least twice as likely to become medicines

Innovation is at the heart of achieving our purpose – to unite science, talent and technology to get Ahead of disease Together. It's by discovering and developing new vaccines and medicines that we help patients and make a large-scale, positive impact on human health through prevention and treatment of disease.

R&D is the core of our innovation. In 2021, we invested £5.3 billion in R&D – 3.5% AER more than 2020 – to enhance our pipeline of vaccines and medicines. Through our own work, and partnerships with other businesses and academia, we currently have 21 vaccines and 43 medicines in development. Many have the potential to be first or best-in-class. In all we do, we encourage our teams to pursue bold research, backed by data and science and underpinned by clear accountability.

We have streamlined our R&D governance to allow us to keep up this pace. In 2021, we switched from separate clinical development organisations for vaccines and medicines to a single combined organisation. This will help us make sure we invest in the programmes with the biggest impact for patients and unlock scientific synergies across prevention and treatment.

Our approach to R&D

To deliver transformational vaccines and medicines, our R&D approach is to focus on the science of the immune system, human genetics and advanced technologies, such as artificial intelligence and machine learning.

We prioritise research into vaccines and medicines across our four therapeutic areas of infectious diseases, HIV, oncology, and immunology including respiratory. We also remain open to opportunities outside these core areas where the science aligns with our strategic approach.

Our pipeline consists of 64 potential vaccines and medicines with more than 70% that modulate the immune system. In 2021, we moved 19 assets into phase I or phase II trials.

Speeding up the pace of discovery and development

The productivity of our R&D is increasing. Since 2017, we've doubled the number of assets in phase III of clinical development to 22 and cut overall cycle times across development by 20%. In addition, in 2022 we anticipate milestones on up to 7 of the 11 potential new vaccines and medicines identified as key future growth drivers, including *Apretude* which was approved at the end of 2021 and our respiratory syncytial virus (RSV) vaccine candidate for older adults.

This growing pace helps us make a difference to more people's lives. For instance, *Blenrep* (belantamab mafodotin), a treatment for multiple myeloma, gained regulatory approval just two years after the start of its first pivotal study. And our COVID-19 treatment, sotrovimab, achieved emergency use authorisation from the FDA just 13 months after our partnership with Vir Biotechnology began in April 2020, when the molecule was still in preclinical phase.

Innovation continued

Leading progress

We've had 13 major new vaccines and medicines approved since 2017. This puts us in the top quartile in our industry. For 2018-20, we had a greater than 90% success rate for our pivotal studies, compared to 77% across the industry. Our 2017-20 number of launches per billion dollars of R&D spending was over 50% better than peer median.

Lifecycle innovation

As well as developing new treatments, we look for innovation across the lifecycle of our existing vaccines and medicines by finding new ways for them to help patients, either on their own or combined with other therapies. Since 2017, we have increased the number of lifecycle projects per asset by 50%. Examples are:

- *Benlysta* for the treatment of both systemic lupus erythematosus and lupus nephritis.
- *Nucala*, our anti IL-5 biologic, which is now also approved in the US and Europe for severe eosinophilic asthma, hypereosinophilic syndrome, eosinophilic granulomatosis and polyangiitis and chronic rhinosinusitis with nasal polyps.

- Our shingles vaccine, *Shingrix*, which was approved for wider use in several markets including the US and Canada.
- Expansion of our clinical trial programme for *Zejula* into new indications such as breast and lung cancer.
- The contribution of *Trelegy Ellipta* to respiratory disease and lung health continues to evolve. *Trelegy* has expanded the indicated use from chronic obstructive pulmonary disease (COPD) to include asthma in the US.

Strategic partnerships – joining forces to make progress

Through strategic partnerships and business development, we join forces with commercial and academic partners to open up new avenues of discovery or advance the development of new potential medicines. In 2021 alone, we announced more than 20 partnerships and collaborations that provided us access to five novel clinical assets, including with iTeos in immuno-oncology, Alector in immuno-neurology and Vir Biotechnology in flu. We have also invested in technologies that expand our capabilities in human genetics and artificial intelligence/machine learning (AI/ML).

Genetics, genomics and technology

The success of our R&D rests not just on finding new treatments, but on getting better at how we find them. The key to that is combining genetics, genomics and advanced technologies.

To fulfil our purpose to get Ahead of disease Together, we prioritise genetically validated targets to increase our probability of successfully delivering an approved vaccine or medicine. Approximately 70% of our targets in research are genetically validated and published scientific research shows that genetically validated targets are at least twice as likely to become medicines. We're now able to harness advanced technologies to convert insights from human genetics and genomics to improve the probability of success for R&D.

Making better predictions to help patients

The last decade has seen a revolution in genetic data and genomics. AI and machine learning help us find patterns in data on a larger scale and far more quickly than before. This is leading to the 'digitisation of biology' and is allowing us to better understand the root cause of many diseases.

At GSK we partner with the world's best minds and leading institutions in these areas. We are also investing in our own capabilities including our London AI hub, which is using biomedical information, AI/ML and computing platforms to unlock new insights from our genetic and clinical data.

With these capabilities we have found new potential combinations for existing therapies, such as *Blenrep* in combination with a gamma secretase inhibitor, which could allow for greater patient benefit.

Forming the right partnerships in genetics and genomics

Our collaboration with consumer genetics and research company 23andMe has yielded more than 40 novel research programmes, one of which is now in phase I for the treatment of cancer. We've also worked with the UK Biobank since its founding and have joined the UK's most recent bioresource, Our Future Health. Additionally, we are supporting newer datasets that feature diverse populations, such as the Genes and Health Consortium in East London and the Black Representation in Genetic Research Study with 23andMe.

In late 2021, we announced a five-year collaboration with the University of Oxford which will focus on neurodegenerative diseases. The new Institute will leverage advanced technologies to build on insights from human genetics to accelerate the most promising areas for drug discovery.

Innovation continued

In genomics, our partners include the world's preeminent experts: the Broad Institute in Boston and the Laboratory for Genomics Research (LGR), which we established with the University of California in 2019. They're helping us find genetically validated drug targets by investigating areas including genetic variations and their consequences for the function of cells. Working with the pioneers of CRISPR technology at LGR, we're uncovering new knowledge about disease mechanisms for immunology, oncology and neurology in 12 different programmes. Meanwhile, our work with UK biotech Adrestia is leveraging a new area called synthetic viability to find novel drug targets in hard to treat diseases like frontotemporal dementia (FTD).

We are also funding PhD studentships at multiple universities and institutes, including the Crick Institute, the University of Adelaide in Australia and University of Oxford, Stanford University, Cambridge's Centre for AI and Medicine, and Warwick University. This will help make sure we have sustained talent pools and the right skills in the coming years.

Using AI/ML to build scale and speed

In 2021, we started a new partnership with King's College London using AI/ML to understand why some patients respond to cancer treatment, while disease progresses in others. The technology will tell us more about the role of tumour genetics, the tumour microenvironment and response to therapies. In addition, the technology will aid the creation of tools to help make better clinical decisions for personalised treatment.

NVIDIA's Cambridge-2 supercomputer is performing a similar role for us in immuno-oncology by fusing different datasets and building large-scale models to help us determine the best treatment for patients. And the largest ever chip processor for AI, built by Silicon Valley start-up Cerebras, is helping us construct larger-scale genetic models that learn from DNA to help deconstruct how genes operate in different disease contexts.

Infectious diseases

The world faces a persistent threat from infectious diseases that not only claim lives but also put strain on healthcare systems. Almost half the vaccines and medicines in our pipeline address infectious diseases.

We are targeting several new launches by 2026, including our vaccine candidate for RSV in older adults, and gepotidacin, an antibiotic to treat uncomplicated urinary tract infections (uUTI). Both have the potential to be first and best-in-class. We also aim to complete five proof of concept studies for new vaccine candidates by 2023. Those that successfully demonstrate proof of concept will be ready to move to registrational clinical trials.

Extensive vaccine platform technologies

Our work in vaccine platform technologies, with the broadest portfolio in the industry, enables us to select the most promising technology approach (or combinations of different platform technologies) to develop new vaccines previously not thought possible. Platform technologies such as adjuvants, bioconjugation, generalised modules for membrane antigen (GMMA) and adenovirus vectors can be used to make vaccines against a range of different pathogens and allow for a tailored approach to deliver success. This includes mRNA, a key focus area for our development as we see it as a critical platform technology and major opportunity for the future of vaccines. We're investing in it significantly, including through our collaboration with CureVac and by building on our in-house end-to-end mRNA development and manufacturing capabilities.

We are focusing our efforts on modified and non-modified mRNA technologies optimised for high protein expression to improve mRNA potency and tolerability.

Digitisation, machine learning and AI are helping us speed up the vaccine research and manufacturing process. In 2021, we announced a successful proof of concept of a digital twin approach for vaccine manufacturing with Siemens and Atos. The digital twin uses machine learning and modelling to provide new insights for optimising the development and manufacturing of vaccines.

In 2021, we moved multiple vaccine candidates into clinical trials. They include a meningitis ABCWY second generation vaccine and vaccine candidates for *Klebsiella pneumoniae*, cytomegalovirus (CMV) and new strains of varicella (chickenpox). Our latest trials also include protein-based, adjuvanted COVID-19 vaccines, which we are developing in collaboration with other companies.

Innovation continued

Our combined expertise in vaccines and medicines means we are uniquely positioned to focus on connections between treatment and prevention. Examples include:

- COVID-19, for which we are working on both treatments and vaccines
- RSV and respiratory conditions, through our efforts to develop RSV vaccines for the populations most at risk, as well as to develop future respiratory medicines
- Hepatitis B, through our antisense oligonucleotide and vaccine technologies in development
- Influenza, for which we are developing vaccines and antibodies

The close collaboration in R&D across our research areas helps us innovate in areas where multiple tools might be required, such as antimicrobial resistance (AMR) or pandemic response. By drawing on the crossovers between our work in vaccines and pharmaceuticals we enhance our ability to develop innovative solutions to meet patient needs.

Shingles

Around one in three people will develop shingles in their lifetime. In 2017, our *Shingrix* vaccine signalled a step change in preventing this painful and potentially serious illness. It's the first non-live shingles vaccine, and it combines a specific subunit antigen with an adjuvant to sustain the immune response.

In 2021, we continued to expand access to *Shingrix*. We launched it in nine new markets: Australia, Singapore, Hong Kong & Macau, Italy, Spain, Denmark, Finland, Austria and the UK. Switzerland followed in early 2022.

Regulators in the US, Canada, Australia, Hong Kong and Singapore also extended the indication for the vaccine to adults 18 years and older at increased risk. *Shingrix* is the first shingles vaccine indicated for this expanded use.

We also achieved regulatory approvals for the vaccine in South Korea, Brazil, Switzerland and Taiwan, including for the 18+ at increased risk population. We gained new recommendations for the vaccine in Italy, Spain, Australia and Switzerland.

In addition, the US's National Comprehensive Cancer Network (NCCN) Survivorship Guidelines were updated to preferentially recommend *Shingrix* for cancer survivors aged 50 years and older, and the NCCN Guidelines on the Prevention and Treatment of Cancer-Related Infections were updated with *Shingrix* recommendations for autologous hematopoietic cell transplantation (HCT), multiple myeloma and lymphoma patients. The Global Initiative for Chronic Obstructive Lung Disease (GOLD) guidelines were also updated to recommend shingles vaccination to protect against shingles in adults with COPD aged 50 years and older.

RSV

Respiratory Syncytial Virus (RSV) is a very common virus and a leading cause of acute respiratory infections. In older adults, RSV can exacerbate underlying conditions and lead to pneumonia. It causes 360,000 hospitalisations and 24,000 deaths in over-60s each year in high-income countries, yet remains one of the major infectious diseases without a vaccine. RSV is the leading cause of severe respiratory infections in infants and causes more hospitalisations than influenza in this vulnerable group.

Our programme to help prevent RSV consists of two candidate vaccines, the most advanced of which is being tested in adults aged 60 years and over. It uses a recombinant pre-fusion F antigen combined with our AS01 adjuvant. The AS01 adjuvant is a key ingredient in *Shingrix* and boosts the immune response, helping to overcome the challenges associated with protecting older people. We anticipate phase III data on this candidate vaccine in the first half of 2022. We stopped enrolment and vaccination in trials of our RSV maternal candidate vaccine in February 2022 following feedback from the Independent Data Monitoring Committee (IDMC). Further analysis to better understand safety data from these trials is ongoing.

We have stopped developing a phase II RSV paediatric candidate vaccine based on an adenovirus vector, which was not using the pre-fusion F antigen, because it was unlikely to meet our efficacy target. We are currently investigating new technologies to address this important medical need.

Meningitis

About 1.2 million people develop invasive meningococcal disease (IMD) every year, with infants, young children and adolescents particularly vulnerable. Even with early diagnosis and adequate treatment, 5% to 10% of patients with bacterial meningitis die, often within 24 to 48 hours of symptoms starting. Left untreated, meningitis is fatal in up to 50% of cases and can cause brain damage, hearing loss or disability in 10% to 20% of survivors.

We are a leader in IMD protection, with over ten million patients vaccinated in 2021 alone. *Bexsero*, our meningitis B vaccine, and *Menveo*, our meningitis ACWY vaccine, together help protect against most IMD cases.

In 2021, GSK filed a submission to the FDA for a fully liquid version of *Menveo*. This would simplify administration of the vaccine by healthcare providers.

We are developing two MenABCWY pentavalent (5-in-1) vaccines, which would mean just one vaccine, rather than two, could be used to help protect against all five major disease-causing serogroups. The first generation MenABCWY vaccine candidate is in phase III clinical trials and was created by combining the technologies we have used to develop our existing *Bexsero* and *Menveo* vaccines. In 2021, we also started a phase I/II trial of a second generation pentavalent candidate for broader age indications and strains.

Innovation continued

COVID-19

Globally, more than 400 million cases of COVID-19 have been recorded since the outbreak emerged, resulting in the deaths of over five and a half million people. With our partners, we have been developing treatments as well as several vaccines.

Treatment – harnessing monoclonal antibodies

Alongside vaccines, effective treatments are critical to support patients and communities through the next phases of the pandemic. Some COVID-19 patients are at a higher risk of hospitalisation and death due to risk factors such as old age or comorbidities. For these patients, it will remain important to have access to early, effective treatment options including monoclonal antibodies.

Through our collaboration with Vir Biotechnology, which began in 2020, we developed *Xevudy* (sotrovimab) – a SARS-CoV-2 monoclonal antibody that works to prevent the virus from entering and infecting healthy cells within the body. In the first half of 2021, GSK and Vir announced results from COMET-ICE, a phase III trial that investigated intravenous (IV) infusion of sotrovimab in adults with mild or moderate COVID-19 at high risk of progression to severe disease.

Sotrovimab is authorised for emergency use in the US and, under the brand name *Xevudy*, has been granted a marketing authorisation in the EU. It has conditional or provisional marketing authorisations in Great Britain, Switzerland, Australia and Saudi Arabia. It has also been approved via Japan's Special Approval for Emergency Pathway. Temporary authorisations for sotrovimab have also been granted in several other countries.

Sotrovimab binds specifically to a region of the spike protein that is less likely to change, increasing the potential that it may remain effective against variants that emerge over time. Data from preclinical in vitro studies demonstrate that sotrovimab retains activity against all tested variants of concern and interest to date, including Delta and Omicron.

Along with Vir, we are continuing to progress the clinical development programme for sotrovimab and are exploring more convenient methods of administration. In November, we received positive results from the COMET-TAIL trial investigating the intramuscular (IM) route of administration of sotrovimab as an early treatment for mild-to-moderate COVID-19 in high-risk, non-hospitalised adults and paediatric patients (12 and over). Knowing that the greatest need for effective prophylactic treatments is likely to come from immuno-compromised people, GSK and Vir are also supporting clinical studies specific to this population.

COVID-19 vaccines – using technology to boost immune response

We are working with several companies on COVID-19 vaccines using our proprietary adjuvant technology. Adjuvants can make vaccines more effective by boosting and extending the body's immune response. They also make it possible to produce more doses with less antigen, enabling the production of more vaccine doses to address global needs.

Following positive phase II data, our vaccine collaboration with Sanofi began phase III trials in May 2021, in parallel with a programme of booster studies. In December 2021 we announced positive preliminary results showing that a single booster dose of the adjuvanted recombinant protein-based COVID-19 vaccine candidate delivered consistently strong immune responses across all primary vaccines received. And, in February 2022, we announced our intention to submit applications for regulatory approval of the vaccine in the US and Europe following the positive read outs of both the booster and primary phase III trials with this vaccine candidate.

In December 2021 we reported positive phase III data for the adjuvanted plant-based vaccine we are developing with Medicago, building on positive phase II results announced earlier in the year. Based on these data, the vaccine, Covifenz, was approved in Canada in February 2022.

A third vaccine using our adjuvant technology is in development with SK Bioscience. If successful, we intend to distribute this vaccine globally through the COVAX facility. The GPB510 vaccine, a self-assembled nanoparticle vaccine targeting the receptor-binding domain of the SARS-CoV-2 spike protein, started phase III trials in August 2021.

We are also developing second generation mRNA COVID-19 vaccine candidates using modified and non-modified RNA vaccine technologies as part of our collaboration with CureVac. In August and November 2021 we announced encouraging results from a range of pre-clinical studies.

Other infectious diseases

Diphtheria, tetanus and pertussis

In Europe, healthcare providers can now give *Boostrix*, our combination tetanus, diphtheria and pertussis vaccine, together with one additional vaccine such as *Shingrix*, or an unadjuvanted or inactivated seasonal influenza vaccine. This will save patients multiple vaccination visits and make healthcare more efficient.

Chronic hepatitis B

Over 300 million people suffer from chronic hepatitis B, and each year around 887,000 die from the decompensated cirrhosis or liver cancer it can cause.

Our candidate vaccine, currently in phase I/II, is a targeted immunotherapy combining different technologies, including our adjuvant AS01 also used in *Shingrix* and in our RSV candidate vaccine for older adults. It aims to activate functional virus-specific T-cell and B-cell responses and restore immune competence against hepatitis B virus (HBV). This immune restoration could lead to a functional cure of chronic hepatitis B, which is defined as controlling the virus without eradicating it from the body. A functional cure could reduce the risk of long-term complications of chronic hepatitis B infection, liver inflammation and cancer. We expect proof of concept data in 2023.

Innovation continued

We are also developing bepirovirsen, an HBV antisense oligonucleotide, which has the potential to be a first-in-class functional cure for chronic HBV and is designed to restore the immune system's natural ability to eliminate infected liver cells and provide long-term control of HBV. Our phase IIa programme demonstrated that bepirovirsen can reduce hepatitis B surface antigen after four weeks of treatment. We anticipate data from our ongoing phase IIb programme in 2022.

Cytomegalovirus

CMV is a serious health risk for babies. Most infants with congenital CMV are asymptomatic at birth but still at risk of long-term health problems, including hearing and sight loss, delayed development and seizures. In the US, CMV is the leading infectious cause of birth defects. About one in 200 babies is born with congenital CMV infection, and about one in five of those will have long-term health problems.

There's currently no approved vaccine, but we are working to change that with an adjuvanted subunit vaccine that entered phase I/II trials in 2021.

Antibiotics and antimicrobial resistance

Antimicrobial resistance (AMR) is an urgent threat to public health. By undermining the effectiveness of antibiotics, it currently contributes to 700,000 deaths every year globally, a figure that is expected to increase significantly unless action is taken. We're focusing on organisms with the highest risk of developing AMR as characterised by the Centers for Disease Control and Prevention (CDC) and World Health Organization (WHO).

Medicines – developing new mechanisms

We are developing gepotidacin, a novel mechanism topoisomerase inhibitor, for uncomplicated urinary tract infections (uUTI) and gonorrhoea, in partnership with the Biomedical Advanced Research and Development Authority (BARDA) in the US. This is the first time a new oral antibiotic has addressed these infections in over 20 years. Gepotidacin is currently in phase III.

Vaccines – targeting resistant pathogens

We are using new scientific insights and technologies, including adjuvants, mRNA, bioconjugation and generalised modules for membrane antigens (GMMA) to target pathogens that create a significant health burden and are likely to develop antibiotic resistance.

We have four vaccines in clinical trials, against *Staphylococcus aureus*, *Clostridium difficile*, *Shigella* and *Klebsiella*. We also have other programmes that could have a major impact by reducing cases of diseases directly or indirectly contributing to AMR, including RSV and tuberculosis.

Staphylococcus aureus is often resistant to antibiotics, with multiple drug-resistant strains already in circulation. In the US, methicillin-resistant strains cause more than 300,000 cases in hospital patients, and an estimated 10,600 deaths. In 2021, our candidate vaccine to prevent primary and recurring soft skin tissue infections from this pathogen entered phase II.

In the US, *Clostridium difficile* causes more than 200,000 cases in hospital patients and leads to around 12,800 deaths every year. In 2021, we progressed the phase I first-time-in-human study of our candidate vaccine against this pathogen.

Klebsiella pneumoniae can cause severe infections in the lungs, bladder, brain, liver, eyes and blood, as well as types of meningitis. There is no approved vaccine, and resistance to many treatments is growing.

Our candidate vaccine, developed with LimmaTech, started clinical development in July 2021. If it succeeds, it could help prevent most *Klebsiella*-associated infections in people who are at highest risk, including older people with underlying conditions like diabetes, kidney disease or chronic liver disease. The vaccine is a tetravalent bioconjugate including O-antigen to target the serogroup causing most infections. We combine the antigens with our proprietary adjuvant system, which has shown, with vaccines like *Shingrix*, that it can help provide strong immune responses in people of all ages including older adults.

Shigella causes over 200,000 deaths every year and is the second leading cause of diarrheal death globally after rotavirus. There is currently no widely available licensed vaccines to protect against *Shigella*; and the related threat of growing anti-microbial resistance is a significant issue.

We started a phase I trial of a quadrivalent *Shigella* vaccine candidate based on our innovative GMMA technology. This is a unique approach to creating bacterial vaccines by replicating the surface characteristics of the bacteria through membrane vesicles.

Early science and additional collaborations

Our partnerships in infectious diseases include our work with CureVac on mRNA vaccines, not only against COVID-19, but also five additional targets including seasonal and universal flu.

Building our understanding of the microbiome in chronic diseases

We have developed collaborations with two companies to generate scientific insights and turn them into innovation in microbiome engineering and optimisation for new therapies.

In October 2021, we expanded a collaboration with Viome Life Sciences that started in 2019, investigating the role of the microbiome in chronic diseases. It combines our expertise in immunology with Viome's mRNA analysis and AI platforms to give us new insights into chronic diseases, cancers and ageing.

We aim to generate data on how pathogens cause or exacerbate chronic diseases, including autoimmune inflammatory conditions and immuno-oncology. This will help us build a predictive model to tell us more about targets for therapies that build on vaccine technology to prevent and even reverse chronic diseases.

With Eligo Biosciences, we are focusing on developing ways to treat acne. This means using Eligo's CRISPR and bacteriophage technology to remove unwanted bacteria while leaving beneficial bacteria intact.

HIV

HIV is an urgent global health threat with 1.5 million new cases each year, including 38,000 new cases in the US and 22,000 new cases in the EU. However, of the 38 million people living with HIV, 55% of the world's cases, over 20 million people, come from sub-Saharan Africa.¹

Our work in HIV is through ViiV Healthcare, the world's only specialist HIV pharmaceutical company, which we majority own, with Pfizer and Shionogi as shareholders. Our goal is to limit the impact of HIV on people's lives by treating, preventing and ultimately curing it.

We are developing long-acting medicines that have the potential to dramatically change people's experience by giving them an alternative to daily medicine. We are also working on long-acting therapies to prevent HIV.

Replacing daily medicines with long-acting regimens

Our aim is to offer innovative choices that help address the evolving needs of people living with HIV. Despite incredible progress made with current oral HIV medicines, some people living with HIV face challenges taking pills every day. We are transforming the lives of people living with HIV by reducing the number of days they take treatment from 365 to 12 or 6 per year. This spares them the daily reminder of living with HIV, as well as relieving the pressure of having to take medicine every day.

In January 2021, we received FDA approval for *Cabenuva*, the first-ever complete, long-acting, injectable regimen for HIV, offering people living with HIV in the US a new approach to care. Studies show *Cabenuva* dosed once-monthly is as effective as three-drug oral regimens that patients currently take every day.

We received approval for dosing once every two months in the US in early 2022.

In Europe, the regimen is approved as the combination of *Vocabria* (cabotegravir) and *Rekambys* (rilpivirine), with dosing every two months.

Launching this innovative treatment regimen has established ViiV Healthcare as the industry leader in developing long-acting HIV medicines.

Giving patients a two-drug regimen option

Integrase inhibitors are the gold standard in HIV treatment and our medicine dolutegravir is the most widely prescribed in the world. More than 21.3 million people living with HIV – almost 3 in 4 of those currently on HIV medicine – are now taking a dolutegravir-based regimen. Our two-drug regimen oral therapies *Dovato* and *Juluca*, based on dolutegravir, have been shown to be as well tolerated and effective as three-drug regimens. This allows people living with HIV to maintain viral suppression while taking fewer HIV drugs over their lifetime.

We have a robust and industry-leading clinical trial programme that is driving confidence in two-drug regimens. Our goal is to make *Dovato* the most successful dolutegravir-based regimen because it has fewer reactions to drugs and reduces exposure to antiretrovirals. We now have more than three years of efficacy and safety data for *Dovato* which sets the bar very high for two-drug oral treatment regimens. Both the US and European Treatment Guidelines include *Dovato* as recommended for most adult patients who are new to therapy as well as for stably suppressed patients who need a switch in their HIV therapy.

Supporting people living with HIV with a range of options

No single medicine works for all people living with HIV, so we offer innovative choices that help address their evolving needs.

Our portfolio of approved antiretroviral medicines offers a range of therapeutic options and includes *Tivicay* and *Triumeq*, which contain dolutegravir.

In 2021, we received European marketing authorisation for the first ever dispersible tablet formulation of dolutegravir in the form of *Tivicay*, a treatment for children from four weeks old and over three kilogrammes living with HIV in Europe. We also made a regulatory submissions to both the FDA and EMA for approval of a new dispersible tablet formulation of the fixed dose combination of abacavir, dolutegravir and lamivudine (*Triumeq*) and to lower the minimum weight at which a child can be prescribed this medicine.

In Europe, we received approval in February 2021 for *Rukobia* (fostemsavir), a first-in-class HIV attachment inhibitor. This addresses an unmet need for heavily treatment-experienced adults with HIV-1 who aren't responding to current antiretroviral treatment and have exhausted all other options. The European approval followed US approval in 2020, when it was fast-tracked as an FDA breakthrough therapy.

Preventing HIV with long-acting cabotegravir PrEP

Preventing HIV is essential. This has been reinforced by the US Government's goal to reduce acquisition of HIV by 75% by 2025.

In December 2021, the FDA approved ViiV Healthcare's *Apretude*, the first and only long-acting injectable pre-exposure prophylaxis (PrEP) option to reduce the risk of sexually acquired HIV-1.

Studies, reported in 2020, showed the once-every-two-month regimen was superior to daily pills, with effectiveness three to nine times higher (in men and women, respectively) than the oral medicine in preventing HIV acquisition.

1 [hiv.gov/hiv-basics/overview/data-and-trends/global-statistics](https://www.hiv.gov/hiv-basics/overview/data-and-trends/global-statistics)

Innovation continued

Increasing our ambition for patients

Our pipeline includes a number of medicines with new mechanisms of action that could be combined with our integrase inhibitor, cabotegravir, to create medicines to further extend the interval between doses. We have two objectives. One is to produce the world's first self-administered long-acting medicine for people who want to take medicine at home. The other is to develop an ultra-long-acting regimen, with dosing intervals of three months or longer.

We have a 20-year history of success in developing integrase inhibitors for HIV, including dolutegravir and cabotegravir, through the collaboration with our shareholder Shionogi. This year we signed an exclusive collaboration and licence agreement with Shionogi for a third-generation integrase inhibitor, a pre-clinical candidate called VH148. We believe it will give us the potential to offer medicines with longer dosing intervals than cabotegravir. This could anchor our future pipeline of innovative, long-acting therapies for HIV beyond 2030.

Also in 2021 we announced a licensing agreement with life sciences company Halozyme for its recombinant human hyaluronidase called PH20. When PH20 is injected subcutaneously, it creates a temporary expansion under the skin, allowing increased volumes of medicine to be delivered, without added discomfort to the patient. With the ability to give a larger dose, we hope to expand the interval between doses. This opens up opportunities to combine cabotegravir with other products in our pipeline to create ultra-long-acting regimens for treatment and prevention of HIV. In particular, there's potential for us to use this technology to increase the dosing interval of cabotegravir for prevention from every two months to as long as every six months.

Our ultimate goal remains to find a cure for HIV. We are continuing to progress our unique industry/academic partnership with the University of North Carolina at Chapel Hill through our jointly-owned QURA Therapeutics and we expect to start a phase I trial for a cure medicine in 2022.

Oncology

Cancer is second only to heart disease as the world's biggest killer. We develop transformational cancer medicines with life-changing potential for patients.

We have accelerated research into areas including synthetic lethality and next generation immuno-oncology agents, drawing on our own expertise in functional genomics and the science of the immune system, and that of our partners.

In 2021, we had our oncology medicine *Jemperli* (dostarlimab) approved for patients. This means we have three marketed therapies, a further nine assets in development, and numerous pre-clinical targets. This represents rapid progress since 2018, when we had no approved medicines and just eight assets in development, the most advanced of them in phase I.

Blood cancers

Multiple myeloma is the third most common blood cancer worldwide – more than 175,000 people develop it every year.

Blenrep (belantamab mafodotin) is our treatment for patients who have relapsed or refractory multiple myeloma, and who have received at least four other therapies. It's the first therapy of its kind, as a humanised antibody drug conjugate targeting the protein B-cell maturation antigen (BCMA).

In 2020, *Blenrep* received regulatory approval in the US and Europe following the pivotal DREAMM-2 trial, which demonstrated deep and durable responses in patients with advanced multiple myeloma. After launching in the US and Germany, we expanded to another six EU countries in 2021 as well as the United Kingdom and Hong Kong.

We are continuing our DREAMM trials to understand the potential for *Blenrep* to be used in earlier lines of treatment, as a monotherapy and in combination with standard and novel therapies, as well as exploring dosing and scheduling modifications. For example, in the DREAMM-5 platform study, we are investigating a novel combination of treatments with nirogacestat, a gamma secretase inhibitor (GSI), and isatuximab, a CD38 targeting monoclonal antibody.

Gynaecologic cancers

Gynaecologic cancers are some of the most common cancers affecting women. In 2020, nearly 1.4 million women around the world were diagnosed with a gynaecologic cancer.

Approval for *Jemperli* to treat endometrial cancer

In 2020, there were over 400,000 new cases globally of endometrial cancer (a cancer that begins in the lining of the uterus). Patients have limited treatment options if their cancer progresses after first-line therapy.

In April 2021, *Jemperli* (dostarlimab), received accelerated approval in the US for certain patients with dMMR endometrial cancer and conditional approval in Europe for certain patients with dMMR or MSI-H endometrial cancer. It treats advanced or recurring endometrial cancer that has worsened despite previous treatment with platinum-based chemotherapy. *Jemperli* activates the immune system to better attack cancer cells.

In August 2021, *Jemperli* received accelerated approval in the US for patients with dMMR solid tumours that have progressed despite earlier treatment. This means *Jemperli* is now available to patients with confirmed dMMR solid tumours and those who have no satisfactory alternative treatment options.

Innovation continued

We are also investigating *Jemperli* as a first-line treatment in combination with chemotherapy for patients with advanced or recurring endometrial cancer. The RUBY phase III trial is evaluating the combination of *Zejula* and *Jemperli* as a maintenance treatment (see below).

Treating ovarian cancer with *Zejula*

More than 300,000 women were diagnosed with ovarian cancer in 2020.

Our treatment *Zejula* (niraparib) is an oral, once-daily poly (ADP-ribose) polymerase (PARP) inhibitor monotherapy maintenance treatment for women with advanced ovarian cancer, regardless of its biomarker status, who have responded to platinum-based chemotherapy. In 2020, it received approval as a first-line maintenance treatment in the US and the EU.

We are evaluating *Zejula* in other pivotal trials, assessing activity across multiple tumour types and exploring combinations of *Zejula* with other therapeutics. Our pivotal FIRST phase III trial is studying *Zejula* in combination with *Jemperli* as a treatment for first-line ovarian cancer.

Other solid tumours

Exploring *Zejula* for the treatment of lung and breast cancer

We are currently conducting phase III trials with *Zejula* for lung and breast cancer.

Our phase III lung cancer trial, ZEAL, is investigating *Zejula* as a first-line maintenance therapy for patients with advanced non-small cell lung cancer (squamous and non-squamous histologies), after they have received platinum-based chemotherapy. The trial is studying the efficacy and safety of *Zejula* in combination with the standard of care treatment.

Our phase III breast cancer trial, ZEST, is exploring the efficacy and safety of *Zejula* as an early-stage treatment. The trial uses circulating tumour DNA technology for the first time in a pivotal breast cancer study. This offers the potential to detect tumour cells earlier at the molecular level and identify women at higher risk of recurrence. This means therapy with *Zejula* could start when the burden of disease is still low and may create an opportunity to more effectively slow or stop the cancer's progress.

Harnessing cell therapy

Cell therapy is an important avenue for treating cancer. We're addressing this with our own cell therapy programme for solid tumours, which combines strategies across research, clinical development and supply chain to address patients' unmet needs.

Our lead cell therapy asset in development is letetresgene autoleucel (lete-cel; GSK337794), a T-cell receptor T-cell therapy (TCR-T) which harnesses the immune system to develop a personalised treatment. It does this by extracting a patient's T-cells, which are then genetically modified to express a T-cell receptor (TCR) that targets the NY-ESO-1 antigen found in various solid tumours.

The IGNYTE-ESO phase II trial is evaluating lete-cel in patients with synovial sarcoma and myxoid/round cell liposarcoma. This is on an accelerated development path after receiving European PRIME and FDA breakthrough status.

We are also focused on developing the next generation of cell therapies, which include approaches and technologies that could further enhance anti-cancer activity.

Through a collaboration with Lyell Immunopharma, we are exploring more ways to enhance T-cells' ability to attack and kill tumour cells by further engineering cells that could be longer-lasting and more potent. We are also collaborating with Immatics Biotechnologies to build our capabilities in cell therapy for solid tumours so more patients can benefit from this kind of treatment.

Early science and other collaborations

Across our R&D in oncology, we invest in new technologies and partnerships to push the boundaries of combatting cancer. One of the most important areas is immuno-oncology. Additionally, functional genomics helps us identify new treatment targets in synthetic lethality, an approach to cancer treatment that targets only genetic mutations in cancer cells, not healthy cells.

Continuing advances in immuno-oncology

Immuno-oncology is a fast-developing area, but the search for new targets is important, as so far less than 30% of patients respond to certain immuno-oncology treatments.

Through our work, we are aiming to help the immune system recognise and kill cancer cells more effectively. We're studying how combinations with our treatment *Jemperli* can enhance anti-tumour activity utilising the CD226 axis, that is expressed on the surface of T-cells and natural killer cells, including the checkpoints CD96, TIGIT and PVRIG.

We are the only company with access to antibodies targeting all three CD226 axis checkpoints. GSK6097608 (anti-CD96) is in phase I development as a monotherapy and combined with *Jemperli*. In June 2021, we partnered with iTeos Therapeutics to further develop a TIGIT antibody, GSK4428859A, currently in a phase Ib safety trial also in combination with *Jemperli*.

Exploring the potential of functional genomics in synthetic lethality

Our internal work on functional genomics has identified more than ten target candidates in research for evaluation in the field of synthetic lethality. Partnering with IDEAYA Biosciences, an oncology-focused precision medicine company, we are exploring MAT2A inhibition in tumours with MTAP deletion, a common feature of solid tumours. Our study moved to phase I in 2021. Together, we are also developing two new assets that we expect to move into the clinic over the next few years.

Immunology including respiratory

Our focus on the science of the immune system helps us develop medicines for immune-mediated conditions like lupus, rheumatoid arthritis and a range of inflammatory diseases. For more than 50 years, we have also produced innovative medicines helping millions of people with respiratory conditions to breathe more easily.

Helping more lupus patients with *Benlysta*

Benlysta (belimumab) is the first and only biologic approved for both the chronic autoimmune disease systemic lupus erythematosus (SLE) and lupus nephritis (LN), the kidney inflammation caused by lupus. It is a monoclonal antibody that targets BlyS, an underlying cause of SLE and LN, and reduces autoantibody levels to help control the disease.

In 2021, we received approval for *Benlysta* in adult patients with active lupus nephritis in several markets including Brazil, EU member states and Japan. In 2022, we also received approval in China for this indication. This followed US approval for this use in 2020.

Moving towards a new way to treat rheumatoid arthritis

As many as 1% of people worldwide suffer from rheumatoid arthritis (RA), a chronic inflammatory disease that can cause pain, joint swelling and inflammation that can lead to acute and chronic disability. The needs are great, with only about 30% of RA patients achieving remission despite use of targeted therapies currently available, and around 40% of patients reporting daily pain, which can be debilitating.

In early-stage trials, otilimab, our novel monoclonal antibody targeting GM-CSF, demonstrated rapid and substantial improvement in pain, and has now moved to phase III studies. We expect results of three pivotal studies by the end of 2022. With positive pivotal trial results, otilimab could become the first new medicine for RA in a decade.

Finding new disease targets in immuno-neurology

Focusing on human genetics and the science of the immune system has given us unique insights to pinpoint potential targets for patients with neurodegenerative diseases.

In July 2021, we announced a partnership with Alector to develop two monoclonal antibodies (AL001 and AL101) for neurodegenerative diseases including frontotemporal dementia (FTD), amyotrophic lateral sclerosis (ALS), Parkinson's disease and Alzheimer's disease. Both antibodies are designed to raise levels of progranulin, which regulates immune activity in the brain. AL001 is in a pivotal phase III trial for people with, or at high risk of developing, FTD due to a mutation in the progranulin gene. It is also in a phase II trial in patients with ALS. AL101, in development for Parkinson's disease and Alzheimer's disease, is in a phase Ia trial with healthy volunteers.

In November 2021, Alector announced encouraging new data from the open label INFRONT-2 phase II trial. These data showed a consistent slowing of clinical progression in patients with FTD who were treated with AL001 compared to historical, matched FTD subjects, with both groups having the progranulin gene mutation. There was a trend towards normalisation or stabilisation of disease-associated biomarkers. The INFRONT-3 phase III trial is currently enrolling FTD patients with a mutation in the progranulin gene to confirm the phase II data.

The partnership brings together Alector's immuno-neurology expertise and our R&D focus on the science of the immune system and human genetics, as well as our drug development capabilities.

Growing our respiratory portfolio and tackling eosinophil-driven diseases

We have one of the broadest portfolios of respiratory medicines in our industry, and it continues to grow. Since 2012, we have launched five new inhaled therapies as well as a biologic, *Nucala* (mepolizumab), the first-in-class monoclonal antibody that targets interleukin-5 (IL-5). We have been leading research into eosinophil-driven diseases like asthma for more than 25 years. These are inflammatory conditions associated with elevated levels of eosinophils, a type of white blood cell, and can occur in a range of tissues and organs.

Our trials have studied how *Nucala* could change the lives of people affected by conditions such as severe eosinophilic asthma (SEA), hypereosinophilic syndrome (HES), eosinophilic granulomatosis with polyangiitis (EGPA) and chronic rhinosinusitis with nasal polyps (CRwNP). By targeting IL-5, *Nucala* reduces the number of eosinophils, which, in excessive numbers, can cause inflammation. These trials have led to important new approvals for *Nucala*, addressing unmet needs for a broad group of patients.

In 2021, the FDA approved *Nucala* for adults with CRSwNP, a common, chronic condition which can cause difficulty breathing and sleeping, and interfere with taste and smell. With this approval, *Nucala* is now indicated in the US for four eosinophil-driven diseases. In November 2021, we received approvals for *Nucala* in Europe for CRSwNP, HES and EGPA.

In January 2022, we received FDA approval to extend the marketing authorisation for *Nucala* to include a specific paediatric presentation in a pre-filled safety syringe, enabling healthcare professionals or caregivers to administer *Nucala* at home to appropriate patients. We are also awaiting European approval for this indication.

Innovation continued

Nucala is also in a phase III trial to determine whether it can help patients with COPD with high eosinophil counts, about 40% of COPD patients, who are at increased risk of exacerbations.

Additionally, we are focused on developing depemokimab, a long-acting anti-interleukin-5 (IL-5) monoclonal antibody. A current phase III programme is assessing its safety and efficacy in severe asthma with an eosinophilic phenotype. So far, results show it can reduce and suppress eosinophil levels for longer periods than other anti-IL-5 monoclonal antibodies. This would mean treatment could be extended to one injection every six months.

Early-phase portfolio

In 2021, we started a phase Ib trial for an existing IL-18 monoclonal antibody for atopic dermatitis and a phase I trial for a novel monoclonal antibody targeting IL-7 for multiple sclerosis. Both of these were informed by our access to genetic databases that identified the indications with the highest probability of success.

We also completed a worldwide licence agreement with Arrowhead Pharmaceuticals for GSK4532990 (ARO-HSD), a genetically validated, investigational RNA interference (RNAi) therapeutic currently in phase I/II development for patients with non-alcoholic steatohepatitis (NASH). The agreement covers the medicine's development and commercialisation outside of greater China.

Our phase I pipeline also consists of other molecules targeting the immune system for celiac disease, osteoarthritis pain and neuro-degenerative disease.

Opportunity driven

Alongside our balanced portfolio across key therapy areas, we are also led by the science to pursue other opportunities.

Transforming the treatment of anaemia

Over 700 million people suffer from chronic kidney disease worldwide, and an estimated one in seven of them suffers from anaemia. Many have limited treatment options today.

Daprodustat has potential as a novel oral treatment in dialysis and non-dialysis settings. If approved daprodustat could bring ease of use as an oral treatment with potential to improve on the current injection-based standard of care and work to effectively manage haemoglobin levels.

Daprodustat is based on compelling human genetics and Nobel Prize-winning science that demonstrated how cells sense and adapt to oxygen availability. It is already approved in Japan under the name *Duvroq*. In 2021, data read out positively from five phase III studies. Each independently met their primary efficacy and safety endpoints, demonstrating that daprodustat improved or maintained patients within their target haemoglobin ranges and also showed, in the primary safety analysis of the intention-to-treat population, similar rates of major cardiovascular events when compared to the injection-based standard of care, ESA therapy, within each trial. Data from the ASCEND programme will be used to support regulatory filings with health authorities worldwide.

Innovating for patients with primary biliary cholangitis

We are also developing linerixibat, an ileal bile acid transporter (IBAT) inhibitor, for the treatment of cholestatic pruritus in patients with primary biliary cholangitis (PBC), a condition in which there is a significant unmet need with no new pharmacologic therapy since the 1960s. Following data from the GLIMMER phase IIb trial, in 2021 we initiated the GLISTEN phase III trial. The GLIMMER study was the first time 23andMe helped us to identify, recruit and enrol patients who had opted to participate in research. The GLISTEN phase III study will also use the 23andMe database to help match patients. It is also our first US pivotal trial that allows assessment of participants at home by using technology with a home-based app to track progress.

Following the FDA Orphan Drug Designation, in 2021 linerixibat also received a positive decision on Orphan Drug Designation from the European Commission.

Innovation continued

Pipeline overview

We have 64 assets in development, of which 22 are late-stage.

Phase III/Registration

<i>Bexsero</i> infants (US) vaccine	<i>Xevudy</i> ¹ (sotrovimab/VIR-7831) COVID-19
COVID-19 (Medicago) ¹ vaccine ³	<i>Blenrep</i> ¹ (anti-BCMA ADC) multiple myeloma
COVID-19 (Sanofi) ¹ vaccine ³	<i>Jemperli</i> ¹ (PD-1 antagonist) 1L endometrial cancer ²
COVID-19 (SK Bioscience) ¹ vaccine ³	letetresgene-autoleucel ¹ (NY-ESO-1 TCR) SS/MRCLS ^{2,6}
MenABCWY (1st gen) vaccine	<i>Zejula</i> ¹ (PARP inhibitor) ovarian, lung and breast cancer
<i>Menveo</i> liquid vaccine	4527223 ¹ (AL001, anti-sortilin) frontotemporal dementia ^{2,7}
MMR (US) vaccine	depemokimab ¹ (LA anti-IL5 antagonist) asthma
<i>Rotarix</i> liquid (US) vaccine	<i>Nucala</i> COPD
RSV maternal ^{1,†} vaccine	otilimab ¹ (aGM-CSF inhibitor) rheumatoid arthritis
RSV older adults ¹ vaccine	daprodustat (HIF-PHI) anaemia of chronic kidney disease
gepotidacin ¹ (BTI inhibitor) uUTI and GC	linerixibat (IBATi) cholestatic pruritus in primary biliary cholangitis

Phase II

Malaria (fractional dose) ¹ vaccine	bepirovirsen ¹ (HBV ASO) HBV
<i>S. aureus</i> ¹ vaccine ⁴	3036656 ¹ (leucyl t-RNA inhibitor) tuberculosis
<i>Shigella</i> ¹ vaccine	3640254 (maturation inhibitor) HIV
Therapeutic HBV ¹ vaccine ⁴	3810109 ¹ (broadly neutralising antibody) HIV
MenABCWY (2nd gen) vaccine ⁴	cobolimab ¹ (TIM-3 antagonist) NSCLC
Varicella new strain vaccine	

Phase I

<i>C. difficile</i> ¹ vaccine	3745417 (STING agonist) cancer
<i>Klebsiella pneumoniae</i> ¹ vaccine	3845097 ¹ (NY-ESO-1/TGFβR2 TCR T) cancer
SAM (COVID-19 model) vaccine	3901961 ¹ (NY-ESO-1/CD8a TCR T) cancer
SAM (rabies model) vaccine	4074386 ¹ (LAG3 antagonist) cancer
CMV vaccine	4362676 ¹ (Mat2A inhibitor) cancer
BVL-GSK098 ¹ (ethionamide booster) tuberculosis	4428859 ¹ (EOS-448, TIGIT antagonist) cancer
VIR-2482 ¹ (neutralising monoclonal antibody) influenza ⁸	6097608 (CD96 antagonist) cancer
2556286 ¹ (Mtb inhibitor) tuberculosis	4527226 ¹ (AL101, anti-sortilin) neurodegenerative diseases
3186899 ¹ (CRK-12 inhibitor) visceral leishmaniasis ⁵	3858279 ¹ (anti-CCL17) osteoarthritis pain
3494245 ¹ (proteasome inh) visceral leishmaniasis	3915393 ¹ (TG2 inhibitor) celiac disease
3882347 ¹ (FimH antagonist) uUTI	1070806 (anti-IL18) atopic dermatitis
3923868 (PI4kβ inhibitor) viral COPD exacerbations	3888130 ¹ (anti-IL7) multiple sclerosis
4182137 ¹ (VIR-7832) COVID-19 ⁴	4532990 ¹ (ARO-HSD siRNA) non-alcoholic steatohepatitis
3739937 (maturation inhibitor) HIV	2798745 ¹ (TRPV4 blocker) diabetic macular edema
cabotegravir (400 mg/ml formulation) HIV	3884464 ¹ heart failure
4004280 (capsid protein inhibitor) HIV	

Only the most advanced indications are shown for each asset.

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

2 Additional indications also under investigation

3 GSK contributing pandemic adjuvant

4 In phase I/II trial

5 Transition activities underway to enable further progression by partner

6 In potentially registrational phase II trial

7 Phase III trial in patients with progranulin gene mutation

8 GSK has exclusive option to co-develop post phase II

† Enrolment and vaccination stopped in February 2022. Further analysis to better understand safety data from these trials is ongoing

NSCLC: non-small cell lung cancer; uUTI: uncomplicated urinary tract infection; GC: gonorrhoea; SS: synovial sarcoma; MRCLS: myxoid/round cell liposarcoma

Performance

Strong financial performance in 2021 was driven by first class commercial execution and strong uptake of new products.

Pharmaceuticals highlights

- Total 2021 turnover £17.7 billion, +4% AER, +10% CER
- Sales of new and specialty pharmaceuticals £10 billion +20% AER, +26% CER
- Sales of *Xevudy* £958 million reflecting the ongoing fulfilment of contracts across the world and most significantly in the US
- Strong commercial execution of key growth products, including *Trelegy* and *Nucala*, which exceeded £1 billion in sales for the first time
- Better digital capabilities to support more effective engagement with healthcare professionals, higher productivity and a more efficient supply chain

[+](#) Read more below

Vaccines highlights

- Total 2021 turnover £6.8 billion, -3% AER, +2% CER
- COVID-19 pandemic sales for Vaccines £447 million including pandemic adjuvant sales of £444 million
- Shingles: *Shingrix* sold in 17 countries, including nine markets launched during 2021
- Meningitis: increased market share in the US for *Bexsero* and *Menveo*
- Maintained market share for key products despite significant disruption from COVID-19
- Excellent supply performance; our *Shingrix* supply is fully unconstrained
- Accelerated our digital transformation, helping to drive data-driven decisions in manufacturing and supply

[+](#) Read more on page 31

Pharmaceuticals

Our performance

Pharmaceuticals turnover in the year was £17,729 million, up 4% AER, 10% CER.

Sales of *Xevudy* (sotrovimab), the monoclonal antibody treatment for COVID-19 of £958 million contributed approximately 6 percentage points to Pharmaceuticals growth. By December 2021, less than a year since the first pivotal phase III data, sotrovimab was being used to treat COVID-19 patients. We had sold or reserved over 1.7 million doses through agreements with the EU and over a dozen other countries including the US, UK, Japan, Australia, Canada, Singapore and UAE.

HIV sales were down 2% AER but up 3% CER, to £4,777 million, with growth in *Dovato* and *Juluca* partly offset by *Tivicay* and *Triumeq*. Our broad portfolio includes new products *Cabenuva*, our long-acting injectable treatment, *Apretude*, our long-acting injectable for HIV prevention, and *Rukobia*, for highly treatment experienced patients.

We maintained our lead position in respiratory, amid higher demand during the pandemic and strong commercial execution. Respiratory sales were up 21% AER, 28% CER, to £2,863 million, with sales of *Trelegy* and *Nucala* each exceeding £1 billion per year for the first time. Approvals and launches for more eosinophil-driven disease indications for *Nucala*, and increased uptake of the therapy's home administration options, also boosted performance. *Trelegy Ellipta*, now in 48 markets, further increased its market share in chronic obstructive pulmonary disease, and made gains in asthma, aided by approval in Japan in late 2020.

[+](#) See Group financial review on page 62 for more detail

Oncology continued to show strong double-digit sales growth. Sales of *Zejula* were £395 million, up 17% AER, 22% CER, impacted by ongoing lower diagnosis rates due to the COVID-19 pandemic, particularly in the US. *Blenrep* was approved and launched in the US and Europe in Q3 2020, with ongoing launches throughout Europe in 2021. *Blenrep* sales globally totalled £89 million.

Immuno-inflammation sales of £885 million grew 22% AER, 29% CER with *Benlysta* sales up 22% AER, 29% CER to £874 million, benefiting from lupus nephritis launches in US and Japan in H2 2020.

Sales of Established Pharmaceuticals decreased 11% AER, 6% CER to £7,757 million.

Adapting to the COVID-19 pandemic

The COVID-19 pandemic continued to affect healthcare systems globally. It has seen the interruption of usual care in many healthcare facilities, and a delay in diagnosis and subsequent treatments. Patients with pre-existing medical conditions remain particularly vulnerable.

Amidst the ongoing restrictions on access to customers we continued to perform strongly across markets in areas like oncology. We used online and digital tools to maintain strong engagement with healthcare professionals and continued to meet the needs of our patients through patient support programmes.

Performance continued

Driving growth over the next decade

Our portfolio of pharmaceuticals is made up of innovative and established medicines and we have leading global positions in respiratory disease and HIV. We are developing our presence in other specialty therapy areas, including oncology and immuno-inflammation. Our broad portfolio supplies innovative and high-quality medicines, making a positive impact on the lives of millions of patients. Over the next five years we expect specialty medicines to be a key driver of GSK's growth.

This will be complemented by our newly defined General Medicines business which contains all of our primary care brands, including *Trelegy*, *Anoro* and our classic and established products which will support our broader investment in innovation and R&D.

Our HIV business is also positioned for growth as we remain innovation leaders. We anticipate continued growth in our long-acting injectable therapies, with *Cabenuva* for the treatment of HIV and *Apretude* for HIV prevention. Looking beyond 2026, we have multiple opportunities to sustain growth with our late-stage assets and we're excited about our early-stage pipeline of further innovative long-acting medicines.

Strengthening our capabilities and organisation

We want the best and brightest people in our specialty medicines marketing and medical teams. In 2021, a continued focus on appointing the right leaders led to us naming new general managers in 12 more countries (64 in all since 2017). We're attracting top external people with the right expertise to compete. In oncology alone, we hired more than 300 people (109 in commercial, 208 in R&D) in 2021, 117 of them into leadership positions. Leadership changes are improving the interface between commercial and R&D functions, where early commercial input to select and develop pipeline assets can create lasting value.

Optimised policies and collaboration between marketing, medical and sales teams have made our sales force more effective and competitive across key markets. Changes to our sales incentives policy made a positive impact in our sales teams, with higher engagement and personal accountability. Internal audits show we achieved this without compromising our ethical standards in engagements with healthcare professionals (HCPs). In January 2021, we introduced individual targets for more of our sales representatives to drive competitiveness.

We have used data and predictive analytics to deliver engaging customer interactions, and monitor and improve sales performance and market share.

Transforming interactions with healthcare professionals and patients

It's essential for us to maintain a strong connection with HCPs, so we can meet their needs, and those of their patients. As with many businesses, the pandemic has accelerated how we use technology to make ourselves more effective commercially. We've increased our use of virtual calls to keep HCPs informed about clinical data, launches and products in our pipeline. This helps them understand the science behind our products, and how best to use them.

In 2020, we ran successful pilots on how best to engage with HCPs in a coordinated way across online and traditional channels. In 2021, we scaled this up, with up to 15 brands in 23 markets now using a data-led, automatically orchestrated mix of traditional and digital promotion. In 2022, we'll deploy and refine this further. Using novel data sets in our commercial analytics and orchestration engine will let us tailor what we deliver, plus how and when, to each HCP. Our global, data-driven customer experience programme has been recognised externally, winning three silver awards in the International Customer Experience Awards 2021, and helps us improve competitiveness. In the EU, digital investment has led to an immediate 118% increase in HCPs attending webinars. And in China, we're reaching ten times more HCPs through WeChat than through our website alone.

As well as virtual meetings and educational activities, we've brought clinical experience to customers through our global speakers' programme. This follows feedback from HCPs, who told us they like to receive information in a peer-to-peer setting from expert practitioners.

We continue to engage with patients through patient support programmes. *Benlysta Cares* is our US programme with information and guidance, including text reminders, help with benefits and savings, nurse support and exclusive content to help patients taking *Benlysta* get the most from their treatment. By September 2021, we'd enrolled over 150% more patients than we had by the same time in 2020. *Benlysta Cares* has been shown to help more patients stick with the treatment. In 2021, the US Patient Engagement Liaison (PEL) team ran 262 patient education programmes with over 300,000 patients across all diseases. The PEL partnered with our national and local patient advocacy groups (PAGs) to give patients more disease awareness and resources so they can have productive conversations with care providers.

China Yinchuan COPD patient support programme is China's first digital COPD patient management programme enabled by big data, 5G and the internet of things (IoT). We've worked with the National Healthcare Commission (NHC) to embed smart digital technology in inhalers that helps doctors make sure patients follow their prescriptions.

Performance continued

Investing in our supply chain

Our supply chain transformation continues in line with our portfolio's shift to innovative specialty care products. New ways of working in response to the pandemic, and agile resource allocation to prioritise return on investment, helped us make more savings. This sets GSK up to be leaner, more productive and more financially efficient.

Investing in facilities, people and manufacturing partnerships will continue to help us launch specialty medicines rapidly and accelerate delivery across our portfolio. The new facility at our Barnard Castle (UK) site will start manufacturing medicines in the first quarter of 2022. Over the coming years, it will support manufacturing of the majority of the key existing and new biopharmaceutical assets in our pipeline. Since 2019, we have invested £88.4 million in the expansion of our next generation biopharma manufacturing facility in Upper Merion, Pennsylvania, which is set to open in 2022. Our expanded facility in Rockville, Maryland, will begin commercial supply in 2023.

A streamlined supply chain helps us control costs and allocate capital more effectively, with a bigger share now directed to specialty medicines. We have simplified our network and central functions, completing the divestment of the site in Poznań, Poland and the closure of Xochimilco, Mexico. Our commercial and supply chain teams are collaborating on initiatives to lower cost of goods sold (COGS), protect margin and increase profit. This work includes reducing active pharmaceutical ingredient costs, optimising capacity, improving processes and working with suppliers. By simplifying our portfolio, we've also reduced the brands we sell from over 450 to 247 in four years, and SKUs by 15%.

Investing in automation and AI/ML is improving efficiency by reducing variability in our supply chain, as demonstrated by us being on track to reach top-quartile days in inventory outstanding (DIO), which frees up working capital. We expect more digital investments in the next three years to help us improve planning productivity and accuracy, and reduce our inventory.

Keeping supply consistent and dependable

Our success rests on maintaining a high-quality and reliable supply of products for patients and consumers. We reduced total costs in the supply chain as we continue to increase productivity and simplify our supply network. Cost reductions together with sales growth have improved the gross profit margin by 1.2%.

We strengthened our internal and external quality oversight model and modernised our quality management system, which will simplify ways of working. We have improved deviation rates, and our pharmaceutical supply chain has continued to be in our industry's top quartile for FDA recalls per £1 billion of sales. All 70 regulatory inspections of Pharmaceuticals sites were satisfactory.

Because our safety performance is critical to our success we've taken extra measures to make serious incidents less likely and strengthen our safety culture. These include deploying Life Saving Rules to help all employees understand and apply basic safety rules to their work, launching an operational safety leadership programme and strengthening our safety monitoring systems.

Reliability of our supply has improved from a median performance of 95% on-time, in-full in 2018 to 97% in 2021. This was despite COVID-19 disruption. As well as applying supply chain segmentation, we've also improved performance by investing in technology like Resilinc, a tool using AI to highlight emerging supply chain risks, and piloting digital twins to optimise planning and increase operational efficiency.

We've accelerated our data, digital and analytics (DDA) adoption and use of enterprise systems for managing data and documents and planning operations. They include value chain mapping for supply chain planning, and cognitive supply chain models to lower logistics costs.

Vaccines

Our performance

Vaccines 2021 turnover was £6,778 million in the year, down 3% AER, but up 2% CER. As anticipated, our Vaccines business faced significant disruption during 2021, given governments' prioritisation of COVID-19 vaccination programmes and measures to contain the pandemic. This resulted in lower demand for routine adult vaccination, including *Shingrix* and hepatitis vaccines. Vaccines turnover excluding pandemic adjuvant sales decreased 9% AER, 5% CER to £6,331 million.

Shingrix decreased 13% AER, 9% CER to £1,721 million. Sales fell in the US and International. Sales grew in Europe, driven by Germany and launches in the UK, Spain and Italy. *Shingrix* was sold in 17 countries, including nine markets launched during 2021.

Hepatitis vaccines sales were down 20% AER, 16% CER to £460 million, adversely impacted by the de-prioritisation of routine US adult vaccination, increased hepatitis B vaccine competition and unfavourable CDC stockpile movements in the US, and by COVID-19-related travel restrictions in Europe and International.

Meningitis sales decreased 7% AER, 2% CER to £961 million driven primarily by unrepeatable International tender volumes for other meningitis vaccines. *Bexsero* sales were stable at AER, but grew 5% CER to £650 million, reflecting increased market share in the US. *Menveo* sales were up 3% AER, 9% CER to £272 million, primarily driven by 2020 cohort catch-up vaccinations and 2021 higher demand, as well as increased market share in the US.

 See Group financial review on page 64 for more detail

Performance continued

Adapting to the COVID-19 pandemic

The pandemic continued to dominate 2021 as highly transmissible variants emerged and countries around the world cycled in and out of stay-at-home orders. Countries with access to COVID-19 vaccines made them available to their adult populations and then children. Healthcare systems had to adapt significantly to enable this huge vaccination endeavour, which had repercussions across many aspects of health provision, including a lower priority on vaccines for diseases other than COVID-19.

The pandemic also meant we did not always have as much access to customers as usual. Despite this, we maintained our market share for key vaccines in strategic countries. We held virtual meetings with HCPs and attended other events virtually to provide educational support and material about vaccination. We continued to inform people about the importance of immunisation through disease awareness and branded campaigns for meningitis, shingles, and diphtheria, tetanus and pertussis (DTP).

Driving growth over the next decade

Our portfolio of marketed vaccines is the broadest in the industry. It includes more than 20 vaccines, helping to protect people worldwide from a range of diseases throughout their lives, including meningitis, shingles, flu, polio, measles and many more – and 90% of our vaccines by sales have an efficacy level of above 90%.

In commercial terms, vaccines tend to have a longer lifecycle than medicines and can generate significant revenues over decades. For example *Engerix*, our vaccine to help prevent hepatitis B virus infection, has been available for more than 30 years and will remain an important part of our portfolio. In November 2021 the CDC's Advisory Committee on Immunization Practices voted unanimously to recommend hepatitis B vaccination for all adults aged 19 to 59 years.

Vaccines is expected to be one of the largest drivers of growth for GSK, with high single-digit percentage sales growth (CAGR) anticipated over the 2021-2026 period. We aim to double revenues of *Shingrix*, our shingles vaccine, in that five-year period, and to double both meningitis and flu vaccine sales in the next decade, helping to protect millions of people from these diseases.

By 2026, we plan to launch several new vaccines, including our programme to help prevent RSV through the vaccination of older adults, a significant medical and commercial opportunity. We will support these goals by drawing on our strong manufacturing capability and scale, as well as our global reach and commercial execution.

Another area of focus has been attracting and retaining the right people in strategic areas and further strengthening our capabilities, including mRNA which is now the focus of approximately 250 of our people.

Digital capabilities

We continue to build our capabilities through Vaccine Virtual Days, bringing HCPs together, bringing us closer to our customers and sharing scientific discourse from the world's leading experts in vaccines. Through our new eCongress platform, we extended the second edition of this event to HCPs from more than 150 countries, including China, and offered translations in eight different languages. This attracted over 11,000 registrants, and we received a Net Promoter Score (HCP feedback score) that was above the industry standard. The event played a role in helping to improve and protect public health everywhere.

We also continue to work with Philips on its Pregnancy+ and Baby+ apps. Our partnership with Philips is live in 12 countries, reaching approximately 30 million parents and continues to be an effective tool for educating parents about the vaccines in our paediatric portfolio. Following this success, we launched a digital partnership in the fourth quarter of 2021 focused on adults. This time the partnership is with San Francisco-based Nextdoor, a neighbourhood network used by almost one in three households in the US.

Global momentum behind vaccination

COVID-19 vaccination programmes required countries and populations to adapt and learn – and we believe this will have a positive long-term impact on vaccinations more widely, particularly for adults. Attitudes to vaccination have shifted as well – our research among people aged 50 years and older in eight of our largest vaccine markets in 2021 showed an increase in positive attitudes to vaccination as a result of the pandemic.

Performance continued

There is a real opportunity for healthcare systems to harness this momentum because the need for vaccination remains strong. In the US, we commissioned and published a report with Avalere Health which showed that adolescents and adults may have missed more than 37 million doses of recommended vaccines between January 2020 and July 2021, compared to 2019. These findings demonstrate how routine immunisation in 2021 continued to lag below pre-pandemic levels. The original Avalere report was followed by the CDC's own analysis of missed vaccine doses, and calls from government, public policy groups and the media to prioritise the recovery of vaccination rates for diseases other than COVID-19.

Supply performance

We continue to strengthen our manufacturing capability to make sure we support the growth of our vaccines portfolio. Despite the supply chain disruptions caused by the pandemic, in 2021 we had another very strong year for supply performance.

We are proud of the fact that all our strategic vaccines sites are approved by multiple regulatory agencies including the FDA. In 2021, our network of 12 manufacturing sites, in nine countries, produced and delivered 767 million doses.

Throughout the year we continued to invest in this network, modernising and automating our filling and packaging activities, building our mRNA production capabilities and adding launch capacity for pipeline products such as RSV. We are also investing in the infrastructure needed for the future with a planned lyophilisation (freeze drying) unit at our site in Wavre, Belgium, which will support our manufacturing capacity for priority products and our innovation pipeline.

We have worked across our supply chain to reduce our end-to-end lead times, improve our agility in the marketplace and more effectively manage demand uncertainty. This close cooperation, from the shop floor to delivery to the end-customer, allows us to make better-informed decisions by sharing data, to free up cash through increased efficiency and to be more competitive in tenders with our customers.

By redesigning our supply chains, we are reducing lead times and making sure we have the right inventory at the right place to win in the marketplace. This is part of a multi-year effort to use our working capital more effectively.

We continue to apply a co-development model where colleagues in R&D and manufacturing work hand-in-hand to scale up production as effectively and efficiently as possible. An ongoing example is how we are preparing for an accelerated launch of our RSV candidate with investment in Wavre in both clinical and commercial activities.

We have made great strides in unlocking capacity and getting the most from our existing assets. A good example of this is our shingles vaccine, *Shingrix*, where we have improved yield and throughput across the supply chain. Reductions in lead times also mean we are now fully unconstrained on *Shingrix* supply, which will support our growth aspirations.

We have also met our COVID-19 commitments, scaling our pandemic adjuvant production to respond to fluctuating demand. This agility meant we delivered on our adjuvant agreements, and pandemic adjuvant sales made an important contribution to our revenue. (For more about our COVID-19 solutions, see page 21.)

At the same time, we've continued to accelerate our digital transformation, including investment in a manufacturing execution system. More than 50 production lines at ten sites are switching from paper batch recording to electronic. The system will be deployed over the next three years, with benefits including operational efficiency, lead-time reduction, and improvements in compliance, yield and stability.

This investment, along with many others, will accelerate data-driven decisions in manufacturing and supply. Examples of data analytics and technology improvements include robotic automation of our material handling activity, 'bots' to replace repetitive manual tasks, and automating the visual inspection of syringes and vials using AI/ML.

We are also embedding Lean Six Sigma tools and techniques into our processes, systems and capabilities to improve our ways of working.

The investments we're making in our manufacturing facilities and people will help us in many ways, for example ensuring that we have the right mRNA capabilities and talent in place. Together, these investments will help make our manufacturing ready to support a bright future in Vaccines.

Trust

Trust is one of our three long-term priorities. The more trust we build, the better we perform and the more value we create for shareholders, our people and society.

Our Trust priority covers our work across ESG factors, and it's integral to our overall strategy. Our approach to ESG helps us deliver sustainable performance and long-term growth, as well as building trust with our stakeholders (see Stakeholder engagement on page 44). It also reduces risk to our operations (see Risk management on page 46) and helps us make a positive social impact.

We have 13 commitments in the ESG areas where we can make the biggest difference. The commitments help us respond to challenges and opportunities in our industry and broader society (see External environment on pages 13 to 16). They also contribute to many of the UN Sustainable Development Goals, especially Goal 3: to ensure healthy lives and promote wellbeing for all, at all ages.

 [gsk.com](#): Our contribution to the SDGs

ESG governance

Our Board-level Corporate Responsibility Committee (CRC) oversees our progress against our commitments and how we're addressing the views and expectations of our stakeholders. The GLT and senior management are responsible for delivery of our Trust commitments and report regularly to the CRC on progress (see page 104).

Our approach to reporting

In this section, we report highlights of our 2021 progress against each of our 13 Trust commitments. We provide more detailed reporting and data on each commitment in our ESG Performance Report. This report also includes our UN Global Compact Communication on Progress, Global Reporting Initiative index, Sustainability Accounting Standards Board index and assurance statements for our social and environmental data.

 [gsk.com](#): ESG Performance Report

External benchmarking

We have maintained our acknowledged leadership in ESG, and this continues to be a key driver in our goal to deliver health impact and shareholder returns. Detailed below is how we perform in key ESG ratings that we are frequently asked about by investors.

- **Dow Jones Sustainability Index (DJSI)**: 1st in pharmaceutical industry group for 2021
- **S&P Global Sustainability Award**: Gold Class 2022
- **Access to Medicine Index (ATMI)**: Ranked 1st in ATMI in 2021, and an industry leader in the 2021 Antimicrobial Resistance Benchmark
- **FTSE4Good**: Member of FTSE4Good Index since 2004
- **CDP**: A- in Climate Change, B in Water, B in Forests (palm oil and timber) and Supplier Engagement Leader
- **Sustainalytics**: Low risk rating
- **MSCI**: AA rating
- **Vigeo Eiris**: Ranked 2nd in the pharmaceuticals sector

Using our science and technology to address health needs



Commitment	Progress in 2021
<p>New medical innovations Develop differentiated, high-quality and needed medicines, vaccines and consumer healthcare products to improve health</p>	<ul style="list-style-type: none"> – 2021 saw three major approvals for medicines, eight phase III starts and have 64 vaccines and medicines in our pipeline. For more details, see the Innovation section on pages 17 to 28.
<p>Global health Improve global health impact through R&D for infectious diseases that affect children and young people in low-income countries, focusing on HIV, malaria and TB</p>	<ul style="list-style-type: none"> – Our commitment to improve global health impact through R&D for infectious diseases and access to medicines and vaccines has been recognised in the Access to Medicines Index (ATMI) where we have ranked number one for the last seven years, every year since its inception. – Our RTS,S/AS01e malaria vaccine is the first and only vaccine shown in long-term clinical trials to reduce malaria in children. In 2021, the WHO recommended broader deployment of the vaccine, to reduce illness and deaths in children in sub-Saharan Africa and other regions with moderate to high malaria transmission. This followed new data which showed that the vaccine, in combination with seasonal antimalarials, lowers clinical episodes of malaria, hospital admissions with severe malaria and deaths by around 70% compared to antimalarials alone. In December 2021, Gavi announced its decision to provide funding for the procurement and introduction of the vaccine into routine child immunisation programmes in Gavi eligible countries. – We made good progress in improving availability of age-appropriate HIV treatment options for children around the world. A generic dolutegravir dispersible tablet was made available in key sub-Saharan African countries, less than a year after US FDA approval of this treatment. This work was facilitated by our public-private partnership with the Clinton Health Access Initiative, Unitaid and two generic manufacturers: Mylan (now part of Viatrix group) and Macleods. – Shigella is the second biggest cause of morbidity and mortality from diarrhoea worldwide after rotavirus, and no approved vaccine is widely available. In late 2021, the first subjects were vaccinated with our quadrivalent shigella vaccine candidate, in a first-time-in-human, clinical phase I/II study. Our goal is to develop an affordable vaccine giving broad protection against the most prevalent shigella serotypes. – We have the richest pipeline focused on global health priority diseases in the industry, including ten medicines and vaccines currently in clinical development. – We launched a collaboration with Novartis in 2021, Project Africa Gradient, to support scientific research on the link between genetic diversity and patients’ response to malaria and tuberculosis drugs in three African regions.
<p>Health security Help the world to better prepare for future disease outbreaks with pandemic potential, and tackle antimicrobial resistance</p>	<ul style="list-style-type: none"> – We have taken a broad approach to developing COVID-19 solutions. To see how we have applied our science to finding COVID-19 innovations, see page 21. – We were one of five companies to sit on the Pandemic Preparedness Partnership Steering Group, convened by the UK Government in 2021, bringing together industry, international organisations and experts to advise G7 governments on how to speed up the response to a future pandemic. The Trinity Challenge, of which we were a founding member, also announced the winners of its inaugural competition to find innovative ways to better predict and prevent outbreaks of disease, using data and analytics. Winners included the VaccineLedger, which tracks vaccines from manufacture to patient, using blockchain technology. – Our commitment to preventing antimicrobial resistance (AMR) was recognised by the Access to Medicine Foundation’s AMR Benchmark, with GSK an industry leader for the third consecutive time in 2021. The benchmark highlighted in particular the diversity and depth of our R&D pipeline, particularly our AMR-relevant vaccines.

⊕ For full details of our progress against these commitments, please see our ESG Performance Report

Making our products affordable and available



Commitment	Progress in 2021
<p>Pricing Improve the health of millions of people each year by making our products available at responsible prices that are sustainable for our business</p>	<ul style="list-style-type: none"> – In developed markets, pricing of all our new products reflects the value they deliver to patients, healthcare systems and wider society compared to available alternatives, and supports our work to meet future healthcare needs. We offer patient support and, in the US during 2021, provided prescribed vaccines and medicines to more than 87,000 low-income uninsured, underinsured, and Medicare Part D patients through GSK and ViiV Healthcare's Patient Assistance Programs Foundation. – For pricing in low income countries (LICs) and lower middle income countries (LMICs) we use innovative pricing structures to extend product reach. Our vaccines business has a tiered pricing model based on World Bank gross national income country classifications, and we do not file patents for our medicines or enforce historic patents in low-income countries LICs.
<p>Product reach Use access strategies to reach 800 million underserved people in lower income countries with our products by 2025</p>	<ul style="list-style-type: none"> – Our access strategies continued to reach many more underserved people in lower income countries. We made good progress against our target in 2021, and have now reached over 323 million people with our products using access strategies. These strategies include our advanced market commitments to provide our vaccines to lower income countries through Gavi. Our partnership with Gavi includes supplying <i>Cervarix</i>, a critical tool in lower income countries for addressing cervical cancer, <i>Synflorix</i>, our pneumococcal vaccine, and <i>Rotarix</i> our vaccine against rotavirus, the most common cause of severe diarrhoeal disease in children under five. – In 2021, we also made a commitment to supply <i>Rotarix</i> through the Humanitarian mechanism for civil society organisations serving the vaccination needs of refugee and other emergency situations. This builds on our existing commitment to the Humanitarian Mechanism for <i>Synflorix</i>. – ViiV Healthcare has voluntary licensing agreements with generic manufacturers. These have allowed at least 21.3 million people living with HIV across 119 LICs and LMICs access to a generic product containing dolutegravir by the end of 2021. – We have donated over ten billion albendazole tablets, including 526.4 million in 2021, to support efforts to end lymphatic filariasis and control intestinal worms in school-age children.
<p>Healthcare access Partner to improve disease prevention, awareness and access to healthcare services for 12 million people by 2025</p>	<ul style="list-style-type: none"> – We have a number of partnerships with NGOs and multilateral organisations to improve disease prevention, awareness and access to healthcare services. By 2021, these programmes reached 13.9 million people. Over the next year we're developing an ambitious global health strategy for GSK which will include setting a new target. – Our partnership with Save the Children increased its emergency preparedness and response capability, investing in data analytics and early-action protocols to provide efficient and timely healthcare in crises. Our partnerships with Save the Children, Amref Health Africa and CARE International have trained more than 108,000 front-line health workers since 2011. They reached over 17.3 million people with prevention and treatment for infectious diseases, plus providing maternal/child healthcare, vaccination, hygiene sanitation and nutrition. – ViiV Healthcare's Positive Action programme aims to explore ways to support people-centred and community-led interventions to help meet the UN targets to end AIDS by 2030. In 2021, the programme reached approximately 274,000 people and funded 66 grants across 28 countries.

 For full details of our progress against these commitments, please see our ESG Performance Report

Being a modern employer



Commitment	Progress in 2021
<p>Engaged people Achieve and maintain a competitive employee engagement score by 2022</p>	<ul style="list-style-type: none"> – In early 2022, we launched a new all-company survey focused on purpose, strategy, engagement and culture progress. Engagement remains high at 78% and above the general industry benchmark, settling back to 2019 levels after an extra boost during the early phases of the pandemic.
<p>Inclusion and diversity Accelerate our progress on inclusion and diversity, including aspirational targets for female and ethnically diverse representation in senior roles by the end of 2025, and recognition as a disability confident employer and in LGBT+ indices</p>	<ul style="list-style-type: none"> – Our aspiration is that women hold at least 45% of VP and SVP roles by the end of 2025. In 2021, women held 40% of roles at VP and above, up from 38% in 2020. The FTSE Women Leaders ranking showed that we are in the top 10% of FTSE 100 companies based on the proportion of women on our Board and in leadership positions¹. We also published our fifth annual UK 'gender pay gap' report in 2021, which showed that we continue to outperform the national average. – Our aspiration is to have at least 30% ethnically diverse leaders in our roles at VP and above in the US and at least 18% in the UK, by the end of 2025. Our representation as at 31 December 2021 showed that we had 12.9% ethnically diverse leaders in VP and above roles in the UK, up from 11.1% in 2020. In the US, we had 27.1% ethnically diverse leaders in roles at VP and above, up from 23.2% in 2020. This progress is supported by our rigorous focus on equal employment opportunity. We have launched programmes such as Accelerating Difference – Ethnic Diversity, which supports the development of ethnically diverse employees, building on their strengths and addressing development gaps through individual and group coaching. From 2023 we will publish GSK's 'ethnicity pay gap' data for the UK. – We have developed a three-year plan to increase our disability confidence. As part of this we have rolled out our workplace adjustments programme to our biggest markets, making it available to over 40% of our employee population so far. We also signed up to the International Labour Organization's Global Business and Disability Network, to promote the inclusion of people with disabilities in workplaces. – We continue to be recognised in global LGBT+ indices, including being designated as a Best Place to Work for LGBTQ+ Equality in the Human Rights Campaign Foundation's 2021 Corporate Equality Index.
<p>Health, wellbeing and development Be a leading company in how we support employee health, wellbeing and personal development</p>	<ul style="list-style-type: none"> – GSK's Leadership Team has continued to oversee our COVID-19 response, including the health, wellbeing and engagement of our employees in all our locations. We continuously monitor the impact of COVID-19 on our employees and as public health vaccination programmes continue, we're helping to educate and raise awareness about them. Where there are no public health vaccination programmes available, we have committed to offer vaccinations at minimal cost to our employees and their eligible dependents. – We continued to make mental health training available for all our employees, and 66% of managers have completed it since it launched in 2019. We make confidential support available through our global Employee Assistance Programme, and we successfully piloted a new wellbeing programme focused on resilience strategies and energy management and will continue to implement a global rollout in 2022. – We run health and safety training for our people, which covers how to identify and take measures to reduce workplace risks. In 2021, our reportable injury and illness rate remained at 0.16 per 100,000 hours worked and there were no fatalities. – All our employees have access to our internal development portal – the Keep Growing Campus. This offers extensive development courses, videos and articles on a range of topics, including decision making, building change capability, coaching, influencing others and health and wellbeing. In 2021, our people completed 84,493 leadership and business courses.

1 Data on employees by gender (including total employees, Board and management) is provided in our non-financial information statement on page 54

For full details of our progress against these commitments, please see our ESG Performance Report

Being a responsible business



Commitment

Progress in 2021

Reliable supply

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

- It’s a priority to make sure there is a high-quality and reliable supply of our products for patients and consumers. This has continued to be of high importance throughout the pandemic, which has put increased strain on global supply chains. For more on how we manage continuity of supply, see pages 31 and 33.
- Our quality management systems allow for continuous improvement, helping us to keep up high standards for product quality and safety. In 2021, we had 171 external regulatory inspections at our manufacturing sites and local operating companies – many conducted virtually because of the pandemic. We respond to all inspection findings, no matter how minor. We also ran 1,833 quality audits of suppliers, and 312 audits of clinical trials run by, or on behalf of, GSK to assess their quality and safety. Where we find areas to improve, we create improvement plans and track their progress.

Ethics and values

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

- Everyone at GSK has to complete training on what the company expects from them. In 2021, we renamed this mandatory employee code of conduct training ‘Working at GSK’ and improved the content to focus on risk and compliance, as well as diversity and creating an inclusive workplace. In 2021, 99.4% of employees and 92.9% of contract workers completed this training.
- Anyone inside or outside GSK can raise concerns or speak to an independent third party through our Speak Up reporting channels, confidentially or anonymously, without fear of retaliation. We continue to take every concern raised seriously, and review every report to identify whether we need to investigate formally. If investigations show an employee has breached our policies, we take action.
- In 2021, we changed the way we report disciplinary data and expanded the scope to include cases which were initiated in previous years. In 2021, 2,065 employees had concerns raised against them, with an additional 757 employees with concerns raised from prior year’s open cases. We disciplined 1,176 employees (298 of whom initially had concerns raised in previous years), an increase from 2020 primarily driven by late completion of mandatory training. Of these, 265 either left voluntarily or were dismissed, and 923 received a written warning. In other cases, we took action short of a written warning. At the end of 2021, we had 427 cases awaiting investigation or a disciplinary decision.
- During 2021, we undertook an independent assessment of our approach to managing human rights, to help us better understand how we can continue to improve how we manage our priority human rights areas. The assessment showed that there is good understanding of our human rights impacts and we will be reviewing and addressing the findings in the year to come.
- How our third parties act can have a direct impact on us meeting our priorities. It is important to manage our relationships with them well, including the way we choose, contract and monitor them. Our Third-Party Oversight (TPO) programme evaluates and mitigates the risks introduced through engaging third-parties to provide goods or services for GSK. We complete assessments for the portion of our third parties that may present greater potential risk, for example, interactions with government officials or annual transfers of value above certain pre-defined limits. In 2021, we ran more than 12,800 assessments of these higher risk third parties across more than 20 risk areas, identifying over 55% as high-risk in one or more areas. Most of these third parties are goods and services providers (70%), contract manufacturers and external suppliers (2%) or distributors and wholesalers (9%). We are evaluating our TPO programme to simplify the upfront assessment and broaden its focus to risk management throughout the third-party relationship, using user feedback and findings from our ongoing monitoring.

For full details of our progress against these commitments, please see our ESG Performance Report

Trust continued

Being a responsible business continued

Commitment	Progress in 2021
Data and engagement	<ul style="list-style-type: none"> – In 2021, we simplified our privacy notices and made them easier to access through a portal on all our websites. Privacy is a key part of the mandatory ‘Working at GSK’ annual training that all our people have to complete. This helps employees to understand that everyone at GSK is responsible for handling personal information in the right way. – Our patient panels give us insights and advice, as well as building trusting, long-term relationships with patients and carers that help us develop medicines that meet patients’ needs. In 2021, we ran panels in disease areas including cancer, rheumatoid arthritis and hepatitis B. – As part of our commitment to data transparency for our clinical studies, we have published 2,776 clinical study reports and 6,239 summaries of results. We have listed 2,550 studies for data sharing via www.vivli.org and www.clinicalstudydatarequest.com. – We want our clinical trials to be as representative and accessible as possible, reflecting the patient populations with the disease including age, race, ethnicity, sex and gender. Over the past five years, we have endeavoured to improve patient diversity in our clinical trials by implementing training and support to personnel at investigator sites including awareness training on conducting clinical trials in under served communities. In 2021, we formed a Global Demographics and Diversity team to coordinate our learning about epidemiology, burden of disease and health equity, and how they relate to age, sex, gender, race and ethnicity, so we can apply these lessons when planning our trials.

Environment

Have a net zero impact on climate and a net positive impact on nature by 2030

Climate

- To achieve our ambitious net zero goal we have set targets across our value chain carbon footprint. The targets have been accredited by the Science Based Targets Initiative as aligning to a 1.5°C pathway.
- In 2021, we reduced our operational carbon emissions (scope 1 and 2) by 15% compared to 2020, primarily through increased use of renewable energy¹. In September 2021, we announced a £50 million investment in UK and US manufacturing sites to secure renewable power generation. This includes new wind turbines and a 20-year power purchase agreement to supply solar electricity for our Irvine facility in Scotland, and solar energy for our Oak Hill facility in New York.
- In 2020 (our latest available data), emissions from our suppliers, logistics and people using our products (scope 3) reduced by 8% reflecting the evolution of our product portfolio and reductions in business travel and commuting as a result of the pandemic. Our metered dose inhalers for asthma and COPD account for 40% of our carbon footprint so in 2021 we started an R&D programme to find a lower-impact propellant that could reduce emissions from them by about 90%.

Nature

- Collaboration is an important part of our strategy and during the year we joined nine other global pharmaceutical companies to launch the Energize programme. This is the first collaboration of its kind to use the scale of a single industry’s global supply chain to drive greater use of renewable electricity. We were a Principal Partner of the UN Global Climate Change Conference (COP26) in Glasgow and we championed the need for action on climate and nature to protect health. We also joined the Health Systems Task Force of the Sustainable Markets Initiative to drive collective action in digital healthcare, supply chains and patient care pathways to accelerate the shift to net zero.
- We make our Climate-Related Financial Disclosure on pages 49 to 52 along with our energy and carbon emissions data. GSK’s carbon reduction pathway to become net zero by 2030 can be found on gsk.com.

¹ Energy and carbon emissions data is provided in our Climate-related financial disclosure on pages 49 to 52.

 For full details of our progress against these commitments, please see our ESG Performance Report

Trust continued

Being a responsible business continued

Commitment	Progress in 2021
Environment continued	<ul style="list-style-type: none">– We are involved in developing standardised guidance on measuring our impact on nature through working with the Science Based Targets for Nature Initiative and the Taskforce on Nature-related Financial Disclosures (TNFD). We will achieve our net nature positive goal by reducing our environmental impacts across water, materials and biodiversity and investing in protecting and restoring nature.– In 2021, we reduced overall water use in our operations by 16% compared to 2020, and by 21% in sites in high water stress regions. 91% of our sites are now good water stewards, in line with the Alliance for Water Stewardship's definition. During the year, we joined the Water Resilience Coalition (WRC), partnering to develop our approach to water neutrality in water-stressed regions and to deliver water resilience projects on the ground. Our Cape Town site in South Africa is the first in our network to embark on the journey towards water neutrality, and we are working with the WRC and local partners to address shared water challenges by clearing alien plant species and replanting local flora to create greater resilience in the basin.– In 2021, we reduced the waste from our sites by 7% and recovered 43% of these materials through circular routes like reuse or recycling. Consumer Healthcare launched 40 million recycle-ready toothpaste tubes in over 20 markets.– In 2021, we piloted our approach to biodiversity at our Stevenage site in the UK, working in partnership with Kew Gardens to deliver a 39% increase of biodiversity at the site. We aim to have measurable and effective biodiversity plans in place across all GSK sites by 2025.– In 2021, we joined the public-private Lowering Emissions by Accelerating Forest Finance (LEAF) coalition which contributes high-quality emissions reductions by supporting countries to protect their tropical forests from deforestation.

 For full details of our progress against these commitments, please see our ESG Performance Report

Consumer Healthcare

Our future standalone Consumer Healthcare business, Haleon, which is on track to separate from GSK in mid-2022, will be a new world leader focused on consumer healthcare.

- Consumer Healthcare had 26 first-market launches for new innovations in 2021
- Total 2021 turnover £9.6 billion -1% AER, +4% CER (excluding brands divested/under review)
- E-commerce represented 8% of total sales
- Delivered 3.7 billion consumer healthcare products
- Committed to producing one billion recyclable toothpaste tubes by 2025
- Significant investment in on-site solar power towards goal to source 100% of our electricity from renewable sources by 2025
- Announced growth ambitions of 4-6% annual organic sales growth in the medium term, sustainable moderate margin expansion and high cash conversion

A sector more relevant than ever

Global consumer healthcare is a growing, £150 billion-plus market. Events of the last two years have underscored the industry's importance. The pandemic, which continues to have an impact across the world, means consumers are focusing more on health and wellness, whether it's managing their symptoms, or proactively looking after their wellbeing with vitamins, minerals and supplements.

Self-care supports healthcare

The burden on healthcare systems is increasing, driven by an ageing population and a rising middle class population. The consumer healthcare sector, particularly over-the-counter (OTC) products, play an important role in addressing this challenge. Data shows that for every \$1 spent on OTC medicines in the US, the healthcare system saves over \$7 which amounts to \$146 billion annually.

The opportunity for a standalone consumer healthcare company

The consumer healthcare sector's role in supporting broader public health presents a significant opportunity for a standalone company focused on consumer healthcare.

In 2018, we announced our plan to separate our Consumer Healthcare business as a UK-listed company through a demerger.

Since then, we have made significant progress in preparing for that separation, which is due to happen in mid-2022.

In June 2021, we confirmed our intention to separate through a demerger. In July 2021, Brian McNamara was named as CEO-designate for the new Consumer Healthcare company, and in December 2021 Sir Dave Lewis was appointed Chairman designate. In February 2022 we laid out our strategic priorities, key growth drivers, detailed financial information and the name, Haleon, for the future Consumer Healthcare business. See gsk.com for information.

Passing key milestones and looking ahead

Despite the challenges we've all faced during the pandemic, we successfully completed the integration of Pfizer Consumer Healthcare in 2021 with no delay to timings as well as over-delivering on our synergy targets. This was a complex integration which impacted multiple parts of our business including commercial, manufacturing and R&D. The completion marked a major milestone in our separation planning.

Our new Consumer Healthcare company, Haleon, will be UK-based and listed, and in October 2021 we announced proposals for new company headquarters to be located in Weybridge at a newly built campus which will also feature an innovation centre. Due to open at the end of 2024, subject to consultation and planning approvals, our ambition is for it to reflect our ambitious sustainability targets that we set out in 2020.

We are set up for success. We have grown from a business with about £6 billion in annual sales and an operating margin of 11.3% in 2015, to one with sales of £9.6 billion and an operating margin of 23.3% in 2021; a world-leading consumer healthcare business.

An industry-leading portfolio

As a world leader in consumer healthcare, we hold leadership positions in the five categories that we operate in: oral health¹; vitamins, minerals and supplements (VMS); pain relief; respiratory health; and digestive health.

Our growth strategy is based on prioritising investment in our nine power brands and a number of other strategically important brands concentrated in key countries and regions. Our previously described operating model has been designed to drive the performance of these brands. Through the divestment of low growth brands, we have a focused portfolio.

Geographically, we are number one or two in 70% of the OTC and VMS markets we operate in.² This includes our priority markets in the US and China.

1 Therapeutic oral health segment

2 Nicholas Hall's DB6 Consumer Healthcare (OTC/VMS) Database, 2020 Store and E-commerce sales

Consumer healthcare continued

2021 performance

Consumer Healthcare turnover in the year of £9,607 million decreased 4% AER and was stable at CER reflecting dilution from divestments given the completion of the portfolio rationalisation at the end of Q1 2021. On a two-year CAGR, sales excluding brands divested/under review grew 4% overall, despite the adverse impact of the COVID-19 pandemic.

Sales excluding brands divested/under review decreased 1% AER but increased 4% CER reflecting the underlying strength of brands across the portfolio and categories, and continuing growth in e-commerce. Overall, sales benefited from strong growth across all categories excluding respiratory health which was negatively impacted in Q1 2021 by the historically low cold and flu season. The decrease in cold and flu sales resulted in an approximately 1% drag on full-year growth.

International sales excluding brands divested/under review grew high single digit on a CER basis with double digit growth in emerging markets including India, China, the Middle East and Africa. Excluding brands divested/under review, US sales grew low single digits but European sales were stable on a CER basis. Both regions were particularly negatively impacted by the historically low cold and flu season during Q1 2021.

⊕ See Group financial review on page 65 for more detail

Science-based innovation to address unmet consumer needs

Innovation continues to be a driver of growth. In 2021, we delivered major innovations based on trusted science and human understanding to meet the needs of consumers across the world. In total, we delivered 26 first-market launches of new innovations, and more than 350 brand-market launches overall.

Our research shows that a third of tooth sensitivity sufferers are searching for a trusted, long-lasting solution to address the cause of the pain, rather than just treat the symptoms. To address this key consumer need, we innovated to develop and launch *Sensodyne Repair and Protect Deep Repair* in more than 25 markets. This is a product scientifically proven to provide deep and targeted repair within the dentine tubules – holes in the tissue beneath the tooth enamel that are the source of the pain – while also providing long-lasting protection from sensitivity.

In oral health, we have also expanded our Gum Health expert offering under our *parodontax* brand in the US. Research shows a third of people globally suffer from bleeding gums, which may be a sign of gum disease. Our *parodontax Active Gum Repair* innovation is clinically proven to help reverse the early signs of gum disease. It also strengthens the appeal of the brand to more consumers with gum problems by reinforcing our credentials with dental experts.

The COVID-19 pandemic has also accelerated a consumer shift towards greater proactivity in managing their health and wellness, with research highlighting that 22% of consumers, in the US for example, took more supplements in 2020 than they did in the prior year. Research also uncovered that more than 85% of *Centrum* consumers favour solutions which are more targeted than a multivitamin. Based on this insight, we launched tailored solutions that are scientifically blended for *Centrum* in a number of key markets. In Australia we moved beyond 'the multivitamin' and launched a new *Centrum Benefits* range with multi-ingredient combinations in order to cater for consumer needs across mind, body and beauty including Mind & Memory, Rest & Renew, Immune Defence & Recovery and Collagen Boost & Glow. In China we successfully launched *Centrum Dual Probiotics*, a proposition that is specially designed to appeal to the growing consumer trend around gut health and the body's self-defence power. In the US, we continued to innovate in new formats by expanding the *Centrum Minis* and *Centrum Gummies* portfolios, including the launch of *Centrum Organic Multigummies*. These innovations help us evolve the brand from a single multivitamin pill and bring a number of personalised solutions – all based on trusted science and informed by clinical data.

We have continued to see an increased interest in our *Emergen-C* brand in the US, as consumers continue to look for ways to support their immune health. Our research revealed that consumers are looking to botanicals, for their natural qualities, in order to support their wellness goals. We launched a formulation which combines the natural goodness of plant-based botanicals and all the nutrients from our core *Emergen-C* formula with antioxidants, B and C vitamins and electrolytes.

We also continue to invest in locally relevant innovation. In China, one of our key markets, we launched *Contac Multi-Symptom*. This innovation, the biggest OTC launch (by sales) for our business in China in 2021, provides fast relief from multiple cold and flu symptoms. *Contac Multi-Symptom* comprises three active ingredients in a single pill to relieve seven cold and flu symptoms: fever, headache, sneezing, runny nose, limb pain, sore throat and nasal congestion.

Investment in digital driving growth

The pandemic has also seen an explosion in digital commerce and digital engagement. We have been well positioned to capture that digital opportunity.

E-commerce sales grew in the mid-20% range in 2021 versus 2020. Overall, e-commerce represents 8% of total sales. We saw good growth in some of our key e-commerce markets including China.

We also invested in capabilities around digital media. A significant proportion of our total advertising spend is now in digital media, allowing us to be more efficient and effective in targeting our consumers.

Consumer healthcare continued

A purpose and culture guiding all we do

We serve hundreds of millions across the world and, through our brands, have a significant effect on their everyday health. Our future standalone company will be rooted in a purpose to deliver better everyday health with humanity. This will guide everything we do and the choices we make.

Our success depends on creating the right culture. As a consumer healthcare business, it's clear that what we do matters.

Our culture starts with always doing the right thing. Acting with integrity is non-negotiable, and that means we can always be proud of how we operate. Our culture focuses on three behaviours:

- **Go beyond** – this is about our hunger and desire, our drive to be better, to move with pace, and to outperform the competition.
- **Do what matters most** – this is about prioritising the important things and challenging the unnecessary.
- **Keep it human** – this is about our dedication to the consumers and customers we serve. But, equally important, it's about our dedication and commitment to each other, which demands unmatched understanding and empathy.

Building the right culture starts with having a diverse workforce and creating an inclusive environment where colleagues can thrive. We believe that inclusion and diversity (I&D) leads to business success by unleashing the enormous potential of all our people and strengthening our ability to respond to the differing needs of our patients and consumers.

Our commitment to accelerate our progress on I&D remains a priority, including working towards aspirational targets for female and ethnically diverse representation in senior roles by the end of 2025.

Running a responsible business

Having a strong ESG strategy and performance will be a critical expectation our future standalone company. It is an integral part of how we live our purpose – to deliver better everyday health with humanity – and a key pillar of our strategy. ESG is increasingly important to our stakeholders.

The health of the world affects the health of people. People can't enjoy better everyday health in a world where our environment is under threat and society is increasingly unequal and divided, with heightened economic inequality manifesting itself in growing health inequalities. The focus of our ESG strategy is therefore to tackle the environmental and social barriers to everyday health.

- **Environmental:** by tackling carbon emissions and climate change, developing more sustainable packaging and using trusted ingredients which are sustainably sourced, we are taking steps to create a healthy environment for people to live in.
- **Social:** by improving health inclusivity; tackling the bias, discrimination and prejudice which holds people back from everyday health and educating and empowering people towards better, sustainable self-care, we will help create a healthy social environment for people to live in.
- **Governance:** by defining our strategy and governance to reflect increasing stakeholder expectations; supported by the appointment of a Board led by Sir Dave Lewis, who brings a wealth of international consumer sector experience.

This year, we have step-changed action on sustainability, including significant investment in on-site solar power as part of our goal to source 100% of our electricity from renewable sources by 2025, committing to make a billion toothpaste tubes recyclable by 2025 and achieving full palm oil derivatives accreditation by 2025. Through our *Otrivin* Actions to Breathe Cleaner Project, we are campaigning to help children learn more about air pollution and identify the best way to minimise our exposure to it. We scaled up our education on this topic to a broader population through a high profile presence at the 2021 COP26.

In 2022, ahead of becoming a standalone company, we will continue our work to define our Social Sustainability Strategy and Governance, reflecting increasing stakeholder expectations.

Stakeholder engagement

Engaging and building trust with a broad range of stakeholders is vital for our long-term success.

Here, we summarise who our key stakeholders are, how we engage with them, which issues matter most to them and how we're responding. To see how we enable the Board and management to understand stakeholders' views and include them in decision making, see our section 172 statement on page 116.

Patients and consumers

Insights from patients and consumers enable us to develop products that better meet their needs.

How we engage

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 including consumer sensory labs.

What matters to patients and consumers

Differentiated product innovation based on patient and consumer needs.

Access to a reliable supply of high-quality products.

Pricing of healthcare products, particularly out-of-pocket expenses.

What we're doing

Strengthening our pipeline of innovative products.

Maintaining high standards for product quality and safety.

Continuing to take a value-based approach to pricing to balance reward for innovation with access and affordability.

Investors

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.

How we engage

Ongoing communications including the AGM, quarterly results calls, in-person and virtual roadshows and detailed company information online.

One-to-one meetings between Board members, senior executives and institutional investors.

Biennial investors and analysts perception study.

What matters to investors

Sustainable performance for long-term shareholder value.

Understanding how our R&D strategy is successfully developing our pipeline.

Commitment to strong management of ESG issues.

What we're doing

Creating two new leading companies through demerger in 2022.

Good financial performance and transparent reporting.

Business and R&D updates and events on key pipeline milestones.

Driving leading-edge ESG performance and a culture of ambition, accountability and responsibility.

Healthcare professionals and medical experts

We work with healthcare professionals (HCPs) and medical experts to understand the patients' journey, partner to resolve unmet medical needs and make sure that our products are used safely and effectively.

How we engage

Scientific dialogue to increase understanding of disease management and patient experience.

Providing high-quality, balanced information about our vaccines and medicines.

Collaborating on clinical trials and research.

What matters to HCPs and medical experts

Access to product and scientific information.

Responsible sales and marketing practices.

Safety, efficacy and differentiated innovation.

What we're doing

Increasing the use of digital channels to deliver more personalised and effective sharing of information to HCPs.

Ensuring we attract and retain the best talent and uphold responsible sales and marketing standards.

Using HCP insights on disease management and patient experience to inform the development of our vaccines and medicines.

R&D partners and academia

We partner with scientific institutions, national health systems, academia and industry partners to help us develop the most effective vaccines and medicines to meet unmet patient needs.

How we engage

Collaborating with outstanding scientists at academic institutions to accelerate discovery and development of new vaccines and medicines.

Licensing advanced technology and potential vaccines and medicines from biotechs.

Establishing joint ventures to strengthen innovation and improve efficiency.

What matters to R&D partners and academia

Finding the right partner to identify and accelerate a potential vaccine or medicine to reach the patients that need it.

Pushing the science and technology as far as it can go to advance human health.

Dissemination and advancement of scientific knowledge.

What we're doing

Working with world-leading experts at biotechs, research institutes and universities to improve drug and vaccine discovery to increase the productivity of our R&D pipeline.

Collaborating with a broad range of partners to support our R&D focus on the science of the immune system, human genetics and advanced technologies (see pages 17 to 27).

Supporting the advancement of scientific knowledge with our long-standing commitment to sharing research see page 39.

Stakeholder engagement continued

Governments and regulators

We work with governments and regulators to advocate for policies that encourage innovation and promote efficient management of healthcare spending.

How we engage

Meeting with regulatory bodies throughout the development process to ensure high-quality new products.

Engaging with government health agencies to demonstrate the value of our products for patients and economies.

Working with governments to protect and strengthen the operating environment for life sciences innovation and new medicine and vaccine launches.

Participating in international efforts to address global health threats, such as the pandemic.

What matters to governments and regulators

Investment in innovation and life sciences.

Scientific funding and collaboration.

Medicines pricing and reimbursement.

Public health threats – COVID-19 and antimicrobial resistance (AMR).

Investment in preventive health and strengthening health systems.

What we're doing

Engaging in US policy pricing/reimbursement debates and, with phRMA, commenting on legislative proposals for healthcare reform.

Partnering across industry and governments to tackle AMR.

Engaging with governments, including the US, UK and EU regarding production and procurement of COVID-19 vaccines and treatments.

NGOs and multilateral organisations

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 and deliver on our ambitions for patients.

How we engage

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 lower income countries.

Partnering to strengthen health systems in lower income countries and drive progress on global health priorities.

What matters to NGOs and multilateral organisations

Access to vaccines and medicines.

UN SDGs and WHO targets for specific disease areas.

Universal health coverage and the future of health systems.

Financing for global health, including COVID-19 solutions.

What we're doing

Focusing on our unique role 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 our partnership with Gavi to support access to vaccines in lower income countries.

Leveraging our community investment programmes to support our scientific expertise and deliver greater impact for patients.

Suppliers

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.

How we engage

Regular direct engagement with suppliers to ensure they support GSK's strategies and targets.

Engaging with suppliers through our Third-Party Oversight programme and by conducting in-depth audits.

Participating in forums such as the Pharmaceutical Supply Chain Initiative and the Consumer Goods Forum to improve supply chain sustainability.

What matters to suppliers

Prompt payment to agreed terms.

Understanding GSK policies to ensure compliance.

Opportunities to innovate and grow the relationship.

What we're doing

Engaging with suppliers to develop improvement plans and track progress when we identify areas for improvement.

Providing proactive support through our third-party EH&S team in countries where our priority suppliers are located.

Our people

We involve and listen to our people to increase employee engagement, drive business performance and retain talented people.

How we engage

Regular interactive broadcast events with the GLT and other senior leaders.

Facilitating dialogue and collaboration through our internal communications platforms, Works Councils, Employee Forums and Employee Resource Groups.

Providing feedback to managers via the global all-company survey and One80 questions.

What matters to our people

Our purpose and being able to see the difference we make.

Having a great line manager.

Feeling understood and valued.

Being part of an inclusive and diverse workplace.

What we're doing

Fostering a culture of accountability and ambition, underpinned by integrity and humanity.

Launched new leadership programmes to help managers motivate, focus, care for and develop their teams.

Campaigns and programmes to support safety, mental wellbeing and enable work-life balance.

Driving our diversity and inclusion activities in support of new aspirational targets.

Risk management

Our risk management and internal control framework is well-embedded, mature, and continuously reviewed and overseen by the Board.

Identifying, evaluating and managing risk

Our risk management and internal control framework is well-embedded and provides the ability for the Board to evaluate and oversee how the company manages principal and emerging risks in line with our long-term objectives. We have a company-wide policy that sets out the requirements, roles and responsibilities for the management and governance of risks, controls and supporting guidance on the essential elements of our internal control framework. We routinely evaluate our framework for improvements.

Our governance

The Board oversees our risk management system and establishes our risk appetite, supported by the Audit & Risk Committee (ARC). The Corporate Responsibility Committee (CRC) and Science Committee further assess the effectiveness of risk management strategies pertinent to their defined remits. Our Risk Oversight & Compliance Council (ROCC) helps the ARC and CRC to oversee the risks, and the strategies used to address them.

Risk management and compliance boards across the Group promote the 'tone from the top'. They also establish our risk culture and oversee the effectiveness of risk management activities, as well as communicating information about internal controls. Our business is accountable for delivering on its objectives in line with its established risk appetite.

An Enterprise Risk Owner is responsible for each principal risk, with oversight by a GLT member. Risk owners report risk and mitigation to ROCC, the GLT and the appropriate Board committee. Legal and Compliance support these efforts by advising on our business strategies, activities, risks and controls, and Audit & Assurance provides assessments of the adequacy and effectiveness of our framework.

Considering current and emerging risks

Our risk assessment process considers the likelihood and impact of risks, and the timescale over which a risk could occur. We consider both current and emerging risks that could affect our ability to achieve our long-term objectives. Emerging risks are those on the three-year horizon, in line with our viability statement. We also define risks in this way if we need to know more about how likely they are to materialise, or what impact they'd have if they did. We will evaluate if additional investigation is required before classifying them as principal risks. Risk management and compliance boards at all levels of the organisation identify emerging risks on an ongoing basis, and ROCC discusses emerging risks at each meeting. We also scan the risk horizon throughout the year to identify external trends that may be opportunities and/or emerging risks and monitor our business activities and internal environment for new, emerging and changing risks.

⊕ Viability statement, see page 53. Risks associated with COVID-19, see page 54. ARC report, see page 111. Internal control framework, see page 112.

ROCC conducts an annual risk review to assess principal and emerging risks for the company. This review is supported by extensive analysis of external trends and insights, senior level interviews and recommendations from risk management and compliance boards and risk owners. ROCC shares this annual review with the ARC and Board for assessment and this forms the basis for the following year's risk management focus.

Putting risk management plans in place

We define enterprise risk plans that include a description of the risk, its context, our assessment, risk appetite, how we will treat the risk, and the actions businesses need to take in line with our internal control framework to mitigate the risk. They also enable our Board committees to assess the effectiveness of our risk management strategies. This year, along with our annual business risk reports, we continued quarterly reporting of risks to ROCC and the Board committees, to drive more dynamic, data-driven discussions, agile risk management strategies and oversight. We report on existing control measures, implementation, emerging risks, external insights and out-of-tolerance key risk indicators, where tolerance aligns to risk appetite. We include risks and mitigations associated with COVID-19.

Our risk management framework complements our culture and Speak Up processes in ensuring that risks are actively and effectively identified and mitigated. It also provides reasonable assurance against material misstatement and mitigates potential losses that could arise in the ordinary course. Each business monitors its most important risks and takes action to address issues. Our annual confirmation exercise checks that key risks are well managed, or actions are in place to address gaps, at each business.

Business continuity planning is embedded in our framework. Our principal risks include controls for responding to problems within their risk plans. We also have business continuity planning for our critical processes, so we can continue business operations in the event of a crisis.

Changes to our risks for 2022

In our November 2021 annual risk review, the ROCC agreed our principal risks for 2022 which remain largely unchanged, with the evolution of Privacy to Data Ethics and Privacy, Non-Promotional Engagement to Scientific and Patient Engagement, and Transformation and Separation to Separation. Additionally, we agreed that Environmental Sustainability will be managed under our ESG areas of focus. Also we identified two new emerging risks, Geopolitical Tensions and Healthcare Reform, which will be evaluated during 2022 before being classified as principal risks.

The table on the following pages shows our current principal risks and respective trends, assessments and mitigation activities for the year. These are not in order of significance. For full risk definitions, potential impact, context and mitigating activities please see Principal risks and uncertainties on pages 275 to 287.

2021 Principal risks summary

Risk	Trend	Assessment and mitigation activities
Patient safety	→	The macro risk level is stable but remains challenging. Public awareness of drug safety has increased following media coverage of the safety and efficacy of COVID-19 vaccines and therapies in 2021. Misinformation and negative characterisations of the industry have fuelled vaccine hesitancy. Highly publicised information security threats and data breaches require us to consider how we securely collect safety information from external sources.
	→	GSK's risk exposure is stable. Our portfolio is evolving, with a greater focus on advanced therapy medicinal products that may require specialised pharmacovigilance. We need to carefully balance resources to execute routine pharmacovigilance while we manage change initiatives including the separation of the Consumer Healthcare business, the accelerated pace of drug development and the simplification of our safety processes.
Product quality	↑	The macro risk has increased following COVID-19, with regulators resuming multiple on-site inspections to check that product quality expectations are met. There continues to be a focus on data governance and data integrity requirements, and on evaluation of products for the presence of nitrosamines.
	↑	GSK's risk exposure has increased, as we need to respond to the heightened inspectorate presence. We have launched inspection readiness programmes to ensure full preparedness. We have continued to invest in technology and digital platforms to further strengthen our controls around good data management practices. Governance and control strategies have been deployed for timely nitrosamine evaluations. All these mitigations will require focus and diligence as GSK undergoes significant organisational change.
Financial controls and reporting	↑	The external environment remains challenging due to political uncertainty, proposed increases in the obligations of directors and auditors, increasing threats of cyber attacks (information security) and fraud, and increasing environmental disclosure requirements.
	→	GSK's risk exposure has remained stable due to our ongoing focus on the resilience of personnel and the testing of our internal control framework. We implement optimal risk mitigation through transformational programmes, technology, centralised processes, and risk and control assessments, and maintain effective tax and treasury strategies. We continually strengthen our control frameworks and collaborate with external bodies on standard setting.
Anti-bribery and corruption (ABAC)	→	The macro risk level for bribery and corruption remained unchanged in 2021. We continued to see the ongoing impact of the pandemic on governments, people and businesses; rigorous anti-bribery and corruption standards aided by improved technology; and continued enforcement with focus on third-party intermediaries.
	→	GSK's risk exposure is unchanged as we continuously improve our Anti Bribery and Corruption programme to ensure appropriate controls, training, capability building, awareness raising, strong monitoring and use of data analytics.
Commercial practices	↑	COVID-19 consequences continue to impact the macro level. Competitive pressure has increased in many therapy areas and market segments. Future innovation requires successful launches of key medicines and products. Vaccination rates have been impacted by accessibility and political issues. Governments remain focused on initiatives to drive medicine and vaccine costs down for consumers.
	→	GSK's risk exposure level remains stable due to our mature and robust control environment. We continue to evolve our commercial practices competitively. We have invested in new technologies that support virtual customer engagement. We maintain proportionate controls, training and monitoring for employees that engage with healthcare organisations and professionals. We train senior business leaders on delivering performance and managing risk.
Non-promotional engagement	→	The macro environment for non-promotional activities and scientific engagement with HCPs and patients is stable. It continues to be characterised by complex, dynamic disease areas and treatments with increased patient-centric focus, increasing diversity of engagement platforms, and the continued increase in virtual engagements since the pandemic.
	→	GSK's risk exposure has remained stable. Our digital practices continued to develop and modernise, and we have applied our internal principles and policies, designed to mitigate risk, to this rapidly evolving environment. We have internal networks to foster collaboration and best practice sharing, as well as the identification of emerging risks associated with non-promotional activities, so we can conduct them in compliance with GSK's values and policies, local laws and regulations.

Risk management continued

2021 Principal risks summary continued

Risk	Trend	Assessment and mitigation activities
Privacy	↑	The macro risk continues to increase, with priority GSK markets such as the UK, EU, US, China and India instituting new privacy laws, and court rulings invalidating established international data transfer mechanisms that international companies had relied on. The increasing trend for data sovereignty initially targeting tech companies could affect healthcare companies in their ability to drive medical innovation and to effectively operate internationally.
	↑	GSK's risk exposure is increasing due to the impact of the unstable privacy regulatory environment preventing us from further standardising our privacy framework globally and due to the scale of the changes necessary to prepare for the creation of two new data-driven companies.
Research practices	→	The macro risk level is unchanged. We always need to continually assess how we do R&D in the context of our future ambition, our benchmarks, and the evolving global regulations and quality standards. This is particularly vital when expectations change or there are country-specific requirements (Human Genetic Resources Administration of China, Schrems II).
	→	GSK's risk exposure is unchanged, as laws and regulations are continually evolving. When regulations change, the accountable R&D function develops an action plan which can include risk and impact assessments to determine how the internal control framework needs to change to meet the new requirements. R&D regularly scans the external environment through membership of professional organisations and consortiums, attendance at industry or agency-sponsored meetings and review of publicly posted regulatory/legal reports.
Environment, health and safety (EHS)	→	The macro risk level is unchanged as COVID-19 protocols have been embedded in our ways of working. Site staffing has moved from essential workers only to mostly full staffing. This has meant we have been able to resume more consistent management oversight and on-site global support through senior leaders, subject matter experts and audit teams.
	→	GSK's risk exposure has levelled out due to consistent work practices related to COVID-19 control measures. However, organisational change continues to be a factor. We have placed continued focus on safety leadership training, embedding our Life Saving Rules, and adhering to our EHS standards.
Environmental sustainability	↑	The macro risk level continues to increase. Investors, regulators and other stakeholders expect companies to understand and actively reduce the environmental footprint of their operations across their value chain, and to mitigate the impacts climate change could have on their operations and supply chains.
	→	GSK's risk exposure is unchanged. We set ambitious new environmental sustainability goals at the end of 2020 and have established an enterprise transformation programme addressing climate, water, waste and biodiversity across our operations. We also increased the scope and depth of our Task Force on Climate-related Financial Disclosures (TCFD) analysis, and continued to monitor trends in physical, reputational and regulatory risks from climate change impacts.
Information security	↑	The macro risk level continues to rise, as large multinationals increase their digital footprints and threats from hackers become more sophisticated. Risks identified as increasing during the pandemic have levelled off but continue to be an ongoing threat. At the same time, governments are tightening the regulatory frameworks, and we can expect enforcement to increase.
	↑	GSK's risk exposure has increased. The targeting of pharmaceutical and vaccine intellectual property, and of third-party service availability, has intensified. In response, our cyber security programme continues to improve our controls to increase our cyber threat intelligence capabilities and protect critical information and systems, including operational technology and networks.
Supply continuity	↑	The macro risk level remains high due to the ongoing impact of the pandemic on product supply. There is also continuing potential for increasing protectionism, and Brexit uncertainty. Our COVID Issues Management Team is actively managing supply risk and mitigation on an ongoing basis.
	→	GSK's risk exposure has stabilised. Our Procurement Task Force, a cross-functional group from Procurement and Supply Chain, is accountable for the identification and management of potential bottlenecks in the supply of components.
Transformation and separation	→	The macro risk level is unchanged and remains challenging as we set up two new companies in a highly competitive external labour market.
	→	GSK's risk exposure level remains unchanged. Our transformation and separation projects have progressed as planned throughout 2021, with employee engagement remaining a priority.

Climate-related financial disclosure

GSK climate-related disclosures are consistent with the recommendations and recommended disclosures of the Task Force on Climate-related Financial Disclosures (TCFD), and in compliance with the requirements of LR 9.8.6R (UK listing rules).

GSK has been reporting on climate-related financial disclosures in accordance with the TCFD recommendations since 2019, with the purpose of building trust and connecting both our strategic and financial disclosures to climate change. In 2021, we have expanded disclosure by undertaking a more detailed review of GSK's manufacturing operations and our inhaler portfolio, which is the largest contributor to GSK's current carbon footprint within our portfolio of medicines, vaccines and consumer products. GSK's carbon reduction pathway to become net zero by 2030 can be found here¹ on gsk.com. We will continue to evolve our future climate-related disclosures by building further climate risk assessments into our external supply chain.

Governance

Environmental sustainability, which includes climate change, was assessed as a principal risk at GSK in 2021. The Board has overall accountability for the management of GSK's principal risks, with support from the GLT.

The Board-level Corporate Responsibility Committee (CRC) oversees the environmental sustainability principal risk and progress against environmental targets with Non-Executive Director, Lynn Elsenhans as chair. See the CRC report on page 104. Our Risk Oversight and Compliance Council (ROCC) helps the CRC to oversee the risks, and the strategies used to address them through quarterly reporting. Refer to page 94 for further details of the Board and Board committee's architecture.

Regis Simard, President, Pharmaceuticals Supply Chain and GLT member has management responsibility for environmental sustainability, which includes climate change. He is responsible for governance and oversight of risks and opportunities and ensures there is an effective framework in place to identify and manage the risks and opportunities across each of our business units along with delivering on the commitments made to have a net zero impact on climate and a net positive impact on nature by 2030. Refer to page 46 for the detailed risk management plan.

Established, specialised teams across GSK are working together to deliver our environmental strategies and embed them as business as usual including:

- The GSK Sustainability Council chaired by Regis Simard which includes leaders from business units and global functions, including manufacturing, R&D, procurement and facilities management, ethics and compliance and finance, who all play a key role in delivering our environmental strategy. The Council is supported by a dedicated Programme Steering Team, which is run by the Global Sustainability Team who also provide specialist expertise and advice to the business.

- The Programme Steering Team who co-ordinate the sustainability programme and associated workstreams and have oversight for monitoring performance and progress of the enablers to deliver the sustainability programme.
- The Capital Allocations Board (CAB) which includes the CFO and Group Financial Controller who review climate-related capital expenditure as part of their annual planning and capital allocation process.
- The Finance Sustainability Network includes leaders from across Finance, Sustainability and Procurement and focuses on key financial enablers to deliver the sustainability programme.

Strategy and Risk Management

Methodology and Assumptions

Since 2019 we have disclosed long-term risks from climate change across the value chains of key products that account for approximately 40% of revenue. In 2021, we expanded our assessments with a focus on risks to our own manufacturing operations and we have developed a three-year plan to further embed climate-related analysis across significant areas of our business.

We used two climate scenarios based on internationally recognised data sets²:

- business-as-usual (BAU): assuming little to no mitigation leading to 3-5°C of warming by 2100.
- low-carbon future: assumes that the global temperature increase by 2100 is limited to well below 2°C by rapid changes in legislation and technology.

During 2021, using the enterprise risk plan we carried out scenario analyses on the risks and opportunities, prioritising physical and transitional risks and opportunities according to the likelihood and the magnitude of the potential impact to GSK's manufacturing operations and staff.

Each risk and opportunity was analysed and the potential impact on our profit was classified as either low (<£100 million), medium (£100 million-£300 million) or high (>£300 million).

We consider climate-related issues within the time horizons used in our strategic and capital planning processes: short-term (less than 12 months); medium-term (1-3 years); and long-term (3-10 years). We have focused on climate risks out to 2030, with no material risks identified as falling into short or medium term.

We have tested the resilience of GSK's climate-related strategy taking into consideration different scenarios and the risks and opportunities identified. As a result, we are continuing to improve our management of climate-related risks and opportunities.

¹ <https://www.gsk.com/media/7180/gsk-carbon-glidepath-010921.pdf>

² Scenarios are based on IPCC Representative Concentration Pathways 2.6, 4.5 and 8.5, the IEA World Energy Outlook 2018 New Policy Scenario, Current Policy Scenario and Sustainable Development Scenario; and data sets from WWF and WRI for water stress and flood risk modelling

Risk management continued

Risk Management

A specific and dedicated environmental sustainability enterprise risk management plan has been put in place (for more details see Risk management on page 46). The risk management plan covers expectations that GSK is addressing its impact on the environment, and that the environment has increasing impacts on operational resilience such as access to energy, water and the natural resources used in products, along with any anticipated cost increases from regulatory changes or environmental taxes.

An internal control framework has been established for environmental sustainability, including the appointment of dedicated senior leaders for environmental sustainability to ensure that governance processes are in place and effective.

Our performance in reducing carbon emissions, energy and water utilisation, and waste will continue to be delivered and managed by our mature programmes and will be enhanced by including further eco-design considerations into products and packaging.

Summary of GSK's risks and opportunities

Physical risk/ description	Scenario	Risk management	Potential profit impact/ timeframe	Metrics	Targets
<p>Increasing levels of water stress which reduces the availability of water for our operations.</p> <p>GSK uses freshwater as the main source of water to manufacture medicines, vaccines, and consumer health products.</p> <p>If water availability was restricted at a factory then production operations would be interrupted.</p>	BAU and low carbon	<p>We have performed water stewardship risk assessments for all our manufacturing sites and we have identified ten sites in our current network that are currently in areas of high-water risk.</p> <p>We are developing plans for these sites to become water neutral by 2030 and will partner with other organisations to address shared water challenges. We are currently piloting this approach in our Cape Town site working with partners including WWF and the Water Resilience Coalition.</p> <p>The TCFD process has helped us develop a watch list of additional sites potentially under long-term threat and we will monitor changes to the risk levels and update our site water risk assessments appropriately.</p>	Low: <£100m/ Long: 3-10 years	<p>Sites that have achieved water stewardship*</p> <p>Water use in our operations</p> <p>Sites and supplier sites that have achieved water neutrality</p>	<p>Achieve good water stewardship at 100% of our sites by 2025</p> <p>Reduce overall water use in our operations by 20% by 2030</p> <p>Be water neutral in our own operations and at key suppliers in water stressed regions by 2030</p>
<p>Increasing frequency of extreme weather events causing disruption.</p> <p>Extreme weather events such as flooding, storms etc can result in short-term interruptions to manufacturing and other operations.</p>	BAU and low carbon	<p>We have performed risk assessments for our manufacturing and other operations and have business continuity plans in place which are reviewed annually to respond to the impact of extreme weather events including adopting appropriate mitigation plans.</p> <p>The TCFD process has helped us identify a watch list of sites that are in places where the flood risk is expected to increase over time. However, the risk from flooding remains very low. GSK has a well-established loss prevention and risk engineering programme to identify a range of risks that could impact our sites and where flood risks exist, we have taken action to mitigate the risk.</p>	Low: <£100m/ Long: 3-10 years	Sites that have business continuity plans	100% of sites have a response to extreme weather events in their business continuity plans
<p>An increased number of very hot days (>35°C) resulting in reduced productivity.</p> <p>Extreme heat could result in heat stress affecting our staff.</p>	BAU	<p>GSK has operations in countries that already experience very hot temperatures periodically. We already control the temperature and humidity inside our buildings. As part of our EHS control framework, sites conduct risk assessments on very hot days including adaptations for outside work.</p>	Low: <£100m/ Long: 3-10 years	Scope 1, 2 and 3 carbon emissions	<p>Net zero emissions across all operations by 2030</p> <p>Net zero emissions across our full value chain by 2030)</p>

* As defined by the Alliance for Water Stewardship

Risk management continued

Transitional risk/ description	Scenario	How the risk is managed	Potential profit impact/ timeframe		
			Metrics	Targets	
<p>Regulations governing the use of high global warming potential (GWP) substances are being updated in the UK, EU and US.</p> <p>This could lead to increasing cost and restrictions on the use of the high GWP propellant (HFA134a) in our Metered Dose Inhaler (MDI) products.</p>	BAU and low carbon	<p>We have started an R&D programme to find a lower-impact propellant that could reduce emissions from our metered dose inhalers by about 90%.</p> <p>We already have a portfolio of Dry Powder Inhaler products that do not use propellants that are not impacted by this risk.</p> <p>We are monitoring the evolving regulations governing the use of fluorinated gases and will review our assessments in future declarations.</p>	Medium: £100m to £300m/ Long: 3-10 years	Scope 3 carbon emissions	<p>Net zero emissions across all operations by 2030</p> <p>Net zero emissions across our full value chain by 2030)</p>
<p>There is uncertainty over future regulatory policy responses to address climate change that countries around the world will develop including carbon pricing.</p> <p>We anticipate that carbon pricing on operational carbon emissions will come into force in some regions in the medium to long term which could increase our operating costs.</p>	Low carbon	<p>We are transitioning to 100% renewable electricity by 2025 and are starting to investigate options for renewable heat technology to reduce our carbon emissions from energy.</p> <p>Our sales fleet aim to transition to electric vehicles by 2030, further reducing our scope 1 carbon emissions.</p> <p>Shadow carbon pricing has been embedded in the capital investment process at \$100 per tonne and is driving conversations and decisions around carbon emissions at all levels of the organisation.</p>	Low: <£100m/ Long: 3-10 years	Scope 1&2 carbon emissions	Net zero emissions across all operations by 2030
<p>At COP26 in November 2021, more than 50 countries around the world committed to provide low carbon healthcare systems.</p> <p>This could lead to increasing demand for low carbon vaccines and medicines.</p>	BAU and low carbon	<p>We are reducing our own scope 1 & 2 carbon emissions which in turn reduces the scope 3 footprint of our customers and suppliers.</p> <p>We have started a new Eco-design programme to reduce the impacts of all our products and packaging.</p> <p>GSK have certified and published the carbon footprints of our portfolio of respiratory inhalers and have launched our first carbon neutral inhaler in the UK. This enables healthcare providers and patients make informed choices.</p> <p>We have started an R&D programme to find a lower-impact propellant that could reduce emissions from our metered dose inhalers by about 90%.</p>	Low: <£100m/ Long: 3-10 years	Scope 1, 2 and 3 carbon emissions Total waste and non-circular waste	<p>Net zero emissions across our full value chain by 2030</p> <p>Zero operational waste, including eliminating single-use plastics by 2030</p> <p>25% environmental impact reduction for our products and packaging by 2030</p> <p>10% waste reduction from supply chain by 2030</p>

Risk management continued

Metrics and targets

Our commitment is to have a net zero impact on climate and a net positive impact on nature by 2030, across our value chain. Additional details on the targets and carbon reduction glidepath that contribute to these goals are available on [gsk.com](https://www.gsk.com). The Science Based Targets Initiative has validated that our near-term carbon targets align to a 1.5°C pathway. We are delivering these goals by acting on priority impact areas and working with stakeholders across our value chain including our suppliers and customers. We are also working with external partners such as the World Business Council for Sustainable Development and the UN Water Resilience Coalition.

Details on the progress we are making towards achieving our climate targets can be found on page 39. Additional background on our climate and also our nature targets, the progress we are making and the approaches we are adopting to meet these targets can be found in the ESG performance report, and in our public responses to the CDP Climate, Water and Forest questionnaires.

From 2022, in order to align our approach to climate and nature targets with the remuneration of our Executive Directors and senior executives, we are introducing a 10% ESG target measure initially into both our short- and long-term remuneration incentive plans. This will include setting and measuring short- and long-term performance of these participants against our Nature Net Positive and Climate Net Zero ambitions. For further details please see our Remuneration report on pages 119 to 152.

Energy and carbon emissions

Carbon emissions^{1,2}

Carbon emissions '000 tonnes CO ₂ e	2021	2020	2019
Scope 1 emissions (from energy)	393	415	416
Scope 1 emissions (other ³)	288	349	382
Scope 2 emissions (market-based)	159	227	518
Scope 3 emissions ⁴	Available in 2022 report	13,427	14,260
UK Scope 1 & 2 emissions	130	141	195
Energy	2021	2020	2019
Scope 1 and 2 emissions from energy/sales revenue (tonnes CO ₂ e/£m)	15.1	18.8	27.7
Scope 1 and 2 emissions from energy/FTE (tonnes CO ₂ e/FTE)	6.1	6.8	9.4
Total energy used (GWh)	3,596	3,858	4,079
UK energy used (GWh)	850	945	975

1 Carbon emissions are calculated according to the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (revised edition). GSK uses market-based Scope 2 emissions for reporting purposes and reports Scope 3 emissions across all 15 categories in our ESG Performance Report. We ask external assurance providers, DNV, to provide limited assurance to ISAE 3000 for energy, Scope 1, 2 and selected Scope 3 carbon emission data. Methodologies for reporting and measurements are provided in our ESG Performance Report, on the KPI definitions page

2 GSK asks DNV to provide limited assurance to ISAE 3000 for energy, Scope 1, 2 and selected Scope 3 carbon emissions, water, waste and wastewater data. Methodologies for reporting and measurements are provided in our ESG Performance Report, on the KPI definitions pages

3 "Other" refers to emissions from sales force vehicles, propellant emissions released during manufacture of inhalers, on-site waste, or wastewater treatment and refrigerant gas losses

4 We collect and publish scope 3 data across 15 categories. The most recent scope 3 data available is for 2020 as the process of compiling the 2021 data is not yet complete. We will publish this data once it becomes available and it will be included in the 2022 ESG Performance Report

Viability statement

In accordance with provision 31 of the 2018 revision of the Code, GSK has assessed the prospects of the Group 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 46 to 48 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 Group'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 potential risks associated with the ongoing COVID-19 pandemic, which have been considered within both the Plan and stress test downside scenarios. The Plan assumes the next several years to be challenging for the healthcare industry with continued uncertainty related to the impact of the COVID-19 pandemic on adult vaccinations and continued pressure on pricing of pharmaceuticals. GSK assumes no premature loss of exclusivity for key products over the period. GSK also expects volume demand for its products to increase, particularly for *Shingrix*, as healthcare systems are expected to return to normal following disruption from governments' prioritisation of COVID-19 vaccination programmes and ongoing measures to contain the pandemic.

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 future separation of the Consumer Healthcare Joint Venture with Pfizer, if approved by the Board and shareholders, is likely to occur within the period covered by the viability assessment. The Directors have therefore considered the ability of the Group to continue in its current form (ie the scenario in which the demerger does not proceed) for the three-year period ending 31 December 2024 as well as the viability of new GSK if the demerger proceeds as planned.

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 and environmental sustainability as well as anti-bribery and corruption and any consequent regulatory actions or fines, all of which could fundamentally threaten our operations. 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.

Scenario 5: Demerger of the Consumer Healthcare Joint Venture (CH). The final scenario focuses on the impact of the CH demerger in early Q3 2022 as well as the downside assessment of scenarios 1 to 4 applied to new GSK's cash flows.

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 Group with or without demerger will be able to continue in operation and meet its liabilities as they fall due over the three-year period of assessment.

Risks associated with COVID-19

The potential impact of the COVID-19 pandemic on GSK's trading performance and all our principal risks has been assessed with mitigation plans put in place. In 2021, as anticipated, the pandemic impacted Group performance primarily in demand for vaccines and reflected the prioritisation of COVID-19 vaccination programmes by governments, including social distancing rules resulting from COVID-19 that affected customers' ability and willingness to access vaccination services across all regions.

We continue to remain confident in the underlying demand for our vaccines and are encouraged by the rate at which COVID-19 vaccinations and boosters are being administered in many countries, which provides support for healthcare systems and the eventual return to normal. This continues to be a dynamic situation, with the future severity, duration and impact unknown at this point including potential impacts on trading results, clinical trials, supply continuity, and our employees. The situation could change at any time and there can be no assurance that the COVID-19 pandemic will not have a material adverse impact on the future results of the Group.

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	
The value we create	01	Ethics and values	38	Summary of our principal risks	47
		Data and engagement	39	Principal risks and uncertainties	275
Social matters		Third parties	38	Viability statement	53
Global health	35			Audit & Risk Committee report	111
Health security	35	Anti-corruption and bribery			
Affordability and availability	36	Ethics and values	38	Non-financial key performance indicators	
		Reporting and investigating concerns	38	Key performance indicators	12
Employees		Anti-bribery and corruption	47		
Employee engagement	37			Our policies	
Diversity	37	Environmental matters		All of our public policies, codes and standards are available on gsk.com	
Wellbeing and development	37	Carbon, water and waste	39		
Gender pay gap	37	Climate-related financial disclosure	49		
Ethics and values	38				
Board diversity	83				

Employees by gender

	Male	Female	Total
Board	8	5	13
Management*	10,148	9,553	19,701
All employees	47,751	42,345	90,096

* Senior managers as defined in the Companies Act 2006 (Strategic Report and Directors' Report) Regulations 2013

Group financial review

In this section

Reporting framework	56
Our approach to tax	60
Financial performance	61
Adjusting items	70
Cash generation and conversion	73
Financial position and resources	74
Treasury policies	79
Critical accounting policies	80

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 59.

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.

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 and capitalised development costs)
- 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 settlement income; 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 including the impact of the revaluation of deferred tax assets and liabilities following enactment of the increase in the headline rate of UK corporation tax from 19% to 25% (effective 2023)
- separation costs include costs to establish Consumer Healthcare as an independent business, as well as admission listing and demerger costs

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 amortisation of intangible assets except for computer software and capitalised development costs, 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.

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 2020 and 2021 are set out on page 70 and for the five years to 2021 are set out on pages 263 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:

	2021 £m	2020 £m	2019 £m	2018 £m	2017 £m
Total operating profit	6,201	7,783	6,961	5,483	4,087
Intangible asset amortisation	802	775	777	580	591
Intangible asset impairment	322	263	83	116	688
Major restructuring	626	1,532	1,105	809	1,056
Transaction-related items	1,159	1,308	345	1,977	1,599
Divestments, significant legal and other items	(618)	(2,823)	(299)	(220)	(119)
Separation costs	314	68	–	–	–
US tax reform	–	–	–	–	666
Adjusted operating profit	8,806	8,906	8,972	8,745	8,568

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

	2021 £m	2020 £m	2019 £m	2018 £m	2017 £m
Novartis Consumer Healthcare Joint Venture put option	–	–	–	658	986
Contingent consideration on former Shionogi-ViiV Healthcare JV (including Shionogi preferential dividends)	1,026	1,114	31	1,188	556
ViiV Healthcare put options and Pfizer preferential dividends	48	(52)	(234)	(58)	(126)
Contingent consideration on former Novartis Vaccines business	27	172	76	58	101
Release of fair value uplift on acquired Pfizer inventory	–	91	366	–	–
Other adjustments	58	(17)	106	131	82
Transaction-related items	1,159	1,308	345	1,977	1,599

Full reconciliations between Total and Adjusted results for 2017–2021 are set out on pages 266 to 268. Further explanations on the Adjusting items for 2021 are reported on page 70.

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 allocated to each shareholder also changes. In particular, the increasing proportion of sales of dolutegravir and cabotegravir-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 86% of the Total earnings and 83% of the Adjusted earnings of ViiV Healthcare for 2021. Remeasurements of the liabilities for the preferential dividends allocated to Pfizer and Shionogi are included within other operating income/(expense).

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 and 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, dolutegravir and cabotegravir. 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 re-measurements are reflected within other operating income/(expense) and within Adjusting items in the income statement in each period.

Cash payments to settle the contingent consideration are made to Shionogi by ViiV Healthcare each quarter, based on the actual sales performance and other income 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 2021 were £826 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:

	2021 £m	2020 £m
Contingent consideration at beginning of the year	5,359	5,103
Remeasurement through income statement	1,026	1,114
Cash payments: operating cash flows	(721)	(751)
Cash payments: investing activities	(105)	(107)
Contingent consideration at end of the year	5,559	5,359

Of the contingent consideration payable (on a post-tax basis) to Shionogi at 31 December 2021, £937 million (31 December 2020 – £745 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:

	2021 £m	2020 £m
Pfizer put option	1,008	960
Pfizer preferential dividend	–	1

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.

Settlement with Gilead Sciences Inc. (Gilead)

On 1 February 2022, ViiV Healthcare reached agreement with Gilead to settle the global patent infringement litigation relating to the commercialisation of Gilead's Biktarvy. Under the terms of the global settlement and licensing agreement, Gilead made an upfront payment of \$1.25 billion to ViiV Healthcare which was received on 15 February 2022. In addition, Gilead will also pay a 3% royalty on all future US sales of Biktarvy and in respect of the bictegravir component of any other future bictegravir-containing products sold in the US. These royalties will be payable by Gilead to ViiV Healthcare from 1 February 2022 until the expiry of ViiV Healthcare's US Patent No. 8,129,385 on 5 October 2027. Gilead's obligation to pay royalties does not extend into any period of regulatory paediatric exclusivity, if awarded. The settlement resulted in a re-measurement of the existing liabilities for contingent consideration and the Pfizer put option at the 2021 year end.

The impact of the settlement with Gilead on the contingent consideration liability (CCL) is to increase it by £288 million, on a post-tax basis in Q4 2021 due to the obligation ViiV Healthcare has to pay future cash consideration to Shionogi for its share of the upfront and of the future US sales performance of Biktarvy and products containing bictegravir. Including the impact of the settlement at 31 December 2021, the liability which is discounted at 8% stood at £5,559 million, on a post-tax basis.

Pfizer has the right to require GSK to acquire its shareholding in ViiV Healthcare in certain circumstances at any time. A put option liability is therefore recorded on the Group's balance sheet as a current liability. It is measured on the gross redemption basis derived from an internal valuation of the ViiV Healthcare business.

The impact of the settlement on the Pfizer put option liability is an increase of £114 million and is included in the re-measurement at 31 December 2021.

See page 251 for an explanation of the post balance sheet event impact.

Group financial review continued

Reporting framework continued

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 73.

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.

Return on capital employed

Return on capital employed is calculated as total profit before taxation as a percentage of average net assets over the year.

Net debt

Please see Note 29 'Net Debt' for the calculation of net debt.

2 year Compound Annual Growth Rate

CAGR is defined as the compound annual growth rate and shows the annualised average rate of pro-forma revenue growth between two given years, assuming growth takes place at an exponentially compounded rate. For Consumer Healthcare, the 2 year revenue CAGR has been presented showing the annualised average rate of pro-forma revenue growth between 2019 and 2021.

COVID-19 solutions

COVID-19 solutions include the sales of pandemic adjuvant and other COVID-19 solutions including vaccine manufacturing and *Xevudy* and the associated costs but does not include reinvestment in R&D. This categorisation is used by management and we believe is helpful to investors through providing clarity on the results of the Group by showing the contribution to growth from COVID-19 solutions.

General Medicines

General medicines are usually prescribed in the primary care or community settings by general healthcare practitioners. For GSK, this includes medicines in inhaled respiratory, dermatology, antibiotics and other diseases.

Specialty Medicines

Specialty medicines are typically prescription medicines used to treat complex or rare chronic conditions. For GSK, this comprises medicines in infectious diseases, HIV, oncology, immunology and respiratory.

Our approach to tax

Business makes a major contribution to the public purse through its tax contribution. This includes direct taxes (such as corporate income tax) and indirect taxes (such as VAT and customs duties) as well as other taxes (such as employment taxes and property taxes). It is therefore important that companies explain their approach to tax. This helps inform dialogue about tax and tax policy.

We are supportive of efforts to ensure companies are appropriately transparent about how their tax affairs are managed. As part of that, our Tax Strategy is set out in detail within the Public policies section of our website.

We support the exchange of country-by-country reporting (CbCR) data between tax authorities as, validated against existing information held on taxpayers, it will support their ability to ensure multinational groups pay the right amount of tax in the right places.

As a global healthcare company, we have a substantial business and employment presence in many countries around the world and pay a significant amount of tax. This includes corporate income tax and other business taxes, and tax associated with our employees. We also collect a significant amount of tax on behalf of governments along our supply chain, including from our employees.

We are subject to taxation throughout our supply chain. The worldwide nature of our operations means that our cross-border supply routes, necessary to ensure supplies of medicines into numerous countries, can result in conflicting claims from tax authorities as to the profits to be taxed in individual countries. This can lead to double taxation (with profits taxed in more than one country).

Profits are recognised in territories by reference to the activities performed there and the value they generate. To ensure the profits recognised in jurisdictions are aligned to the activity undertaken there, and in line with current OECD guidelines, we base our transfer pricing policy on the arm's length principle and support our transfer prices with economic analysis and reports.

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.

Tax risk in all countries in which we operate is managed through robust internal policies, processes, training and compliance programmes. Our Board of Directors and the Audit & Risk Committee are responsible for approving our tax policies and risk management arrangements as part of our wider internal control framework.

We seek to maintain open and constructive relationships with tax authorities worldwide, meeting regularly to discuss our tax affairs and real time business updates wherever possible.

We also monitor government debate on tax policy in our key jurisdictions so that we can understand and share an informed point of view regarding any potential future changes in tax law. Where relevant, we provide pragmatic and constructive business input to tax policy makers either directly or through industry trade bodies, advocating reform to support economic growth and job creation as well as the needs of our patients and other key stakeholders.

In 2021, the Group corporate tax charge was £346 million (2020 – £580 million) on profits before tax of £5,442 million (2020 – £6,968 million) representing an effective tax rate of 6.4% (2020 – 8.3%). We made cash tax payments of £1,291 million in the year (2020 – £1,655 million). In addition to the taxes we pay on our profits, we pay duties, levies, transactional and employment taxes.

Our Adjusted tax rate for 2021 was 17.5% (2020 – 16.0%). The rate has benefited from the closure of open issues with tax authorities in various jurisdictions. Following separation of the Consumer business and 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 16%.

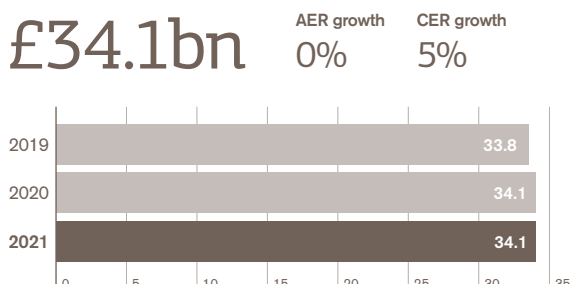
The Group's Total tax rate for 2021 of 6.4% (2020 – 8.3%) was lower than the Adjusted tax rate mainly due to enactment of an increase in the UK corporate income tax rate from 19% to 25% resulting in an increase in the value of balance sheet tax assets. Due to the magnitude, GSK has reported this credit as an Adjusting item in 2021 so that it does not obscure the key trends in the Group's performance for the period.

The OECD and the EU continue to develop new policies which will not only lead to a substantially increased tax compliance burden but may, in the case of the OECD's project to 'Address the Tax Challenges of Digitalisation', fundamentally change the international corporate tax landscape and therefore the tax profiles of multinational companies, including GSK, by: (i) reallocating countries' taxing rights for the largest and most profitable multinationals; and (ii) set a new minimum global corporate tax rate of 15%. This project achieved political consensus during 2021, with a plan for effective implementation in 2023. However, the detailed rules are still under discussion and it is not therefore possible to accurately forecast the impact for GSK at this stage.

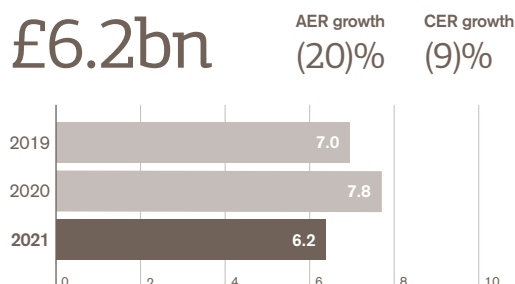
Further details about our corporate tax charges for the year are set out in Note 14.

Financial performance

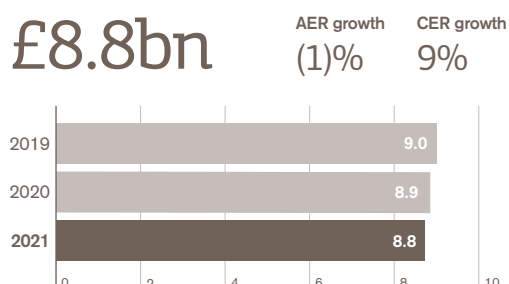
Group turnover (£bn)



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 56 and 59.

The Total results of the Group are set out below.

	2021		2020		Growth	
	£m	% of turnover	£m	% of turnover	£%	CER%
Turnover	34,114	100	34,099	100	–	5
Cost of sales	(11,603)	(34.0)	(11,704)	(34.3)	(1)	2
Selling, general and administration	(10,975)	(32.1)	(11,456)	(33.6)	(4)	–
Research and development	(5,278)	(15.5)	(5,098)	(15.0)	4	7
Royalty income	419	1.2	318	0.9	32	32
Other operating (expenses)/income	(476)	(1.4)	1,624	4.8		
Operating profit	6,201	18.2	7,783	22.8	(20)	(9)
Net finance costs	(756)		(848)			
Share of after-tax profits of associates and joint ventures	33		33			
Loss on disposal of interest in associates	(36)		–			
Profit before taxation	5,442		6,968		(22)	(10)
Taxation	(346)		(580)			
Profit after taxation for the year	5,096		6,388		(20)	(9)
Profit attributable to shareholders	4,385		5,749			
Earnings per share (p)	876p		115.5		(24)	(13)
Earnings per ADS (US\$)	2.42		2.98			

The Adjusted results for the Group are set out below.

Reconciliations between Total results and Adjusted results for 2021 and 2020 are set out on page 70.

	2021		2020		Growth	
	£m	% of turnover	£m	% of turnover	£%	CER%
Turnover	34,114	100	34,099	100	–	5
Cost of sales	(10,726)	(31.4)	(10,191)	(29.9)	5	8
Selling, general and administration	(10,225)	(30.0)	(10,717)	(31.4)	(5)	(1)
Research and development	(4,776)	(14.0)	(4,603)	(13.5)	4	8
Royalty income	419	1.2	318	0.9	32	32
Adjusted operating profit	8,806	25.8	8,906	26.1	(1)	9
Adjusted profit attributable to shareholders	5,665		5,769		(2)	9
Adjusted earnings per share (p)	113.2p		115.9		(2)	9

Group financial review continued

Financial performance continued

Group turnover

Group turnover by business

	2021 £m	2020 £m	Growth £%	Growth CER%
Pharmaceuticals	17,729	17,056	4	10
Vaccines	6,778	6,982	(3)	2
Consumer Healthcare	9,607	10,033	(4)	–
	34,114	34,071	–	5
Corporate and other unallocated turnover	–	28		
	34,114	34,099	–	5

Group turnover by geographic region

	2021 £m	2020 £m	Growth £%	Growth CER%
US	15,093	14,556	4	10
Europe	7,838	8,164	(4)	(2)
International	11,183	11,379	(2)	4
	34,114	34,099	–	5

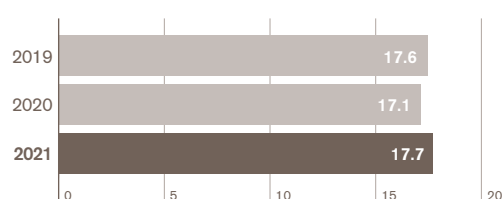
Group turnover was £34,114 million in the year, stable at AER but up 5% CER. Sales of COVID-19 solutions contributed approximately 4 percentage points to growth in the year.

Pharmaceuticals

Turnover (£bn)

£17.7bn AER growth 4% CER growth 10%

52% of Group turnover



Pharmaceuticals turnover

	2021 £m	2020 (revised*) £m	Growth £%	Growth CER%
Respiratory	2,863	2,360	21	28
HIV	4,777	4,876	(2)	3
Immuno-inflammation	885	727	22	29
Oncology	489	372	31	37
Pandemic	958	–	–	–
New and Specialty	9,972	8,335	20	26
Established Pharmaceuticals	7,757	8,721	(11)	(6)
	17,729	17,056	4	10

* GSK has reviewed the presentation of its pharmaceuticals products and from 1 January 2021 has moved sales of *Amuity Ellipta*, *Incruse Ellipta* and *Relvar/Breo Ellipta* from the Respiratory therapeutic area to the Established Pharmaceuticals therapeutic area. Comparative information has been revised onto a consistent basis.

Pharmaceuticals

Pharmaceuticals turnover in the year was £17,729 million, up 4% AER, 10% CER. Sales of *Xevudy*, the monoclonal antibody treatment for COVID-19 of £958 million contributed approximately 6 percentage points to Pharmaceuticals growth.

HIV sales were down 2% AER but up 3% CER, to £4,777 million, with growth in *Dovato* and *Juluca* partly offset by *Tivicay* and *Triumeq*. Respiratory sales were up 21% AER, 28% CER, to £2,863 million, on growth of *Trelegy* and *Nucala*. Oncology and Immuno-inflammation therapy areas each continued to show strong double-digit sales growth. Sales of Established Pharmaceuticals decreased 11% AER, 6% CER to £7,757 million.

In the US, sales grew 13% AER, 21% CER including sales of *Xevudy*, which contributed approximately 9 percentage points to total growth. Continued strong performance of *Trelegy*, *Nucala*, *Benlysta* and *Dovato* also drove growth of New and Specialty products in the Region. Established Products were stable at AER but grew 6% CER, reflecting strong demand for Established Respiratory products in the COVID-19 environment and certain supply challenges faced by generic competitor products, plus the benefit of favourable prior period RAR adjustments.

In Europe, sales decreased 4% AER, 2% CER, with decreases in the Established Pharmaceuticals portfolio, impacted by generic competition including *Seretide*, *Duodart* and *Volibris*, lower antibiotic demand, and the divestment of cephalosporin products at the start of the fourth quarter. The decrease was partly offset by strong growth of *Trelegy*, *Benlysta* and Oncology products, and of *Dovato* which more than doubled in the year. Sales of *Xevudy* totalling £69 million also contributed approximately 2 percentage points to total growth.

International sales decreased 3% AER but grew 4% CER. Decreases in Established Pharmaceuticals reflected the impact of COVID-19 suppressed antibiotics markets and increased generic competition in the first half of the year. This was offset by strong growth in Respiratory, *Dovato*, *Tivicay* tenders, and sales of *Xevudy*, which added approximately 6 percentage points to International total growth.

Group financial review continued

Financial performance continued

Respiratory

Total Respiratory sales were up 21% AER, 28% CER, with sales of *Trelegy* and *Nucala* each exceeding £1 billion per year for the first time. International Respiratory sales grew 33% AER, 42% CER including *Nucala* up 23% AER, 34% CER, and *Trelegy* up 81% AER, 92% CER including the impact of the *Trelegy* asthma launch in Japan in Q4 2020. In Europe, Respiratory grew 11% AER, 13% CER with double digit CER growth of *Trelegy* and *Nucala*. In the US, Respiratory grew 23% AER, 30% CER, driven by continued strong performance of *Trelegy* and *Nucala*.

Sales of *Nucala* were £1,142 million in the year and grew 15% AER, 22% CER, with consistent, strong growth across all three regions. US sales were up 15% AER, 23% CER to £690 million and International sales of £195 million grew 23% AER, 34% CER. Europe sales of £257 million grew 8% AER, 11% CER.

Trelegy sales were up 49% AER, 57% CER to £1,217 million driven by growth in all regions. In the US, sales continue to grow strongly including benefit of the asthma indication approved and launched in Q3 2020, with sales up 52% AER, 62% CER. In Europe, sales grew 19% AER, 21% CER and in International, where *Trelegy* for asthma was approved in Japan in Q4 2020, sales grew 81% AER, 92% CER to £163 million.

HIV

HIV sales were £4,777 million a decrease of 2% AER but growth of 3% CER for the year. *Triumeq* sales were £1,882 million, down 18% AER, 14% CER and *Tivicay* sales were £1,381 million, down 10% AER, 4% CER. The mature portfolio resulted in less than 1 percentage point of CER sales decrease.

New HIV products *Juluca*, *Dovato*, *Rukobia* and *Cabenuva* delivered sales of £1,387 million representing 29% of the total HIV portfolio (18% in 2020). Sales of the two drug regimens *Juluca* and *Dovato* were £517 million and £787 million, respectively, with combined growth of 50% AER, 58% CER. *Rukobia* sales were £45 million. *Cabenuva*, the first long acting injectable, recorded £38 million of sales for the full year.

In the US, total sales were £2,898 million with a decrease of 4% AER, but growth of 3% CER. New HIV products delivered sales of £896 million, including: *Dovato* £428 million with growth of 87% AER, 99% CER, *Juluca* £393 million with growth of 2% AER, 8% CER, *Rukobia* £43 million and *Cabenuva* £32 million. Combined *Tivicay* and *Triumeq* sales were £1,953 million declining 16% AER, 11% CER. In Europe, total sales were £1,194 million with a decrease of 2% AER, but growth of 1% CER. New HIV products delivered sales of £420 million, including: *Dovato* sales of £302 million, which more than doubled at AER and CER, and *Juluca* £111 million with growth of 14% AER, 18% CER. Combined *Tivicay* and *Triumeq* sales were £738 million declining 21% AER, 19% CER. International continued to grow strongly with total sales of £685 million, with growth of 4% AER, 11% CER, driven by the *Tivicay* tender business and new HIV products.

Immuno-inflammation

Immuno-inflammation sales of £885 million grew 22% AER, 29% CER with *Benlysta* sales up 22% AER, 29% CER to £874 million, benefitting from lupus nephritis launches in US and Japan in H2 2020.

Oncology

Sales of *Zejula*, the PARP inhibitor treatment for ovarian cancer were £395 million, up 17% AER, 22% CER, impacted by ongoing lower diagnosis rates due to the COVID-19 pandemic, particularly in the US. Sales included £212 million in the US and £163 million in Europe.

Blenrep for the treatment of patients with relapsed or refractory multiple myeloma was approved and launched in the US and Europe in Q3 2020, with ongoing launches throughout Europe in 2021. *Blenrep* sales globally totalled £89 million.

Pandemic sales

Sales of *Xevudy* were £958 million in the year, reflecting the ongoing fulfilment of contracts across the world and most significantly in the US, which reported sales of £602 million. International recorded sales of £287 million and Europe £69 million.

Established Pharmaceuticals

Sales of Established Pharmaceuticals in the year were £7,757 million, down 11% AER, 6% CER.

Established Respiratory products decreased 7% AER, 2% CER to £4,327 million. This includes the impact of generic competition to *Xyzaal* in Japan, and to *Advair/Seretide* globally. The decrease was partially offset by approximately 6 percentage points impact on growth of favourable prior period RAR adjustments.

The remainder of the Established Pharmaceuticals portfolio decreased by 16% AER, 11% CER to £3,430 million on lower demand for antibiotics during the COVID-19 pandemic period, the divestment of GSK's cephalosporin products at the start of the fourth quarter, and the impact of government mandated changes increasing use of generics in markets including France, Japan and China.

Group financial review continued

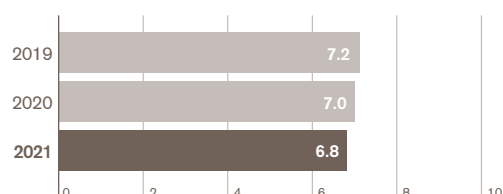
Financial performance continued

Vaccines

Turnover (£bn)

£6.8bn AER growth (3)% CER growth 2%

20% of Group turnover



Vaccines turnover

	2021 £m	2020 £m	Growth £%	Growth CER%
Meningitis	961	1,029	(7)	(2)
Influenza	679	733	(7)	(2)
Shingles	1,721	1,989	(13)	(9)
Established Vaccines	2,970	3,231	(8)	(4)
	6,331	6,982	(9)	(5)
Pandemic Vaccines	447	–	–	–
	6,778	6,982	(3)	2

Vaccines turnover in the year decreased 3% at AER, but grew 2% CER to £6,778 million, primarily driven by pandemic adjuvant sales, partially offset by lower demand for routine adult vaccination due to COVID-19 vaccination programme deployment and disease circulation across regions, resulting in lower *Shingrix* and Hepatitis vaccines sales. Unfavourable US prior period RAR adjustments reduced overall Vaccines growth by approximately 2 percentage points, particularly in *Fluarix/FluLaval* and *Shingrix* where the impact on product growth was a decrease of 7% and a decrease of 2% respectively.

Vaccines turnover excluding pandemic vaccines decreased 9% AER, 5% CER to £6,331 million.

Meningitis

Meningitis sales decreased 7% AER, 2% CER to £961 million driven primarily by unrepeatable International tender volumes for other meningitis vaccines. *Bexsero* sales were stable at AER, but grew 5% CER to £650 million, reflecting increased market share in the US.

Menveo sales were up 3% AER, 9% CER to £272 million, primarily driven by 2020 cohort catch-up vaccinations and 2021 higher demand, as well as increased market share in the US.

Influenza

Fluarix/FluLaval sales decreased 7% AER, 2% CER, to £679 million as a result of unfavourable prior period RAR movements in the US, partially offset by higher volume in the US and strong southern hemisphere demand in International.

Shingles

Shingrix decreased 13% AER, 9% CER to £1,721 million, primarily driven by lower demand in the US and International for routine adult vaccination due to COVID-19 vaccination programme deployment and disease circulation. In Europe, sales growth was driven by Germany and launches in the UK, Spain and Italy. *Shingrix* was sold in 17 countries, including 9 markets launched during 2021.

Established Vaccines

Hepatitis vaccines sales were down 20% AER, 16% CER to £460 million, adversely impacted by de-prioritisation of routine US adult vaccination, increased Hepatitis B vaccine competition and unfavourable CDC stockpile movements in the US, and by COVID-19 related travel restrictions in Europe and International.

Sales of DTPa-containing vaccines (*Infanrix*, *Pediarix* and *Boostrix*) decreased 4% AER but grew 1% CER. *Infanrix/Pediarix* sales decreased 14% AER, 9% CER to £543 million, reflecting lower tender volume in Europe and International as well as a change in recommendation for the dosing schedule in Germany, partly offset by increased demand in the US. *Boostrix* sales grew 9% AER, 14% CER to £521 million, largely driven by demand recovery and tender volumes in International, as well as higher demand and share in the US.

Rotarix sales were down 3% AER but up 1% CER to £541 million, reflecting demand recovery in International.

Synflorix sales decreased by 11% AER, 8% CER to £357 million, primarily due to lower tender demand in Emerging markets.

MMRV vaccines sales were stable at AER but grew 4% CER to £260 million, largely driven by higher demand in International.

Pandemic Vaccines

Pandemic vaccines sales of £447 million included £444 million of pandemic adjuvant sales to the US and Canadian governments.

Group financial review continued

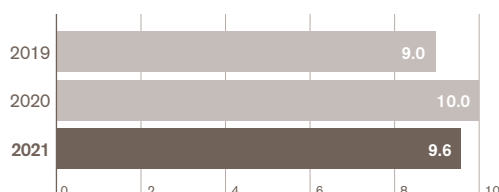
Financial performance continued

Consumer Healthcare

Turnover (£bn)

£9.6bn AER growth (4)% CER growth 0%

28% of Group turnover



Consumer Healthcare turnover

	2021 £m	2020 £m	Growth £%	Growth CER%
Oral health	2,732	2,753	(1)	5
Pain relief	2,276	2,219	3	7
Vitamins, minerals and supplements	1,512	1,506	–	4
Respiratory health	1,133	1,209	(6)	(1)
Digestive health and other	1,803	1,824	(1)	4
	9,456	9,511	(1)	4
Brands divested/under review	151	522	(71)	(69)
	9,607	10,033	(4)	–

	2021 £m	2020 £m	Growth £%	Growth CER%
US	3,179	3,408	(7)	(1)
Europe	2,468	2,619	(6)	(3)
International	3,960	4,006	(1)	4
	9,607	10,033	(4)	–

Consumer Healthcare turnover in the year of £9,607 million decreased 4% AER and was stable at CER reflecting dilution from divestments given the completion of the portfolio rationalisation at the end of Q1 2021. On a two-year CAGR sales excluding brands divested under review grew 4% overall despite the adverse impact of the COVID-19 pandemic.

Sales excluding brands divested/under review decreased 1% AER but increased 4% CER reflecting the underlying strength of brands across the portfolio and categories and continuing growth in e-commerce. Overall, sales benefited from strong growth across all categories excluding Respiratory health which was negatively impacted in Q1 2021 by the historically low cold and flu season. The decrease in cold and flu sales resulted in an approximately 1% drag on full year growth.

International sales excluding brands divested/under review grew high single digit on a CER basis with double digit growth in emerging markets including India, China, the Middle East and Africa. Excluding brands divested/under review, US sales grew low single digits but European sales were stable on a CER basis. Both regions were particularly negatively impacted by the historically low cold and flu season during Q1 2021.

Oral health

Oral health sales decreased 1% AER, but grew 5% CER to £2,732 million. *Sensodyne* delivered high single digit growth reflecting underlying brand strength, continued innovation and strong growth across key markets including the US, China, India and Japan. Gum health also delivered broad based high single digit growth across key markets. Denture care grew low single digits driven partly by a return to growth in Q4 2021.

Pain relief

Pain relief sales increased 3% AER, 7% CER to £2,276 million. *Panadol*, which benefitted from seasonal demand in the last quarter, grew double digits. *Voltaren* grew mid-single digits, offsetting the expected short-term decrease in the second half of the year in the US after the introduction of private label competition earlier in 2021. *Excedrin* delivered growth of over 40% versus a prior year decrease reflecting supply improvements.

Vitamins, minerals and supplements

Vitamins, minerals and supplements sales were stable at AER but grew 4% CER to £1,512 million building on the significant (19% CER) growth in 2020. *Centrum* grew mid-teens percent driven by successful innovation, improved supply capacity in the US and continued consumer focus on health and wellness. *Caltrate* grew mid-single digits and *Emergen-C* decreased high-single digits reflecting a particularly challenging 2020 comparator due to unprecedented demand during the early stages of the pandemic.

Respiratory health

Respiratory health sales decreased 6% AER, 1% CER to £1,133 million. In Q4 2021, cold and flu sales rebounded strongly and were above 2019 levels in Europe and slightly below 2019 levels in the US. For the full year, cold and flu products were down mid-single digits as the H2 2021 rebound was insufficient to offset the considerable decrease in the first quarter of 2021 which resulted from historically low demand for cold and flu products, effectively halving the global market in the period. Allergy products grew mid-single digits.

Digestive health and other

Digestive health and other brands sales decreased 1% AER but grew 4% CER to £1,803 million. Digestive health brands were up high-single digits with particularly strong growth in *Tums* and *Eno*. Skin health and Smoker's health brands were up mid-single digits, offset partly by a decrease in small, non-strategic brands.

Group financial review continued

Financial performance continued

Cost of sales

	2021 £m	2020 £m	Growth £%	Growth CER%
Total cost of sales	(11,603)	(11,704)	(1)	2
Adjusted cost of sales	(10,726)	(10,191)	5	8

Total cost of sales as a percentage of turnover was 34.0%, 0.3 percentage points lower at AER and 1.1 percentage points lower in CER terms compared with 2020. This primarily reflected lower write-downs in a number of manufacturing sites and the unwind in 2020 of the fair market value uplift on inventory arising on completion of the Consumer Healthcare Joint Venture with Pfizer.

Excluding these and other Adjusting items, Adjusted cost of sales as a percentage of turnover was 31.4%, 1.6 percentage points higher at AER and 0.8 percentage points higher at CER compared with 2020. This primarily reflected higher pandemic sales (*Xevudy*) as well as higher supply chain costs in Vaccines resulting from lower demand and higher inventory adjustments and higher commodity and freight costs in Consumer Healthcare, partly offset by price benefits in Pharmaceuticals, including the benefit from prior period RAR adjustments, a further contribution from restructuring savings across all three businesses and favourable mix in Vaccines.

Selling, general and administration

	2021 £m	2020 £m	Growth £%	Growth CER%
Total selling, general and administration	(10,975)	(11,456)	(4)	-
Adjusted selling, general and administration	(10,225)	(10,717)	(5)	(1)

Total SG&A costs as a percentage of turnover were 32.2%, 1.4 percentage points lower at AER and 1.8 percentage points lower at CER compared with 2020. This included increased separation costs partly offset by lower restructuring charges.

Excluding Adjusting items, Adjusted SG&A costs as a percentage of turnover were 30.0%, 1.5 percentage points lower at AER than in 2020 and 1.8 percentage points lower on a CER basis. Adjusted SG&A costs decreased 5% AER, 1% CER which reflected the tight control of ongoing costs and reduced variable spending across all three businesses as a result of the COVID-19 lockdowns, and the continuing benefit of restructuring in Pharmaceuticals, Consumer Healthcare and support functions. The decrease also reflected a favourable legal settlement in 2021 compared to increased legal costs in 2020 as well as one-off benefits in pensions and insurance which were partly offset by the one-off benefit from restructuring of post-retirement benefits in 2020. This was partly offset by increased investment behind launches in HIV and Vaccines.

Research and development

	2021 £m	2020 £m	Growth £%	Growth CER%
Total research and development	(5,278)	(5,098)	4	7
Adjusted research and development	(4,776)	(4,603)	4	8

Total R&D expenditure was £5,278 million (15.5% of turnover), up 4% AER, 7% CER, including an increase in impairments partly offset by a decrease in major restructuring charges. Adjusted R&D expenditure was £4,776 million (14.0% of turnover), 4% higher at AER, 8% higher at CER than in 2020.

Pharmaceuticals R&D expenditure was £3,578 million (20.2% of turnover), stable at AER, up 4% CER, primarily driven by increased investment in our Specialty portfolios, including the early stage research projects. Efficiency savings continued from the implementation of the One R&D programme for Pharmaceuticals and Vaccines as part of the Separation preparation restructuring programme.

The growth of the Specialty portfolio in 2021 was primarily driven by our two programmes for COVID-19 treatment (*Xevudy* and *otilimab*) along with the other *otilimab* programme for rheumatoid arthritis, *bepirovirsen*, our HBV antisense oligonucleotide and *depemokimab*, our anti-IL5 for asthma. This has been partly offset by reduced spend on *daprodustat* due to the completion of programmes. In Oncology, there is continued investment reflecting our commitment to synthetic lethality and in *Blenrep*, together with *bintrafusp alfa*, where we have accelerated close-out costs for the programme but this has been largely offset by a reduction in spend on *feladilimab* following the decision to terminate the programme in April.

R&D expenditure in Vaccines was £887 million (13.1% of turnover), up 29% AER, 34% CER, reflecting increased investment in clinical programmes for meningitis and RSV and investment in our mRNA platform, partly offset by efficiency savings from the implementation of the One Development programme and variable spending as a result of COVID-19 lockdowns. R&D expenditure in Consumer Healthcare was £249 million.

Royalty income

Royalty income was £419 million (2020 – £318 million), up 32% AER, 32% CER, primarily driven by higher sales of *Gardasil*.

Group financial review continued

Financial performance continued

Other operating income/(expense)

Net other operating expenses of £476 million (2020 – £1,624 million income) primarily reflected accounting charges of £1,101 million (2020 – £1,234 million) arising from the re-measurement 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 re-measurement charge of £1,026 million (2020 – £1,114 million) for the contingent consideration liability due to Shionogi, as a result of the unwinding of the discount for £380 million and a charge for £646 million primarily from adjustments to sales forecasts and the settlement with Gilead (see page 58). This was partly offset by a number of asset disposals including the disposal of royalty rights on cabozantinib, the disposal of the cephalosporin business and disposal of a number of Consumer Healthcare brands and fair value uplifts on investments. 2020 included the net profit on disposal of Horlicks and other Consumer Healthcare brands of £2,815 million, partly offset by the related loss on sale of the shares in Hindustan Unilever of £476 million.

Operating profit

Total operating profit was £6,201 million compared with £7,783 million in 2020. This primarily reflected an unfavourable comparison to the net profit on disposal in Q2 2020 of Horlicks and other Consumer brands and resultant sale of shares in Hindustan Unilever. This was partly offset by lower major restructuring costs, lower re-measurement charges on the contingent consideration liabilities and the unwind in 2020 of the fair market value uplift on inventory arising on completion of the Consumer Healthcare Joint Venture with Pfizer.

Excluding these and other Adjusting items, Adjusted operating profit was £8,806 million, 1% lower than 2020 at AER, but 9% higher at CER on a turnover increase of 5% CER. The Adjusted operating margin of 25.8% was 0.3 percentage points lower at AER, 0.9 percentage points higher on a CER basis than in 2020.

The increase in Adjusted operating profit primarily reflected the benefit from incremental pandemic sales (*Xevudy* and adjuvant) contributing approximately 6% AER, 7% CER to Adjusted Operating profit growth. Adjusted Operating profit also benefited from sales growth in Pharmaceuticals including the benefit from prior period RAR adjustments and tight control of ongoing costs including reduced promotional and variable spending across all three businesses as a result of the COVID-19 lockdowns, favourable legal settlements compared to increased legal costs in 2020 and benefits from continued restructuring across the business. This was partly offset by lower sales in Vaccines, primarily *Shingrix*, higher supply chain costs in Vaccines and Consumer Healthcare, divestments in Consumer Healthcare and increased investment in R&D across Vaccines and Pharmaceuticals.

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 2021 amounted to £856 million (2020 – £885 million). This included cash payments made to Shionogi of £826 million (2020 – £858 million).

Adjusted operating profit by business

Pharmaceuticals operating profit was £4,681 million, up 12% AER, 24% CER on a turnover increase of 10% CER. The operating margin of 26.4% was 1.9 percentage points higher at AER than in 2020 and 3.3 percentage points higher on a CER basis. This primarily reflected price benefits in Pharmaceuticals, including the benefit from a prior period RAR adjustment, reduced supply chain costs, the tight control of ongoing costs, short term benefits to changes in ways of working, a favourable legal settlement in 2021 compared to increased legal costs in 2020 and the continuing benefit of restructuring. This was partly offset by support to launches in HIV and increased investment in R&D.

Vaccines operating profit was £2,256 million, down 17% AER, 11% CER on 2% turnover increase at CER. The operating margin of 33.3% was 5.6 percentage points lower at AER than in 2020 and 4.8 percentage points lower on a CER basis. This was primarily driven by higher supply chain costs resulting from higher inventory adjustments and lower demand, along with higher R&D spend to support key strategic priorities and increased SG&A investment to support business growth, partly offset by higher royalty income and pandemic adjuvant beneficial mix.

Consumer Healthcare operating profit was £2,239 million, up 1% AER, 9% CER on stable turnover at CER. The operating margin of 23.3% was 1.2 percentage points higher at AER and 2.0 percentage points higher on a CER basis than in 2020. This primarily reflected sales growth of continuing brands, price increases and favourable mix, synergy delivery from the Pfizer Joint Venture Integration and tight cost control, partially offset by the impact of divestments (1.2 percentage points), increased advertising and promotion investment, increased commodity and freight costs and investment in manufacturing sites.

Group financial review continued

Financial performance continued

Net finance costs

	2021 £m	2020 £m
Finance income		
Interest and other income	26	39
Fair value movements	2	5
	28	44
Finance expense		
Interest expense	(746)	(822)
Unwinding of discounts on provisions	(2)	(3)
Remeasurements and fair value movements	–	(4)
Finance expense on lease liabilities	(31)	(40)
Other finance expense	(5)	(23)
	(784)	(892)

Total net finance costs were £756 million compared with £848 million in 2020. Adjusted net finance costs were £753 million compared with £844 million in 2020. The decrease is primarily as a result of reduced interest expense from lower debt levels, favourable movements in foreign exchange rates, a premium paid on the early repayment and refinancing of bond debt in 2020 and reduced interest on tax partly offset by lower interest income on overseas cash post-closing of the divestment of Horlicks and other Consumer Healthcare nutrition products in India and a number of other countries.

Share of after tax profits of associates and joint ventures

The share of after tax profits of associates and joint ventures was £33 million (2020 – £33 million).

Loss on disposal of interests in associates

The net loss on disposal of interests in associates was £36 million, primarily driven by a loss on disposal of our interest in the associate Innoviva Inc.

Profit before tax

Taking account of net finance costs, the share of profits of associates and loss on disposal of interest in associates, profit before taxation was £5,442 million compared with £6,968 million in 2020.

Taxation

	2021 £m	2020 £m
UK current year charge	132	30
Rest of world current year charge	1,044	1,177
Charge in respect of prior periods	172	66
Total current taxation	1,348	1,273
Total deferred taxation	(1,002)	(693)
Taxation on total profits	346	580

The charge of £346 million represented an effective tax rate on Total results of 6.4% (2020 – 8.3%) and reflected the different tax effects of the various Adjusting items, including a credit of £397 million resulting from the revaluation of deferred tax assets following enactment of an increase in the headline rate of UK corporation tax (effective 1 April 2023). 2020 reflected the disposal of Horlicks and other Consumer brands and the subsequent disposal of shares received in Hindustan Unilever. Tax on Adjusted profit amounted to £1,415 million and represented an effective Adjusted tax rate of 17.5% (2020 – 16.0%).

Issues related to taxation are described in Note 14, 'Taxation' in the Annual Report 2021. 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 £711 million (2020 – £639 million). The increase was primarily due to an increased allocation of Consumer Healthcare Joint Venture profits of £460 million (2020 – £374 million) and an increased allocation of ViV Healthcare profits of £196 million (2020 – £223 million), including reduced credits for re-measurement of contingent consideration liabilities.

The allocation of Adjusted earnings to non-controlling interests amounted to £1,006 million (2020 – £1,031 million). The reduction in allocation primarily reflected a reduced allocation of ViV Healthcare profits of £438 million (2020 – £474 million), partly offset by higher net profits in some of the Group's other entities with non-controlling interests. The allocation of Consumer Healthcare Joint Venture profits was £515 million (2020 – £515 million).

Earnings per share

Total EPS was 87.6p compared with 115.5p in 2020. This primarily reflected an unfavourable comparison to the net profit on disposal in Q2 2020 of Horlicks and other Consumer brands partly offset by the related loss on sale of the shares in Hindustan Unilever, partly offset by a credit of £397 million to Taxation in 2021 resulting from the revaluation of deferred tax assets following enactment of an increase in the headline rate of UK corporation tax (effective 1 April 2023), lower major restructuring costs and lower remeasurement charges on the contingent consideration liabilities.

Adjusted EPS was 113.2p compared with 115.9p in 2020, down 2% AER but up 9% CER, on a 9% CER increase in Adjusted operating profit primarily reflecting incremental pandemic sales, sales increases in Pharmaceuticals, tight cost control and favourable legal settlements and lower interest costs, partly offset by lower sales in Vaccines, primarily *Shingrix*, higher supply chain costs in Vaccines, increased R&D investment and a higher effective tax rate. The contribution to growth from COVID-19 solutions was approximately 8% AER, 9% CER.

Group financial review continued

Financial performance continued

Dividends

The Board has declared four interim dividends resulting in a total dividend for the year of 80 pence, in line with the dividend declared for 2020. See note 16 to the financial statements, 'Dividends'.

Dividend policy

On 23 June 2021, at the new GSK Investor Update, GSK set out that from 2022 a progressive dividend policy will be implemented. The dividend policy, the total expected cash distribution, and the respective dividend pay-out ratios for new GSK and new Consumer Healthcare remain unchanged.

GSK expects to declare a 27p per share dividend payable by the current group for the first half. This comprises 22 pence per share for new GSK and 5 pence per share representing Consumer Healthcare during the first half whilst part of the group. For the second half of 2022, new GSK continues to expect to declare a 22p per share dividend. As previously communicated, new GSK would expect to declare a dividend of 45 pence per share for 2023.

Following separation, the dividend policy for the new Consumer Healthcare company will be the responsibility of its Board of Directors and is expected to be guided by a 30 to 50 per cent pay-out ratio. On this basis, we now expect a second-half dividend from the new Consumer Healthcare company equivalent to a payout of around 3 pence per share, subject to its Board's decisions on the intra-year phasing of dividend payments. This expected distribution per share for the second half of the year has been adjusted from that highlighted at the GSK Investor Update in June 2021 to reflect the total number of shares (up to circa 9.25 billion shares) in the new Consumer Healthcare company that are expected to be in issue upon demerger. In June 2021 the planning assumption for the Investor Update reflected only the GSK shares in issue at that time (circa 5 billion shares).

In aggregate, this would represent on the full year 2022 basis the equivalent of a Group dividend of around 52p per share. Dividends payable by Consumer Healthcare will only be receivable by shareholders who remain invested in Consumer Healthcare post-separation and at the appropriate record dates.

Guidance and Outlook

In 2022 we expect to continue to deliver on our strategic priorities. We plan to increase targeted investment in R&D, to build on and invest behind our top line momentum for key growth drivers and to deliver the demerger of our Consumer Healthcare business in mid-year. Assuming global economies and healthcare systems approach normality as the year progresses, we expect sales of Specialty Medicines to grow approximately 10% at CER and sales of General Medicines to show a slight decrease, primarily reflecting increased genericisation of established Respiratory products. Vaccines sales are expected to grow at a low teens percentage at CER for the year as a whole. However, governments' prioritisation of COVID-19 vaccination programmes and ongoing measures to contain the pandemic are expected to result in some continued disruption to adult immunisations, with the impact weighted to the first half. For *Shingrix*, despite the potential for short-term pandemic disruption, we continue to expect strong double-digit growth and record annual sales based on strong demand in existing markets and geographical expansion.

Reflecting these factors, in 2022 for new GSK we expect sales to grow between 5% to 7% at CER and Adjusted operating profit to grow between 12% to 14% at CER as compared with 2021. This includes the future benefit in royalty income from the settlement and license agreement with Gilead Sciences, Inc. (Gilead) announced on 1 February 2022.

In June 2021, GSK announced that it expected new GSK to deliver sales growth and adjusted operating profit growth of more than 5% and more than 10%, respectively, CAGR at constant exchange rates over the five year period 2021-2026 (with 2021 as the base year). These financial outlooks exclude any contribution from COVID-19 related revenues. New GSK expects to improve adjusted operating margin from the mid-20s% in 2021 to over 30% by 2026 and cash generated from operations is expected to exceed £10 billion by 2026. By 2031, new GSK aims to deliver sales of more than £33 billion (at constant exchange rates).

Medium term outlooks were provided for Consumer Healthcare at a Capital Markets Day scheduled for 28 February 2022. Until such time as the formal criteria for treating Consumer Healthcare as a 'Discontinued operation' have been satisfied (currently expected in Q2 2022), GSK will continue to present the Consumer Healthcare business within 'Continuing operations' and will consolidate the business for reporting purposes until the demerger has completed.

In 2022, based on known binding agreements from governments we expect that COVID-19 solutions will contribute a similar sales level to 2021, but a substantially reduced profit contribution due to the increased proportion of lower margin *Xevudy* sales. We expect this to reduce new GSK Adjusted Operating profit growth (including COVID-19 solutions in both years) by between 5% to 7%. We continue to discuss further opportunities with governments.

Adjusting items

Adjusted results reconciliation 31 December 2021	Total results £m	Intangible asset amortisation £m	Intangible asset impairment £m	Major restructuring £m	Transaction- related £m	Divestments, significant legal and other items £m	Separation costs £m	Adjusted results £m
Turnover	34,114							34,114
Cost of sales	(11,603)	701	(33)	154	28	27		(10,726)
Gross profit	22,511	701	(33)	154	28	27		23,388
Selling, general and administration	(10,975)			426	25	17	282	(10,225)
Research and development	(5,278)	101	355	46				(4,776)
Royalty income	419							419
Other operating (expense)/income	(476)				1,106	(662)	32	–
Operating profit	6,201	802	322	626	1,159	(618)	314	8,806
Net finance costs	(756)			2		1		(753)
Loss on disposal of interest in associates	(36)					36		–
Share of after-tax profits of associates and joint ventures	33							33
Profit before taxation	5,442	802	322	628	1,159	(581)	314	8,086
Taxation	(346)	(159)	(81)	(114)	(196)	(470)	(49)	(1,415)
<i>Tax rate</i>	<i>6.4%</i>							<i>17.5%</i>
Profit after taxation	5,096	643	241	514	963	(1,051)	265	6,671
Profit attributable to non-controlling interests	711				295			1,006
Profit attributable to shareholders	4,385	643	241	514	668	(1,051)	265	5,665
Earnings per share	87.6p	12.9p	4.8p	10.3p	13.3p	(21.0)p	5.3p	113.2p
Weighted average number of shares (millions)	5,003							5,003

Adjusted results reconciliation 31 December 2020	Total results £m	Intangible asset amortisation £m	Intangible asset impairment £m	Major restructuring £m	Transaction- related £m	Divestments, significant legal and other items £m	Separation costs £m	Adjusted results £m
Turnover	34,099							34,099
Cost of sales	(11,704)	699	31	667	116			(10,191)
Gross profit	22,395	699	31	667	116			23,908
Selling, general and administration	(11,456)	1	18	659	(23)	16	68	(10,717)
Research and development	(5,098)	75	214	206				(4,603)
Royalty income	318							318
Other operating (expense)/income	1,624				1,215	(2,839)		–
Operating profit	7,783	775	263	1,532	1,308	(2,823)	68	8,906
Net finance costs	(848)			2		2		(844)
Share of after-tax profits of associates and joint ventures	33							33
Profit before taxation	6,968	775	263	1,534	1,308	(2,821)	68	8,095
Taxation	(580)	(150)	(47)	(292)	(229)	17	(14)	(1,295)
<i>Tax rate</i>	<i>8.3%</i>							<i>16.0%</i>
Profit after taxation	6,388	625	216	1,242	1,079	(2,804)	54	6,800
Profit attributable to non-controlling interests	639				392			1,031
Profit attributable to shareholders	5,749	625	216	1,242	687	(2,804)	54	5,769
Earnings per share	115.5p	12.6p	4.4p	25.0p	13.8p	(56.5)p	1.1p	115.9p
Weighted average number of shares (millions)	4,976							4,976

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 2021 were £626 million (2020 – £1,532 million), analysed as follows:

	2021			2020		
	Cash £m	Non- cash £m	Total £m	Cash £m	Non- cash £m	Total £m
2018 major restructuring programme (incl. Tesaro)	18	9	27	105	210	315
Consumer Healthcare Joint Venture integration programme	173	11	184	298	28	326
Separation Preparation restructuring programme	371	59	430	625	216	841
Combined restructuring and integration programme	8	(23)	(15)	39	11	50
	570	56	626	1,067	465	1,532

Cash charges of £371 million under the Separation Preparation programme primarily arose from restructuring of some administrative and central manufacturing functions as well as commercial pharmaceuticals and R&D functions. The non-cash charges of £59 million primarily reflected write-down of assets in administrative locations and R&D sites.

Cash charges of £173 million on the Consumer Healthcare Joint Venture programme primarily related to severance and integration costs. The non-cash credit in the Combined restructuring and integration programme primarily reflected a write back on disposal of a site.

Total cash payments made in 2021 were £753 million (2020 – £737 million), £434 million (2020 – £152 million) relating to the Separation Preparation restructuring programme, a further £176 million (2020 – £291 million) relating to the Consumer Healthcare Joint Venture integration programme, £95 million (2020 – £179 million) under the 2018 major restructuring programme including the settlement of certain charges accrued in previous quarters and £48 million (2020 – £115 million) for the existing Combined restructuring and integration programme.

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

	2021 £m	2020 £m
Pharmaceuticals	233	671
Vaccines	(40)	214
Consumer Healthcare	196	374
	389	1,259
Corporate and central functions	237	273
Total Major restructuring charges	626	1,532

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

	2021 £m	2020 £m
Cost of sales	154	667
Selling, general and administration	426	659
Research and development	46	206
Other operating income/(expense)	-	-
Total Major restructuring charges	626	1,532

The benefit in the year from restructuring programmes was £0.7 billion, the benefit from the Separation Preparation restructuring programme was £0.3 billion, the benefit from the Consumer Healthcare Joint Venture integration was £0.2 billion and the benefit from the 2018 Restructuring programme was £0.2 billion.

The 2018 major restructuring programme, including Tesaro, has cost £1.5 billion to the end of 2021, with cash costs of £0.6 billion and non-cash costs of £0.9 billion, and has delivered annual savings of around £0.5 billion by the end of 2021 (at 2019 rates). These savings were fully re-invested to help fund targeted increases in R&D and commercial support of new products. The programme is substantially complete and therefore GSK will cease external reporting of total costs and benefits of the 2018 major restructuring programme from 2022 onwards.

The completion of the Consumer Healthcare Joint Venture with Pfizer has realised substantial cost synergies and has largely delivered the expected total annual cost savings of £0.5 billion by 2021. The cash costs are expected to be £0.7 billion and non-cash charges expected to be £0.1 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.

Group financial review continued

Adjusting items continued

The Group initiated in Q1 2020 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. 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 continues to target delivery of £0.8 billion of annual savings by 2022 and £1.0 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 divestments have largely covered the cash costs of the programme.

Transaction-related adjustments

Transaction-related adjustments resulted in a net charge of £1,159 million (2020 – £1,308 million). This included a net £1,101 million accounting charge for the re-measurement 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)	2021 £m	2020 £m
Contingent consideration on former Shionogi-ViiV Healthcare Joint Venture (including Shionogi preferential dividends)	1,026	1,114
ViiV Healthcare put options and Pfizer preferential dividends	48	(52)
Contingent consideration on former Novartis Vaccines business	27	172
Release of fair value uplift on acquired Pfizer inventory	–	91
Other adjustments	58	(17)
Total transaction-related charges	1,159	1,308

The £1,026 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, as a result of the unwind of the discount for £380 million and a charge of £646 million primarily from adjustments to sales forecasts and the settlement with Gilead as well as updated exchange rate assumptions. The £48 million charge relating to the ViiV Healthcare put option and Pfizer preferential dividends represented an increase in the valuation of the put option as a result of the settlement with Gilead, offset by lower cash and updated exchange rate assumptions.

The ViiV Healthcare contingent consideration liability is fair valued under IFRS. The potential impact of the COVID-19 pandemic remains uncertain and at 31 December 2021, it has been assumed that there will be no significant impact on the long-term value of the liability. This position remains under review and the amount of the liability will be updated in future quarters as further information on the impact of the pandemic becomes available. An explanation of the accounting for the non-controlling interests in ViiV Healthcare is set out on page 57.

Divestments, significant legal charges and other items

Divestments and other items also included gains from a number of asset disposals, including the disposal of royalty rights on cabozantinib, disposal of the cephalosporins business and disposal of a number of Consumer Healthcare brands, fair value gains on investments and certain other Adjusting items, including the impact of the enactment of the increase in the headline rate of UK Corporate tax as discussed on page 189. The Consumer Healthcare brands disposal programme is complete and has delivered net proceeds of £1.1 billion. In 2021 the net loss on disposal of interests in associates was £36 million, primarily driven by a loss on disposal of the interest in the associate Innoviva Inc. A charge of £26 million (2020: £7 million) was recorded for significant legal matters arising in the period. Significant legal cash payments were £5 million (2020 – £9 million). Included within Divestments, significant legal and other items, is a deferred tax credit of £157 million arising on the transfer of intellectual property within the group during the quarter. This deferred tax credit arises due to differences between group value and the market value of the assets transferred.

Separation costs

From Q2 2020, the Group started to report additional costs to prepare for establishment of the Consumer Healthcare business as an independent entity (“Separation costs”). Total Separation costs incurred in 2021 were £314 million (2020 – £68 million). This includes £38 million relating to transaction costs including preparatory admission costs (costs relating to achieve a listing).

Total separation costs are estimated to be £600-700 million, excluding transaction costs.

Cash generation and conversion

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

	2021 £m	2020 £m
Net cash inflow from operating activities	7,952	8,441
Net cash inflow/(outflow) from investing activities	(1,777)	2,161
Net cash outflow from financing activities	(7,589)	(10,132)
Increase in cash and bank overdrafts	(1,414)	470
Cash and bank overdrafts at beginning of year	5,262	4,831
Increase in cash and bank overdrafts	(1,414)	470
Exchange adjustments	(29)	(39)
Cash and bank overdrafts at end of year	3,819	5,262
Cash and bank overdrafts at end of year comprise:		
Cash and cash equivalents	4,274	6,292
Overdrafts	(455)	(1,030)
	3,819	5,262

Capital expenditure and financial investment

Cash payments for tangible and intangible fixed assets amounted to £2,931 million (2020 – £2,239 million) and disposals realised £898 million (2020 – £1,582 million). Cash payments to acquire equity investments amounted to £162 million (2020 – £411 million), primarily relating to Vir Biotechnology, and sales of equity investments realised £202 million (2020 – £3,269 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.

	2021 £m	2020 £m
Free cash inflow	4,437	5,406

Total cash payments to Shionogi in relation to the ViiV Healthcare contingent consideration liability in the year were £826 million (2020 – £858 million), of which £721 million was recognised in cash flows from operating activities and £105 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.

	2021 £m	2020 £m
Net cash inflow from operating activities	7,952	8,441
Purchase of property, plant and equipment	(1,172)	(1,226)
Purchase of intangible assets	(1,759)	(1,013)
Proceeds from sale of property, plant and equipment	143	68
Proceeds from disposal of intangible assets	772	1,255
Interest paid	(786)	(864)
Interest received	27	39
Dividends from associates and joint ventures	9	31
Contingent consideration paid (reported in investing activities)	(114)	(120)
Contribution from non-controlling interests	7	3
Distributions to non-controlling interests	(642)	(1,208)
Free cash flow	4,437	5,406

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 a minority shareholder 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.

Financial position and resources

	2021 £m	2020 £m
Assets		
Non-current assets		
Property, plant and equipment	9,932	10,176
Right of use assets	740	830
Goodwill	10,552	10,597
Other intangible assets	30,079	29,824
Investments in associates and joint ventures	88	364
Other investments	2,126	3,060
Deferred tax assets	5,218	4,287
Derivative financial instruments	18	5
Other non-current assets	1,676	1,041
Total non-current assets	60,429	60,184
Current assets		
Inventories	5,783	5,996
Current tax recoverable	486	671
Trade and other receivables	7,860	6,952
Derivative financial instruments	188	152
Liquid investments	61	78
Cash and cash equivalents	4,274	6,292
Assets held for sale	22	106
Total current assets	18,674	20,247
Total assets	79,103	80,431
Liabilities		
Current liabilities		
Short-term borrowings	(3,601)	(3,725)
Contingent consideration liabilities	(958)	(765)
Trade and other payables	(17,554)	(15,840)
Derivative financial instruments	(227)	(221)
Current tax payable	(489)	(545)
Short-term provisions	(841)	(1,052)
Total current liabilities	(23,670)	(22,148)
Non-current liabilities		
Long-term borrowings	(20,572)	(23,425)
Corporation tax payable	(180)	(176)
Deferred tax liabilities	(3,556)	(3,600)
Pensions and other post-employment benefits	(3,113)	(3,650)
Other provisions	(630)	(707)
Derivative financial instruments	(1)	(10)
Contingent consideration liabilities	(5,118)	(5,104)
Other non-current liabilities	(921)	(803)
Total non-current liabilities	(34,091)	(37,475)
Total liabilities	(57,761)	(59,623)
Net assets	21,342	20,808
Total equity	21,342	20,808

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 2021 was £20,778 million, with a net book value of £9,932 million. Of this, land and buildings represented £3,667 million, plant and equipment £4,558 million and assets in construction £1,707 million. In 2021, we invested £1,205 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 2021, we had contractual commitments for future capital expenditure of £616 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 pages 39 to 40 and in Note 46 to the financial statements, 'Legal proceedings'.

Right of use assets

Right of use assets amounted to £740 million at 31 December 2021 compared with £830 million on 1 January 2021. The decrease in the year reflected the impact of depreciation and disposals of £213 million and £70 million respectively, partly offset by additions of £215 million.

Goodwill

Goodwill decreased to £10,552 million at 31 December 2021, from £10,597 million.

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 2021 was £30,079 million (2020 – £29,824 million). The increase primarily reflected additions, net of disposals and write offs of £1,913 million, offset by amortisation and impairment losses, net of reversals, in the year of £1,597 million.

Group financial review continued

Financial position and resources continued

Investments in associates and joint ventures

We held investments in associates and joint ventures with a carrying value at 31 December 2021 of £88 million (2020 – £364 million). In 2021, the Group sold all of its shares in Innoviva Inc. back to Innoviva. Following this divestment, the Group held no investments in associates or joint ventures which are listed entities. 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 2021 of £2,126 million (2020 – £3,060 million). The highest value investments held at 31 December 2021 were in CureVac AG, which had a book value at 31 December 2021 of £380 million (2020 – £887 million), and Vir Biotechnology, which had a book value of £266 million (2020 – £130 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 held current derivative financial assets at fair value of £188 million (2020 – £152 million) and non-current derivative financial assets held at fair value of £18 million (2020 – £5 million). The majority of these financial instruments related to foreign exchange contracts both designated and not designated as accounting hedges.

Inventories

Inventory of £5,783 million decreased from £5,996 million in 2020.

Trade and other receivables

Trade and other receivables of £7,860 million increased from £6,952 million in 2020.

Deferred tax assets

Deferred tax assets amounted to £5,218 million (2020 – £4,287 million) at 31 December 2021.

Derivative financial instruments: liabilities

We held current and non-current derivative financial liabilities at fair value of £228 million (2020 – £231 million). This primarily related to foreign exchange contracts both designated and not designated as accounting hedges.

Trade and other payables

At 31 December 2021, trade and other payables were £17,554 million compared with £15,840 million at 31 December 2020. The increase primarily reflected the impact of higher customer return and rebate accruals and higher accruals relating to our collaborations. See Note 28 to the financial statements, 'Trade and other payables'.

Provisions

We carried deferred tax provisions and other short-term and non-current provisions of £5,027 million at 31 December 2021 (2020 – £5,359 million). Other provisions at the year-end included £196 million (2020 – £320 million) related to legal and other disputes and £652 million (2020 – £860 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 £1,129 million (2020 – £2,104 million) on pension arrangements and £1,243 million (2020 – £1,363 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 £921 million at 31 December 2021 (2020 – £803 million).

Contingent consideration liabilities

Contingent consideration amounted to £6,076 million at 31 December 2021 (2020 – £5,869 million), of which £5,559 million (2020 – £5,359 million) represented the estimated present value of amounts payable to Shionogi relating to ViiV Healthcare and £479 million (2020 – £477 million) represented the estimated present value of contingent consideration payable to Novartis related to the Vaccines acquisition.

The liability due to Shionogi included £231 million in respect of preferential dividends. The liability for preferential dividends due to Pfizer at 31 December 2021 was £nil (2020 – £1 million). An explanation of the accounting for the non-controlling interests in ViiV Healthcare is set out on page 57.

Of the total contingent consideration payable (on a post-tax basis) at 31 December 2021, £958 million (2020 – £765 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.

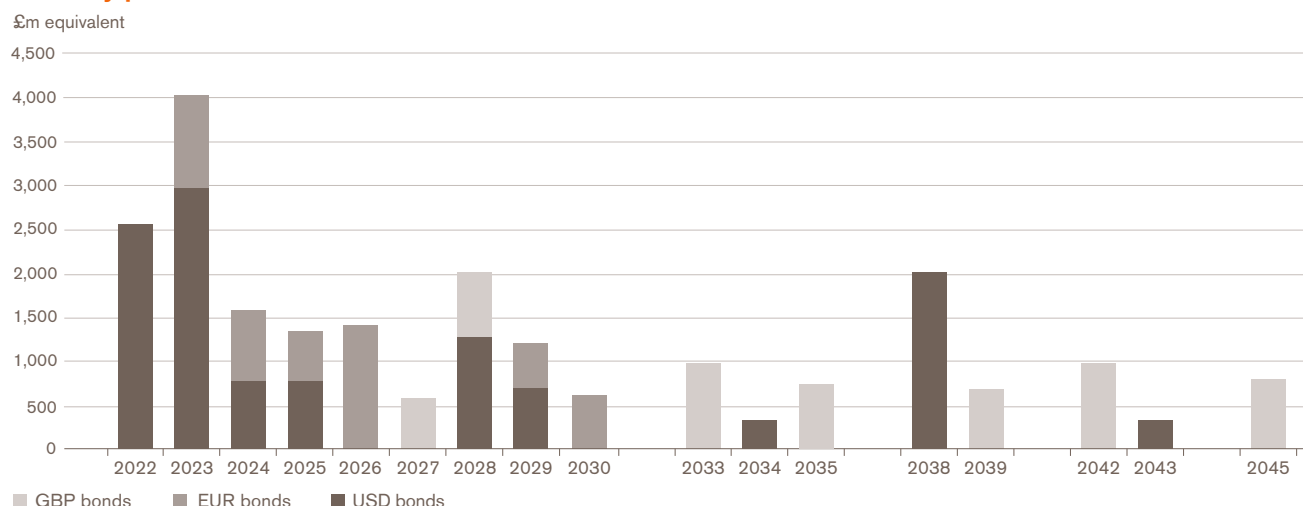
The impact of the settlement with Gilead on the contingent consideration liability (CCL) is to increase it by £288 million, on a post-tax basis in Q4 2021 due to the obligation ViiV Healthcare has to pay future cash consideration to Shionogi for its share of the upfront and of the future US sales performance of Biktarvy and products containing bictegravir. Including the impact of the settlement at 31 December 2021, the liability which is discounted at 8% stood at £5,559 million, on a post-tax basis.

The Shionogi-ViiV Healthcare contingent consideration liability is discounted at 8% and the Novartis Vaccines contingent consideration liability is discounted partly at 7.5% and partly at 8.5%.

Group financial review continued

Financial position and resources continued

Maturity profile of bond debt



Net debt

	2021 £m	2020 £m
Cash, cash equivalents and liquid investments	4,335	6,370
Borrowings – repayable within one year	(3,601)	(3,725)
Borrowings – repayable after one year	(20,572)	(23,425)
Net debt	(19,838)	(20,780)

At 31 December 2021, net debt was £19.8 billion, compared with £20.8 billion at 31 December 2020, comprising gross debt of £24.1 billion and cash and liquid investments of £4.3 billion. Net debt reduced due to £4.4 billion free cash flow and £0.5 billion proceeds from investments, including £0.3 billion proceeds from the Innoviva disposal and £0.3 billion of net favourable exchange impacts from the translation of non-Sterling denominated debt and exchange on other financing items partly offset by the dividends paid to shareholders of £4.0 billion and additional investments of £0.2 billion.

At 31 December 2021, GSK had short-term borrowings (including overdrafts and lease liabilities) repayable within 12 months of £3.6 billion and £4.0 billion repayable in the subsequent year.

At 31 December 2021, GSK's cash and liquid investments were held as follows:

	2021 £m	2020 £m
Bank balances and deposits	2,825	3,000
US Treasury and Treasury repo only money market funds	54	317
Liquidity funds	1,395	2,975
Cash and cash equivalents	4,274	6,292
Liquid investments – government securities	61	78
	4,335	6,370

Cash and liquid investments of £2.9 billion (2020 – £5.4 billion) were held centrally at 31 December 2021.

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

	2021 £m	2020 £m
Cash and liquid investments	4,335	6,370
Gross debt – fixed	(23,167)	(24,538)
– floating	(1,006)	(2,612)
– non-interest bearing	–	–
Net debt	(19,838)	(20,780)

Movements in net debt

	2021 £m	2020 £m
Net debt at beginning of year	(20,780)	(25,215)
(Decrease)/increase in cash and bank overdrafts	(1,414)	470
(Decrease)/increase in liquid investments	(18)	1
Increase in long-term loans	–	(3,298)
Net repayment of short-term loans	1,995	7,305
Repayment of lease liabilities	215	227
Exchange movements	314	(135)
Other movements	(150)	(135)
Net debt at end of year	(19,838)	(20,780)

Group financial review continued

Financial position and resources continued

Interest rate benchmark reform

Interest rate benchmark reform - Amendments to IFRS 9, IAS 39, IFRS 4, IFRS 7 and IFRS 16' Phase I and Phase II were issued by the IASB in September 2019 and August 2020, and adopted by the UK Endorsement Board on 5 January 2021. Phase I of the amendment modifies 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. Phase II also provides that, for financial instruments measured using amortised cost measurement, changes to the basis for determining the contractual cash flows required by interest rate benchmark reform should be reflected by adjusting their effective interest rate and no immediate gain or loss should be recognised.

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.

At 31 December 2021, the Group was not directly exposed to interest rate benchmark reform as it held no interest rate derivatives or floating rate debt that referenced to LIBOR. The Group did not transition any material derivatives or floating rate debt into a new index as all of the instruments referencing LIBOR matured before December 2021.

Total equity

At 31 December 2021, total equity had increased from £20,808 million at 31 December 2020 to £21,342 million.

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

	2021 £m	2020 £m
Total equity at beginning of year	20,808	18,357
Total comprehensive income for the year	4,759	7,358
Dividends to shareholders	(3,999)	(3,977)
Ordinary shares issued	21	29
Changes in non-controlling interests	-	(131)
Transaction with non-controlling interest	10	-
Share-based incentive plans	367	381
Tax on share-based incentive plans	11	(4)
Contributions from non-controlling interests	7	3
Distributions to non-controlling interests	(642)	(1,208)
Total equity at end of year	21,342	20,808

Share purchases

At 31 December 2021, GSK held 355.2 million shares as Treasury shares (2020 – 355.2 million shares), at a cost of £4,969 million (2020 – £4,969 million), which has been deducted from retained earnings.

No ordinary shares were repurchased in the period 1 January 2021 to 28 February 2022 and the company does not expect to make any ordinary share repurchases in the remainder of 2022.

In 2021, no 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 GSK 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 2021, the ESOP Trusts held 23.2 million (2020 – 49.0 million) GSK shares against the future exercise of share options and share awards. The carrying value of £27 million (2020 – £194 million) has been deducted from other reserves. The market value of these shares was £371 million (2020 – £655 million).

On 10 February 2022, 50.3 million shares were transferred to the ESOP Trusts after which the Trusts held 72.9 million shares against the exercise of share options and share rewards.

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 2021 as they fall due for payment.

	Total £m	Under 1 yr £m	1-3 yrs £m	3-5 yrs £m	5 yrs+ £m
Loans	23,296	3,399	5,624	2,800	11,473
Interest on loans	7,603	686	1,194	1,038	4,685
Lease obligations	1,015	203	305	166	341
Future finance charges	153	25	41	30	57
Intangible assets	12,082	583	1,013	1,914	8,572
Property, plant & equipment	616	468	148	–	–
Investments	146	45	61	40	–
Purchase commitments	484	360	115	8	1
Pensions	44	44	–	–	–
Total	45,439	5,813	8,501	5,996	25,129

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. There was a decrease in the commitments in 2021 as a result of a reduction in outstanding loan commitments.

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 includes this commitment but excludes the normal ongoing annual funding requirement in the UK of approximately £110 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 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	12	9	2	–	1
Other contingent liabilities	114	13	12	31	58
Total	126	22	14	31	59

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 2021, 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'.

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 14 October 2021. 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 (stable outlook) and with Moody's Investor Services ('Moody's') is A2 (stable 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.

Commodity risk management

Our objective is to minimise income statement volatility arising from fluctuations in commodity prices, where practical and cost effective to do so. The TMG is authorised to approve the execution of certain financial derivatives to hedge commodity price exposures.

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. Usage of these limits is actively monitored and any breach of these limits would be reported to the CFO immediately.

In addition, relationship banks and their credit ratings are reviewed regularly so that, when changes in ratings occur, changes can be made to investment levels or to authority limits as appropriate. All banking counterparty limits are reviewed at least annually.

Critical accounting policies

The Group consolidated financial statements have been prepared in accordance with international accounting standards in conformity with the requirements of the Companies Act 2006 and the International Financial Reporting Standards (IFRS) as issued by the International Accounting Standard Board (IASB).

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 46 and 31)
- Contingent liabilities (Note 34)
- 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, 'Critical accounting judgements and key sources of estimation uncertainty'.

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:

	2021		2020		2019	
	£m	Margin %	£m	Margin %	£m	Margin %
Gross turnover	19,928	100	20,035	100	18,471	100
Market-driven segments	(6,656)	(33)	(6,754)	(34)	(5,976)	(32)
Government mandated and state programmes	(4,553)	(23)	(5,205)	(26)	(4,264)	(23)
Cash discounts	(377)	(2)	(388)	(2)	(356)	(2)
Customer returns	(117)	(1)	(117)	(1)	(141)	(1)
Prior year adjustments	838	4	402	2	247	1
Other items	(621)	(3)	(522)	(2)	(579)	(3)
Total deductions	(11,486)	(58)	(12,584)	(63)	(11,069)	(60)
Net turnover	8,442	42	7,451	37	7,402	40

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 decreased deductions in the Government mandated and state programmes of the gross turnover to net turnover reconciliation primarily reflected lower rebates and chargebacks on respiratory products, and on *Advair* in particular.

During the year *Advair* accounted for 6% of US Pharmaceuticals turnover and approximately 21% of the total deduction for rebates and returns.

The respiratory portfolio as a whole, including Established Respiratory products, accounted for approximately 77% 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 2021, the total accrual amounted to £5,044 million (2020 – £4,686 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 2021 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 meaningfully assess whether the outcome will result in a probable outflow, or to quantify or reliably estimate the liability, 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'.

Strategic report

The Strategic report was approved by the Board of Directors on 28 February 2022

Iain Mackay

Chief Financial Officer
28 February 2022