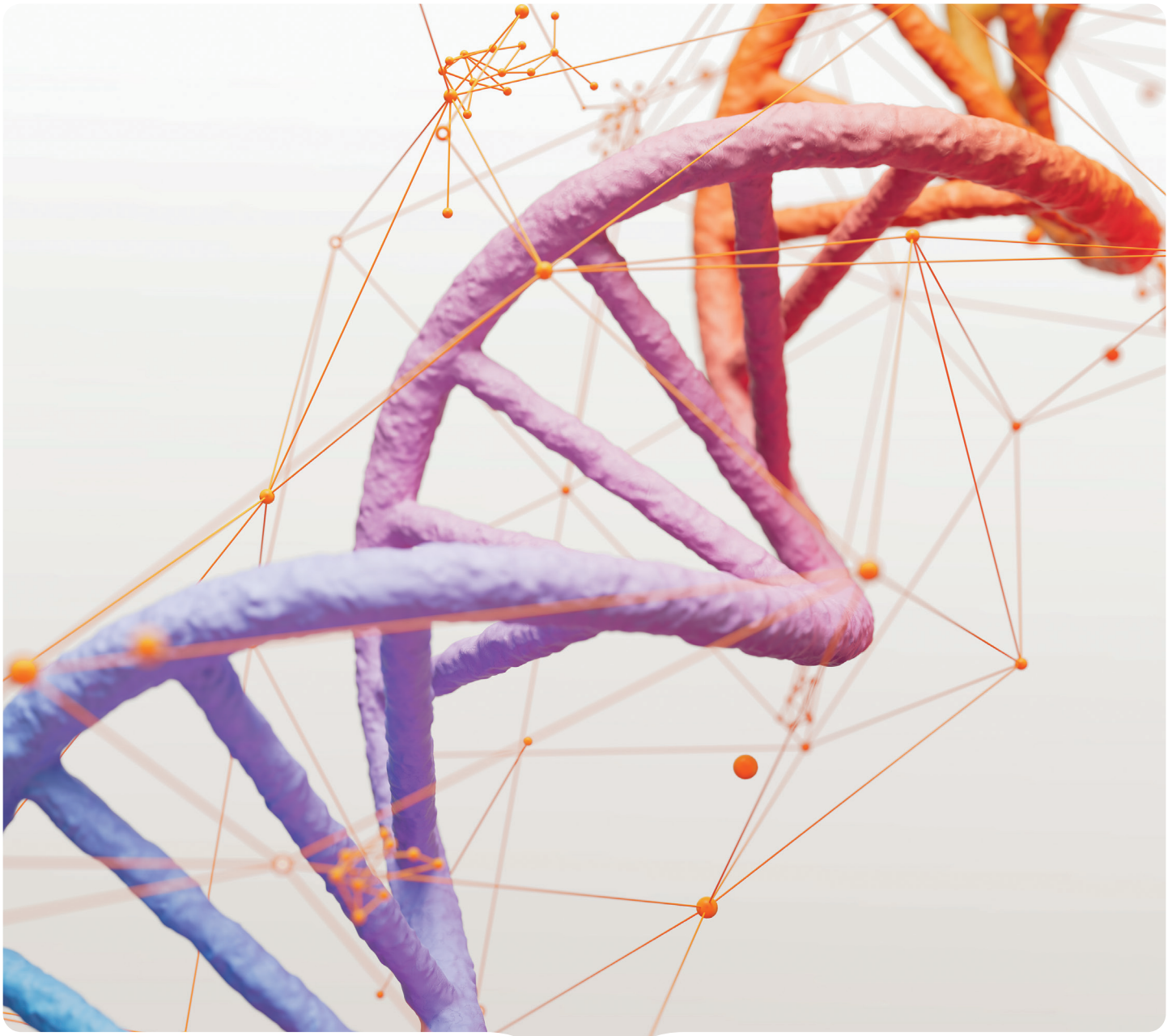


GSK

Ahead Together

Annual Report 2022

We are a global biopharma company with a purpose to unite science, technology and talent to get ahead of disease together.

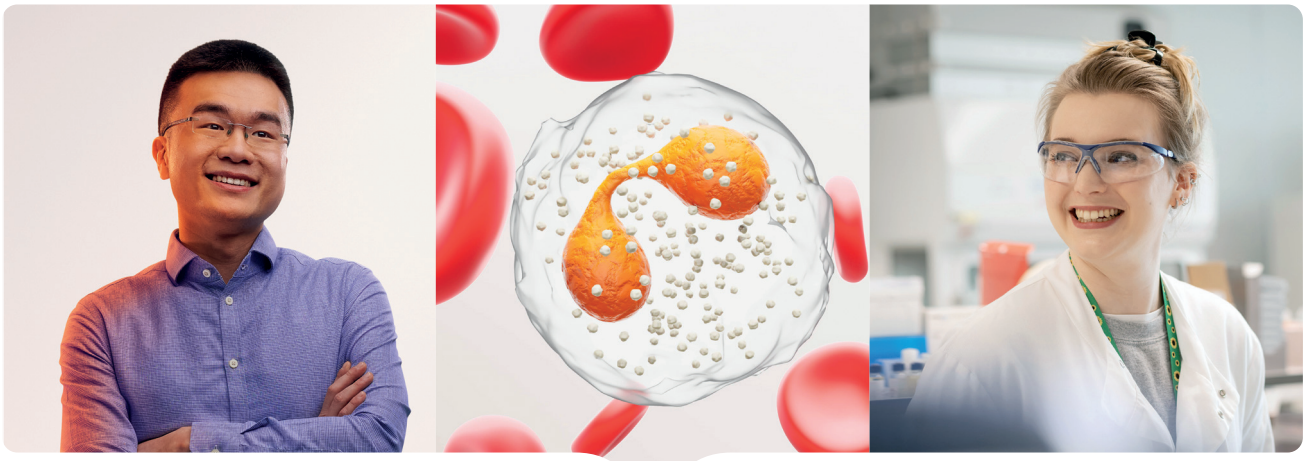
We aim to positively impact the health of 2.5 billion people by the end of 2030. Our bold ambitions for patients are reflected in commitments to growth and a step-change in performance.

We are a company where outstanding people can thrive.

Contents

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 69 and 70 and reconciliations to the nearest IFRS measures are on pages 81 to 85.



Ahead Together

2022 was a landmark year for GSK. Following the demerger of our consumer healthcare business to form Haleon in July, we are now a fully focused biopharma company.

We prioritise innovation in vaccines and specialty medicines, maximising the increasing opportunities to prevent and treat disease

At the heart of this is our R&D focus on the science of the immune system, human genetics and advanced technologies, and our world-leading capabilities in vaccines and medicines development. We focus on four therapeutic areas: infectious diseases, HIV, immunology/respiratory and oncology.

We're confident in our future

Our bold ambitions for patients are reflected in our commitments to a step-change in growth and performance over the period to 2026. This means more GSK vaccines and medicines, including innovative new products, will reach more people than ever before.

Being a responsible business means getting ahead of disease together in the right way

That's why environmental, social and governance (ESG) impacts are embedded in our strategy and support our sustainable performance and long-term growth. They help us build trust with our stakeholders, reduce risk to our operations and deliver positive social impact.

Culture at GSK is something we all own

It powers our purpose, drives delivery of our strategy and helps make GSK a place where people can thrive. Our culture of being ambitious for patients, accountable for impact and doing the right thing is the foundation for how, together, we'll deliver for our patients, shareholders and GSK people.

2022 performance and key performance indicators

Financial

We delivered a step-change in commercial execution with growth across the portfolio. Prioritised investment and cost discipline supported strong growth in operating profit and earnings per share (EPS).

Group turnover (£bn) (R)

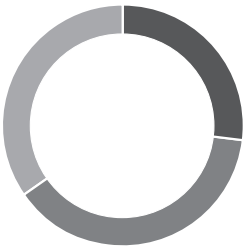
£29.3bn

AER 19%*
CER 13%*

2020	24.4
2021	24.7
2022	29.3

* 2022 growth excluding COVID-19 solutions AER 16% CER 10%

Turnover by product area (KPI)



Vaccines
£7.9bn AER 17% CER 11%

Specialty Medicines
£11.3bn AER 37% CER 29%

General Medicines
£10.1bn AER 5% CER 1%

Total continuing operating profit (£bn) (KPI)

£6.4bn

AER 48%
CER 31%

2020	6.0
2021	4.4
2022	6.4

Adjusted operating profit (£bn) (R)

£8.2bn

AER 26%*
CER 14%*

2020	6.7
2021	6.5
2022	8.2

* 2022 growth excluding COVID-19 solutions AER 29% CER 17%

Total continuing earnings per share (p)

110.8p

AER 34%
CER 18%

2020	122.4p
2021	82.9p
2022	110.8p

Adjusted earnings per share (p)

139.7p

AER 27%*
CER 15%*

2020	114.4p
2021	110.3p
2022	139.7p

* 2022 growth excluding COVID-19 solutions AER 31% CER 18%

Cash generated from operations attributable to continuing operations (£bn) (KPI)

£7.9bn

2020	7.7
2021	7.2
2022	7.9

Free cash flow (£bn) (KPI) (R)

£3.3bn

2020	3.7
2021	3.3
2022	3.3

We use 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 69 and 70. AER – actual exchange rate; CER – constant exchange rate.

2020 and 2021 comparative results presented in the tables above have been restated on a consistent basis from those previously published to reflect the demerger of the Consumer Healthcare business. The presentation of continuing and discontinued operations under IFRS 5 are set out on page 192.

(KPI) Key performance indicator attributable to continuing operations (R) Linked to executive remuneration. See pages 136 to 139 for more details

Performance summary and key performance indicators continued

Research and development

We continued to strengthen the late-stage pipeline with regulatory approvals, positive data read-outs and strategic business development.

Innovation sales (£bn) KPI R

£12.7bn

sales of products launched in the last five years including lifecycle innovation

>20

new approvals since 2017

Innovative pipeline

69

vaccines and specialty medicines based on the science of the immune system

18

in phase III/registration

Phase III starts R

5

including for depemokimab in eosinophilic disease, and cobolimab for second-line non-small cell lung cancers

7

new collaborations and acquisitions including with Affinivax, Sierra Oncology and Spero Therapeutics

Pipeline value and progress KPI R are not reported externally because of their commercial sensitivity.

Responsible business

We continue to be recognised for our environmental and sustainability leadership. Our ESG Performance Rating KPI is on track based on 83% of all performance metrics being met or exceeded. The metrics cover our six new focus areas: access to healthcare, global health and health security, environment R, diversity, equity and inclusion R, ethical standards, and product governance (see pages 41 to 50).

1st

in the Access to Medicine Index for 8th consecutive time

2nd

in the pharmaceuticals industry for the S&P Global Corporate Sustainability Assessment, with a score of 86 (as at 17 February 2023)

13%

reduction in indirect scope 3[1] carbon emissions

Culture

Culture progress KPI – ambitious for patients, accountable for impact and do the right thing – is measured through our employee surveys. Our employee engagement score was 81% in 2022 compared to 78% in 2021.

+ Read more on page 10

1 based on latest available data for scope 3 emissions between 2020-2021

Chair's statement

2022 was one of the most important years in GSK's history with strong operational and financial performance and the successful demerger of Consumer Healthcare.

As I said last year, the programme of change Emma and her team are delivering is designed to fundamentally reconstruct and strengthen GSK's operational capability. Clear, ambitious priorities have been set to sharpen commercial execution and cost discipline; improve the pipeline and R&D productivity; tackle the Group's structure and capital allocation capacity; and shift GSK's culture to be more competitive and performance focused.

We are seeing clear evidence of success of this strategic transformation. But, as always, there is more to do.

We delivered the demerger and separation of GSK's Consumer Healthcare business to form Haleon, a separate company listed in London, in July. This was the largest demerger in Europe for 20 years and the culmination of a huge amount of work over several years.

We have created two attractive and competitive businesses with compelling investment propositions: a world-leading consumer healthcare business, and a newly focused GSK with a strengthened balance sheet to enable increased investment in R&D and future growth.

We are already seeing evidence of the benefits of a simpler, more focused, business model.

Operational performance for GSK in 2022 was excellent, with strong growth in sales of vaccines and specialty medicines and double-digit growth in operating profit and EPS. This is the start of a new, sustained period of growth for the Group, with sales and operating profit forecast to grow by more than 5% and 10% CAGR[1], respectively over the period to 2026. The Board is very confident in delivery of these targets, underpinned by the improvement we are seeing in the Group's commercial execution and competitiveness.

Increasing R&D productivity and building a culture of performance, which take longer to embed, are critical levers of longer-term value creation for GSK.

Progress in R&D

We are making good progress in R&D. In the past five years, over 20 new medicines and vaccines have been approved and more than 18 new medicines are currently in late-stage clinical trial development.

It was good to see clear progress in our pipeline reflected in important milestones during 2022. Our respiratory syncytial virus (RSV) vaccine candidate for older adults achieved exceptional phase III results, and the US Food and Drug Administration (FDA) approval of our long-acting HIV medicine administered every two months reaffirms GSK's leadership in next-generation HIV treatment and prevention.

We also remain ambitious to support the pipeline and future growth through business development, with acquisitions of Sierra Oncology and Affinivax completed during the year.

I was delighted by the seamless transition of Tony Wood into the Chief Scientific Officer role in August, replacing Hal Barron. Tony is an outstanding and highly respected scientist and has been a key architect in rebuilding our pipeline.

1 Compound annual growth rate

Chair's statement continued

Engaging with shareholders

The Board and management continue to maintain very significant engagement with shareholders.

It is clear from these conversations that the vast majority of shareholders support the strategy the company is implementing. Nevertheless – and despite the progress that is being made – the Board recognises that there is more to do to increase investor confidence in the ability of the Group to sustain growth over the next decade.

This is important as GSK has under-performed in terms of TSR and share price performance for many years and the Board understands the need to deliver on this.

In the short term, this means consistent, year-on-year delivery of the targets for sales and operating profit, including successful launch of the company's key new product opportunities such as the RSV vaccine in 2023.

Looking beyond 2026, successful delivery and strengthening of the late-stage pipeline is critical across vaccines and specialty medicines, including for our long-acting HIV portfolio, supported by targeted business development.

Longer term, the Board is confident that the progress the company is making to develop industry-leading AI and machine learning capabilities, and application of deep understanding of genetics, can provide us with an edge to be able to identify, develop and launch products that make a difference for patients and deliver value for our shareholders.

Zantac litigation

The Group's share price performance in the second half of the year was impacted by the uncertainties associated with the *Zantac* product liability litigation in the US.

While this is disappointing, the company remains clear on its position on these matters, namely that the scientific consensus is that there is no consistent or reliable evidence that *Zantac* (ranitidine) increases the risk of any cancer. The decision in December by the US Federal Court in Southern Florida to dismiss all claims and cases relating to ranitidine was very welcome and GSK will continue to defend itself vigorously against claims brought at the State level.

Targets and governance

The Board did not adopt the targets for sales and operating profit growth lightly. These commitments were a very important demonstration of our confidence in the business and our determination to be held accountable for delivery.

In line with this, we introduced a new remuneration policy in 2022 linking executive remuneration to reward for outperformance.

We engaged extensively with shareholders to develop these proposals, recognising the new reward system is a fundamental part of the architecture of GSK post-separation to ensure we build a performance culture and generate sustained delivery of shareholder value. While we were pleased the policy achieved a positive shareholder vote, we recognise a sizeable minority of shareholders voted against. We will continue to engage with shareholders to demonstrate why we believe incentivising outperformance against the targets will ultimately be rewarded through shareholder value creation.

Operating responsibly

Operating responsibly is a foundation stone on which GSK has been built.

We are committed to ensuring ESG considerations are properly embedded into our strategy.

This supports long-term growth, reduces risk and helps us build trust with stakeholders. The Board was pleased to see continued progress in many ESG areas during 2022, including GSK again topping the independent Access to Medicines Index.

Board evolution

Delivery of the demerger obviously resulted in changes to the Board, including departures of Vindi Banga and Vivienne Cox to Haleon and the retirement of Laurie Glimcher. I would like to thank them all for their significant contributions to GSK over recent years.

We committed to using the opportunity of the demerger to deepen the GSK Board's biopharma experience and credentials. I was delighted to welcome Dr Vishal Sikka and Elizabeth McKee Anderson to the Board during the year. Vishal is a world-leading technologist and Elizabeth has deep commercial expertise, across both large and specialty biopharma.

Together with the continued involvement of Hal Dietz and Hal Barron, I believe the scientific credentials of GSK's Board are among the strongest in the industry.

We also look forward to the future appointment of the highly experienced Julie Brown as our new CFO, starting 1 May 2023. I would like to thank outgoing CFO Iain Mackay for his outstanding work and support over the last four years.

I would also like to note the appointments of Anne Beal, who joined the Board in May 2021 as Chair of the Corporate Responsibility Committee, and Charles Bancroft, currently Audit & Risk Committee Chair, as our new Senior Independent Director.

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 2023 for GSK.

Sir Jonathan Symonds
Chair

CEO's statement

2022 was a landmark year for GSK. We enter 2023 with strong momentum and as a focused global biopharma company.

Creating a focused global biopharma company

2022 was a landmark year for GSK. We successfully delivered the demerger of Haleon which is the most significant corporate change for the company in 20 years, and began a new chapter of competitive and profitable growth. We enter 2023 with strong momentum and as a focused global biopharma company with the ambition and purpose to unite science, technology and talent, to get ahead of disease together.

Strong 2022 performance increases confidence in delivering growth through 2026 and beyond

Group sales were £29.3 billion in 2022, up 13% CER, driven by strong growth in both Vaccines and Specialty Medicines. Adjusted operating profit grew 14% and adjusted EPS by 15% (both CER).

Reflecting the huge progress we have made to improve the competitiveness of our commercial execution, we now have 10 products exceeding £1 billion in annual sales, including *Shingrix*, *Trelegy*, *Nucala*, *Benlysta* and *Dovato*. *Shingrix* alone delivered a record year with £3 billion of sales. HIV sales, including *Dovato*, were £5.7 billion, up 12% CER.

Vaccines and Specialty Medicines now represent nearly two-thirds of our sales, compared to 46% in 2017, and we are well on track to achieve our target of 75% of revenues from Vaccines and Specialty Medicines by 2026. This evolving portfolio, together with prioritised investment in innovation and good cost discipline, is reflected in the further expansion of our operating margin.

Strong operational performance has enabled us to increase annual investment in R&D to over £5 billion and, through the demerger, we have also significantly strengthened GSK's balance sheet, creating additional flexibility to invest in growth and innovation. In 2022, we acquired the Boston-based vaccine company, Affinivax, which gave us access to the disruptive MAPS technology – for higher valency and broader coverage in a single vaccine – and a phase II next-generation 24-valent vaccine for pneumococcal disease. We also acquired Sierra Oncology, including the myelofibrosis treatment, momelotinib, which we hope to see approved in 2023, and signed an exclusive licence agreement with Spero Therapeutics for tebipenem, a novel oral antibiotic in late-stage development for complicated urinary tract infections (cUTIs). We expect to do more targeted business development in 2023.

In addition, we generated over £3.3 billion of free cash flow in 2022, supporting investments and a dividend of 61.25 pence per share for the year.

Our strong momentum underpins our confidence in delivering the ambitious sales and profit outlooks we have set for 2026. At the same time, we continue to build a stronger portfolio and pipeline based on science of the immune system, to absorb the loss of revenues from future patent expirations, and to put us in a strong position to deliver growth through the decade and beyond.

CEO's statement continued

Innovation supports future growth

We now have a pipeline of 69 vaccines and specialty medicines, many with the potential to be first- or best-in-class.

In August, Tony Wood took up his new role as GSK's Chief Scientific Officer, succeeding Hal Barron. With his proven expertise in science, data and new technologies, Tony is well placed to capture the value and opportunities we see with our R&D approach.

We are focused across four core therapeutic areas: infectious diseases; HIV; immunology/respiratory and oncology. Overall, infectious diseases and HIV represent around two-thirds of our pipeline and our primary focus for R&D.

In infectious diseases, we have developed a potential best-in-class vaccine for RSV in older adults. We were excited to present the phase III results in late 2022, which demonstrated 94%[1] efficacy against severe disease – an exceptional result. The world has been waiting more than 50 years for an RSV vaccine, so this is a significant scientific achievement. We have submitted this data to regulators and hope to see approval during 2023. Alongside our existing in-house capabilities, such as adjuvants, MAPS through our Affinivax acquisition and our collaboration with CureVac in mRNA, we now have the broadest suite of vaccine platform technologies of any company in the sector.

We also made important advances in the clinical development of two late-stage assets: gepotidacin, a new novel antibiotic for uncomplicated urinary tract infections (uUTIs), and bepirovirsen, which has the potential to provide a first-in-class functional cure for chronic hepatitis B, where there remains a significant unmet medical need. One in three people around the globe have been infected with the virus and more than 300 million are living with chronic hepatitis B infection today. Current standard of care for chronic hepatitis B achieves functional cure for very few patients, fewer than 5%.

With bepirovirsen, which is now undergoing final stage trials, and other assets in our pipeline, we aim to be at the forefront of a new wave of treatments for this ancient disease.

In HIV, we launched *Apretude*, the first and only long-acting injectable for HIV prevention which, alongside *Cabenuva*, the first and only complete long-acting HIV treatment regimen, means we are changing the landscape for HIV patients. We also made further progress during the year in the development of next-generation pipeline options, including presenting promising early-stage data for N6LS, our new broadly neutralising antibody, and we look forward to providing further visibility on these pipeline options during 2023.

In immunology/respiratory, we increased R&D investment to support the phase III programme for depemokimab, a promising potential new long-acting medicine to treat severe asthma – an area in which GSK has long-standing expertise and proven commercial capability. In oncology, we reported very positive data for *Jemperli* as a potential treatment for patients with primary advanced or recurrent endometrial cancer. Following discussions with the FDA, we took the decision to withdraw *Blenrep* from the US market in November, based on the previously announced outcome of the DREAMM-3 trial.

Building trust, reducing risk and delivering positive social impact

We are committed to running a responsible business, which builds trust and reduces risk to deliver sustainable health impact at scale, shareholder returns and to support our people to thrive.

As we set out later in this report, we are making good progress in strengthening our culture, which is key to how we deliver our ambition and purpose. We are committed to making GSK a place where talented people can thrive, with a culture where we are all ambitious for patients, accountable for impact, and do the right thing.

In June 2022, we introduced our new Code, which sets out our culture, as well as commitments GSK and our people make, so we can deliver our ambition and purpose in the right way.

Our ESG focus is on: access to healthcare, global health and health security, environment, diversity, equity and inclusion, ethical standards, and product governance. In 2022, we made excellent progress, maintaining our number one position in the Access to Medicines Index for the 8th consecutive time and ranking 2nd in the S&P Corporate Sustainability Assessment for the pharmaceutical industry.

As I talked about last year, investors and other stakeholders are demanding transparent reporting of performance on ESG matters. We are introducing a new ESG Performance Rating, to track delivery. I am pleased to report that our performance in 2022 is 'on track' with details set out on page 42.

As Jon has made clear on the *Zantac* product liability litigation in the US, the scientific consensus is that there is no consistent or reliable evidence that *Zantac* (ranitidine) increases the risk of any cancer. We will continue to defend ourselves vigorously in the State cases. From my perspective, it is important that as we do that, the company does not get distracted from our main priority – continuing to deliver on our strategy for patients, shareholders and our people.

Looking ahead with confidence

As we enter 2023, I believe GSK has compelling prospects. As ever, its our people who fuel this confidence and I want to thank them for all they have achieved during 2022 and the strong momentum they are delivering. I am very optimistic for the future and excited by what we can achieve together.

Emma Walmsley
Chief Executive Officer

1 Vaccine efficacy (VE) 94% (1 of 12,466 versus 17 of 12,494)

Business model

Our ambition is to positively impact the health of 2.5 billion people by the end of 2030. We aim to do this by developing transformational vaccines and medicines and making them available at responsible prices that are accessible for patients and sustainable for our business.

Central to our success are our people: experts in science, technology, manufacturing, regulation, intellectual property and commercialisation...

69,400
GSK people

>80
countries worldwide

24,000
suppliers working directly with GSK

£5.5bn
R&D investment in 2022
up by 9% at AER, 4% at CER

37
manufacturing sites

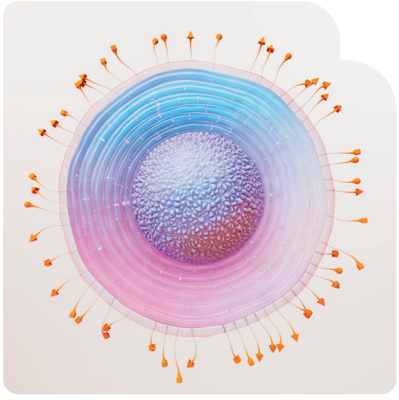
4
global R&D centres

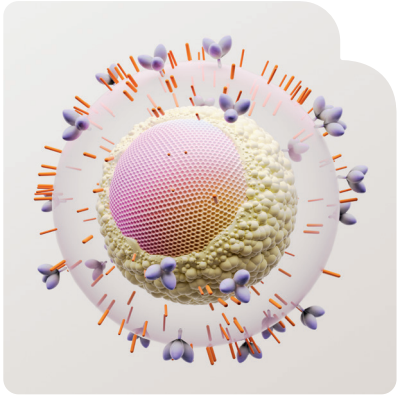
...who are identifying, researching, developing and testing ground-breaking discoveries, and manufacturing and commercialising...

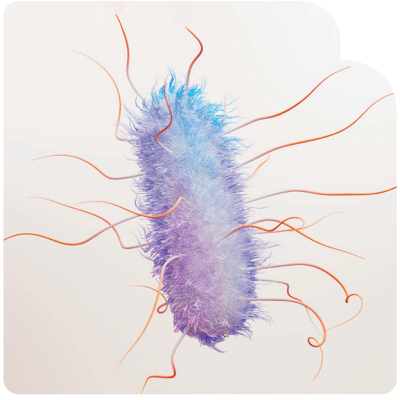
Vaccines
We deliver one and a half million doses of our vaccines every day; and around 40% of the world's children receive a GSK vaccine each year.

Specialty Medicines
Our portfolio of specialty medicines prevent and treat diseases, from HIV and respiratory diseases, to immuno-inflammation diseases like lupus, to cancer. Many are first or best-in-class.

General Medicines
Our portfolio of more than 150 products encompasses all of GSK's primary care medicines, supplied in 112 countries worldwide.







Business model continued

...products that improve the health of millions of people around the world in our core therapeutic areas...

Infectious diseases

We are a world leader in infectious diseases like shingles and meningitis, which, including HIV, account for two-thirds of the vaccines and medicines in our pipeline.

HIV

Our goal is to minimise the impact of HIV on people's lives through treatment, prevention and ultimately cure.

Immunology/respiratory

We're unlocking the science of the immune system to understand how it reacts to diseases like lupus, eosinophilic asthma and other inflammatory diseases.

Oncology

Our emerging portfolio in oncology will potentially bring new cancer therapies to the patients who need them most.

...steered by our long-term priorities...

Innovation

We develop new medicines and vaccines where they are needed, with better, faster and smarter R&D.

We're combining the power of genetic and genomic insights into the causes of disease, with the speed and scale of artificial intelligence and machine learning.

Performance

We've made commitments to growth and a significant step-change in delivery.

We are confident in our ability to sustain growth through the decade and beyond.

Trust

We deliver our strategy responsibly: always considering the ESG impacts of everything we do from lab to patient, helping to build trust with our stakeholders, reduce risk to our operations and deliver positive social impact.

...and creating value for:

Patients

2.3bn

packs of medicines and doses of vaccines delivered

Shareholders

61.25p

per share dividend

Society

£1.3bn

corporate income tax paid; in addition we pay duties, levies, transactional and employment taxes

Our people

All our people are supported to grow, be well and do work that really matters.

Reinvestment

The returns we make enable us to reinvest in discovering and developing new vaccines and medicines so we can continue getting ahead of disease.

Company directors are required by law to promote the success of their organisation for the benefit of both shareholders and their wider stakeholders, including employees, suppliers and the community. Information on the issues, factors and stakeholders that the Board considers relevant to complying with Section 172 (a) to (f) of the Companies Act 2006 can be found on page 112.

+ Our business model is supported by our ESG strategy, described on page 42

+ Our strategy is supported by a robust framework for monitoring and managing risk, described on pages 51 and 52

Our culture and people

GSK's purpose – to unite science, technology and talent to get Ahead of disease Together – puts our people at the heart of our success.

Our culture

We are committed to making GSK a place where people can thrive, with a culture where we are all ambitious for patients, accountable for impact, and do the right thing. This means we support our people to do things better and faster, focusing on what matters most. It means setting clear objectives and accountability for results and giving everyone the support and space they need to succeed. It means doing everything responsibly with care and integrity, because people and patients around the world count on us.

During 2022, we have dedicated significant leadership energy in bringing to life our Ahead Together purpose, strategy and culture across GSK. We have also placed real emphasis on individual ownership of the culture and the small changes we each need to make it a reality. This change has been supported by team conversation guides and simple tools used globally to support better and faster decision making, greater clarity of accountabilities and more ambitious, focused objectives.

In June, we introduced The Code. This sets out our culture as well as the commitments GSK and our people make so we can deliver on our ambition in the right way. GSK people sign up to The Code annually and personally commit 'I'm in'.

+ See The Code on gsk.com[1]

Making GSK a place where people thrive

Core to our Ahead Together ambition is to make GSK a place where people thrive. Although how people thrive is very individual, we also believe there are common themes that matter for all. Firstly, a belief in our purpose and a desire to live our culture and contribute to delivering our ambition. Secondly, feeling included and able to be yourself with opportunities to keep growing, with the support, feedback and space needed to succeed. And finally, feeling good, with positive mental, physical, financial and social wellbeing. This all requires GSK to be a place where people feel welcome and valued, with an environment (including our policies, workplaces and ways of working) which wholeheartedly enables and supports each person to deliver at their best.

Supporting our people managers

Our people managers play a crucial role in helping their teams to thrive and bring culture to life. We expect people managers to Motivate, Focus, Care for and Develop their teams. Over the last two years we have delivered First Line Leader training, anchored in these four areas, to over 80% of this population. In addition, in 2022, we launched a new senior leader programme, Leading Leaders, to further build on our leadership development at more senior levels of the organisation.

In preparation for 2023, we brought all people managers together in a virtual event to bring to life our biggest priorities and support managers in setting focused, ambitious objectives with their teams, aligned to our Innovation, Performance, Trust and Culture priorities.

Focusing on diversity, equity and inclusion

We are continuing our focus on building a more diverse organisation and an equitable and inclusive culture so that everyone feels welcome, valued and included. We are delivering our leadership representation aspirations, have implemented annual diversity, equity and inclusion (DEI) training for all, and invested in development tools to build more inclusive leaders. We support an award-winning leadership development programme, Accelerating Difference, to support women and ethnically diverse leaders. We have also continued to evolve our people policies, processes and practices to support recruitment, retention and development of a more diverse workforce. More details on our aspirational targets for DEI for our people, business and suppliers, can be found in the Responsible Business section on page 47.

Driving Performance with Choice

Performance with Choice – our approach to hybrid working for those in office-based roles (about a quarter of our people) continues to allow us to find the right balance of on-site and remote working. This framework, balanced in driving collective and individual performance, as well as supporting individual flexibility, is supporting personal wellbeing, driving performance and making us attractive as an employer.

This year we have been clear in our expectations so that we spend enough time together in person to help us continue to build our sense of community, connectedness, enable development and better achieve our Ahead Together ambition.

1 https://www.gsk.com/en-gb/company/governance/compliance/#the-code

Developing outstanding people

We are committed to developing outstanding people and giving people opportunities to grow. All GSK people are expected to have an agreed development plan, regardless of grade or role, that is underpinned by a robust conversation to understand the space and support needed for them to succeed. We continue to invest in development initiatives and training that can be accessed by all through our Keep Growing Campus – a central platform for our training and knowledge sharing.

In 2022, we have also redesigned our talent framework – focusing our reviews for our people against performance, living our culture and future potential. This gives us a simpler assessment process, in line with our culture, to support placing our best people in our most critical roles, with strong and diverse succession plans. This allows us to spend more time on development and action planning and less on process.

Health and wellbeing improvements

We have announced improvements to our health and wellbeing benefits, to better support people through different life stages and to make sure our offerings are fair and inclusive. These include a new global minimum standard of 18 weeks' parental leave for primary and secondary carers for all forms of family, a new global minimum standard for care of a family member for end of life or serious health emergencies, insured benefits to include same sex partners wherever possible, a new financial wellbeing service and mental health training – available to everyone.

In November, we gave a one-time discretionary payment to our people who were feeling the greatest impact of rising cost-of-living challenges. This payment was given to almost half of our global workforce in 47 of our 83 countries, using consistent criteria to determine eligible countries.

Understanding how our people experience GSK

We regularly measure how our people experience GSK, including progress in our culture focus areas and as a place to work. This includes an annual survey for all employees featuring questions on engagement, confidence, inclusivity, our culture focus areas and trust priorities. We also run a series of pulse surveys each year, with a statistically significant population, to get timely insights on our culture progress as well as hot topics of the moment. Over the last year, our progress is demonstrated by increased engagement at 81% in 2022, up from 78% in 2021, confidence in delivery of our ambitions, and positive trends in Ambitions for Patients, Accountability for Impact, Doing the Right Thing, and measures of inclusion.

To measure the effectiveness of our global manager population, their teams provide feedback via an annual One80 survey. Managers receive anonymised aggregate feedback on their effectiveness in motivating their team, focusing people on what matters most, leading with care, inclusive leadership and supporting performance and development. In 2022, 77% of our managers were rated as highly effective by their reports.

Recognising and rewarding our people

Sharing our success and recognising and rewarding our people, not just on the progress we have made but how we have made it, continues to be an important part of our culture. In addition to our bonus scheme that rewards performance across the company, each year we award 10% of our population with extra 'Ahead Together' awards for those delivering exceptional performance in line with our culture. And 5% of people are identified as Missed Performance for those that do not deliver on their objectives or live the culture. This year, in addition to our annual bonus and long-term incentive structure, we also gave a special thank you to all our people (excluding the GSK Leadership Team (GLT)), allowing us to recognise in real time what we achieved together in preparation for separation and the unprecedented transformation of GSK: everyone received a one-off week's salary in March, separate to our 2021 bonus pay-out.

We remain energised to continually live and evolve our culture in line with the internal and external environment. It is part of everyone's objectives, starting at the top, with all leadership team members having ambitious goals to embed and grow culture, and shows up in how we act every day.

Our external environment

Here, we set out five major themes that have influenced our environment – and how we work with governments, regulators and industry partners to keep providing medicines and vaccines to patients worldwide.

Life sciences continue to be shaped by new technology

Rapid advances in science and technology are changing life sciences R&D. This is particularly evident in the expansion of artificial intelligence and machine learning (AI/ML), which has the potential to transform outcomes for patients by making R&D more precise and productive. Research has identified nearly 270 companies working in the AI-driven drug discovery industry.[1] We're investing in building our own AI/ML capabilities and forging partnerships to further strengthen our position. Other biopharma companies are also collaborating with AI organisations, with 46 partnerships struck in 2022, compared to 28 in 2016.[2]

The pivotal role of innovation in managing the COVID-19 pandemic underscored the potential of new technologies and approaches to improve patient outcomes. Growth areas include next-generation vaccines, where there has been a substantial increase in assets in development, driven by the advancement of mRNA and DNA vaccine technology.

Greater use of new technologies and digital tools, as well as growth of decentralised trials, is accelerating a drive towards modernisation of clinical trial and regulatory processes.

Governments and regulators are continuing to build on lessons learned from COVID-19 and expand international collaboration on complex trials and further develop policies and infrastructure for responsible access to public datasets. As AI/ML advances, different regulatory approaches on the use of AI in medicines are emerging.

Collaboration is also needed to create common models and standards for AI regulation that support innovation and benefit patients.

+ **Read about our focus on data and platform technologies on pages 18 and 19**

270

companies working in the AI-driven drug discovery industry

Geopolitical tensions prompt countries to shift their priorities and focus

Scientific and technological advances offer significant promise for patients. But geopolitical tensions are putting pressure on the systems needed to deliver this innovation. Rising nationalism and friction between countries, due to the conflict in Ukraine and tensions between the US and China, bring potential risk and disruption. In the face of these tensions, governments are taking more interventionist actions to protect their domestic economic competitiveness, strengthen national security, create domestic jobs and improve public health.

There were notable examples of solidarity during the year. Constructive World Trade Organization discussions about reducing tariffs demonstrated that governments recognise the importance of minimising trade friction. But domestic interests remain the priority with governments encouraging companies to localise and shorten value chains[3], prioritising strategic resilience over efficiency. Policies to restrict trade and secure access to essential items including medical goods have persisted. For example, in 2022, governments introduced over 150 harmful policy interventions affecting trade in pharmaceutical goods.[4]

In an environment defined by tensions, trade disruption and economic uncertainty, health and life sciences continue to be viewed as sectors of strategic importance for governments across advanced markets, including the US, Europe and the UK. In March 2022, the US enacted a new federal agency – Advanced Research Projects Agency for Health – to improve the government's ability to speed biomedical and health research. Life sciences was earmarked as a key strength in the UK government's new Growth Plan.[5] Given their potential to bolster economic productivity and protect lives, healthcare and life sciences are likely to be subject to more muscular industrial policy interventions such as additional support for R&D, as well as state scrutiny over supply chain resilience.

>150

In 2022, governments introduced over 150 harmful policy interventions affecting trade in pharmaceutical goods

1 AI in biopharma research: A time to focus and scale | McKinsey 10 October 2022
2 Deep Pharma Intelligence, Artificial Intelligence for Drug Discovery Landscape Overview Q3 2022
3 KPMG Singapore, six key trends impacting global supply chains in 2022
4 Global Trade Alert
5 HM Treasury, The Growth Plan 2022, September 2022

Economic slowdown as energy crisis and inflation bite

Lockdowns at the height of the pandemic weighed on economies worldwide and the outlook continued to weaken in 2022. Global growth was forecast to slow to 3.2% in 2022[6] amid surging inflation, heightened geopolitical uncertainty and tightening financial conditions. Energy prices soared across Europe due to increased demand and restricted supply, contributing to rising inflation. This has had immediate and challenging consequences for individuals and businesses.

With energy prices climbing, governments have staged significant and costly interventions to protect households, seek alternative energy sources, and invest in renewable energy infrastructure. Government interventions on this scale risk growing fiscal deficits and put pressure on other areas of public spending, including healthcare. During the pandemic, healthcare spending increased as governments rolled out vaccination programmes. But spending is estimated to have fallen in real terms during 2022 as it failed to keep pace with inflation.[7] Medicines spending is expected to return to pre-pandemic growth rates by 2024, albeit with pricing and value under increasing scrutiny over the next few years due to economic pressures and geopolitical disruption.[8]

As governments meet economic headwinds, cost containment measures are on the rise, with healthcare budgets facing significant pressures in the UK, EU and other advanced markets. In August 2022, the US President signed into law the Inflation Reduction Act. This includes provisions to drive down US national debt through higher taxes, lowering energy costs, and lowering drug prices. Parts of the Act that focus on patients are welcome as they bring benefits to people who would otherwise face challenges accessing important vaccines. But there are concerns over negotiation provisions, allowing the federal health secretary to negotiate prices of certain expensive drugs each year for Medicare. This could potentially limit investment in innovation.

As well as cost containment, we are also seeing more examples of innovative contracting to support prudent stewardship of healthcare spending. Companies and payers are continuing to explore innovative pricing models, which facilitate patient access and support payer confidence in the value of a medicine or vaccine at the time of launch.

+ **Read more about pricing and access on page 43**

3.2%

Global growth was forecast to slow to 3.2% in 2022

Green transition disrupted but long-term momentum remains

The energy crisis has not only weakened economies, but also disrupted the green transition. Amid concerns over reliability, supply and affordability, policymakers face conflicting priorities. While energy transition is necessary to mitigate climate change, immediate energy needs are driving renewed investment in traditional fossil fuel energy sources. European countries announced plans to revert to higher coal usage to produce electricity, while the US has taken steps such as reopening oil and gas leasing on public lands.

Investor sentiment, particularly in the US, has seen similar shifts as the ESG agenda becomes increasingly polarised and politicised. During the year, Florida and Texas implemented measures banning their pension funds from investing through any asset managers that have policies on excluding fossil fuels or taking ESG factors into account.

Against this fractured backdrop, corporate net zero efforts remain in the spotlight with stakeholder expectations on credibility and transparency on net zero continuing to rise. But voluntary commitments and coalitions are being tested with, for example, the UN-backed Race to Zero dropping its explicit bar on support for new coal projects.

Despite the disruption seen during 2022, getting ahead of climate change remains a long-term investor and societal expectation, and a government priority. This was reinforced by the $369 billion clean energy investment in the US Inflation Reduction Act. Any setback to the energy transition is likely to be time-limited, so companies must continue to demonstrate leadership on the issue and remain committed to cutting their climate impact.

+ **Read more about climate and nature on pages 45 and 46**

$369bn

allocated to climate and clean energy programmes in the US Inflation Reduction Act

6 IMF, World Economic Outlook, October 2022

7 Economist Intelligence Unit, Healthcare outlook 2023 (eiu.com)

8 IQVIA, Global Use of Medicines 2023

Access in focus as COVID-19 shines light on health inequity

COVID-19 demonstrated the value of the life sciences sector and the potential for delivering innovative interventions at speed. But the pandemic also raised questions about the pace at which medicines and vaccines could be rolled out, shining a light on inequalities in access and healthcare outcomes both within and between countries. Around 26% of people in low-income countries are partially or fully vaccinated against COVID-19, compared with 80% in high-income countries.[9]

Scrutiny of the COVID-19 vaccine rollout has reignited the debate around the intersection between intellectual property (IP) rights and access to medicines and vaccines. This was evidenced by the TRIPS waiver, agreed in June 2022, which temporarily removes developing country obligations on patent protections for COVID-19 vaccines. Such a step doesn't address inequitable access and instead undermines industry's ability to partner, invest at risk, and respond quickly to future pandemics.

Industry has sought to encourage a more holistic approach to realising equitable and timely access during future pandemics. This recognises the multiple factors that enable access, such as sustainable funding and free trade. The international pharmaceutical industry, along with biotechs and vaccine manufacturers based in developing countries, united behind a vision for access in future pandemics, known as the Berlin Declaration. This outlined industry's willingness to reserve an allocation of real-time production for distribution to priority populations during future pandemics. The success of such an approach will rely on having a strong innovation ecosystem; removal of regulatory and trade barriers to export; procurement mechanisms for low- and middle-income countries; and robust health systems.

More resilient health systems are needed not only to counter the increasing threat of infectious disease emergencies, but also to manage the growing burden of non-communicable diseases. Delays to cancer diagnosis and treatment during the pandemic could have an adverse effect on survival for years to come. As health systems continue to manage the long-term repercussions of the pandemic, there is an opportunity to move towards new models of care that enable earlier action to prevent, diagnose and treat disease. Investing in prevention to get ahead of disease has a clear return. It improves health outcomes, is cost-effective, and contributes to healthier lives, societies and economies.

+ See pages 43 to 45 for more on pricing and access, and global health and health security

26%

of people in low-income countries are partially or fully vaccinated against COVID-19

Our position

In a challenging economic and political landscape, it's more important than ever that we invest in a pipeline of vaccines and specialty medicines that will meet changing and unmet healthcare needs. At the same time, we have to work with governments, regulators and industry partners to make sure these medicines and vaccines can reach patients, bringing value to both the people who need them and payers.

Scientific innovation and improving health remain a critical pathway to sustainable economic growth. We therefore continue to work with our peers and governments to make sure that the policy and regulatory environment stimulates and sustains innovation. This includes, for example, advocating for appropriate IP protections; a balanced regulatory framework that supports the discovery and delivery of vaccines and medicines developed through emerging technologies; and reinforcing the importance of global, diversified supply chains.

As the pricing environment becomes tougher, we are well placed to offer a differentiated, high-value pipeline across prevention and treatment of disease. This is built on using new technology and techniques to make our R&D faster and smarter. Demand for data and real-world evidence to support continued reimbursement of new products is likely to increase. We continue to work with payers to design innovative solutions that manage their risk and uncertainty, while also recognising the full health, social and economic value of innovative medicines and vaccines. We also continue to collaborate with global health partners to increase our reach to patients in lower income countries.

To support delivery of innovative medicines and vaccines, we continue to advocate for investment in resilient healthcare systems around the world. More robust infrastructure is needed to support, for example, routine life-course immunisation. Getting ahead of future pandemics, and managing them more effectively when they do happen, starts with investing in health systems and improving public health now.

9 Financial Times, COVID-19 vaccine tracker: the global race to vaccinate, as at 23 December 2022

Research and development

Science and technology have never before opened up so many possibilities for new vaccines and medicines for patients. In 2022, we've continued to harness the science of the immune system alongside genetics, genomics and advanced technology to continue to strengthen our pipeline.

Research and development

Highlights

69
vaccines and medicines in the pipeline

>20
new approvals since 2017

2/3rds
of our pipeline comes from infectious diseases and HIV

- Potential best-in-class RSV older adults candidate vaccine filed in US, EU, Japan
- *Shingrix* interim 10-year data presented at ID Week 2022
- Continued progress in development of long-acting HIV treatments; positive phase II data on N6LS broadly-neutralising antibody presented at HIV Glasgow
- Pivotal phase III trials for gepotidacin antibiotic for uUTIs stopped early for efficacy
- Positive phase IIb data for bepirovirsen, our investigational treatment for chronic hepatitis B, and started phase III study in early 2023
- Expansion of depemokimab phase III programme with trials for long-acting IL-5 inhibitor in three additional eosinophil-driven diseases
- Business development including: acquisition of Affinivax giving access to disruptive MAPS technology and phase II next-generation vaccine for pneumococcal disease; acquisition of Sierra Oncology adding momelotinib for myelofibrosis patients with anaemia (regulatory submission EU, US); and exclusive licence with Spero Therapeutics giving access to tebipenem HBr, a late-stage antibiotic for cUTIs

Our R&D approach

R&D is central to our purpose to get ahead of disease together. By combining the science of the immune system, genetics, genomics, advanced technologies and outstanding talent, we discover and develop vaccines and medicines to make a transformational impact on people's lives.

In 2022, R&D expenditure was £5,488 million, up 9% at AER, 4% at CER, from 2021 and we have strengthened our pipeline and platform capabilities through strategic business development. This means we have 22 vaccines and 47 medicines in development (see page 28). Many have the potential to be first-in-class.

Our late-stage R&D aligns to four therapeutic areas:

- infectious diseases, see page 20
- HIV, see page 23
- immunology/respiratory, see page 24
- oncology, see page 25

Our research team takes an approach that follows the science to identify opportunities with the greatest probability of success to lead to differentiated vaccines and medicines, including opportunities outside these four areas. Our scientists prioritise genetically identified targets that are at least twice as likely to succeed in the clinic. They also prioritise infectious disease targets and immune-modulators that have greater lifecycle opportunities.

Prioritising execution and technology

Our priorities are:

- flawless execution of our late-stage pipeline and acceleration of our organically derived pipeline
- doubling down on technology to deliver further innovation faster
- finding new ways to help patients through lifecycle innovation
- targeted business development to push towards new discoveries

Research and development continued

Flawless execution and acceleration of our pipeline

Our pipeline, across all phases, has 69 potential vaccines and medicines, more than 70% of them modulating the immune system and more than 70% with human genetic validation. In 2022, we started 16 phase I programmes, moved nine candidates into phase II and started five phase III programmes.

We also achieved industry-leading milestones, including the approval and launch of the first long-acting HIV medicines and the FDA priority review of the exceptional RSV older adult vaccine candidate with a potential best-in-class profile. We also presented new data at IDWeek 2022 showing that *Shingrix* can provide at least 10 years of protection against shingles in the over 50s, and completed our acquisition of Affininax.

We have made significant progress in improving key measures of productivity. We reduced overall cycle times by 20% from the start of new drug discovery projects through to the end of phase I (for 2019-2021 compared to 2016-2018), and we now have a phase I portfolio that includes many potential first-in-class medicines.

Doubling down on technology to deliver further innovation faster

We believe the combination of science and technology holds the key to fundamentally transforming medical discovery, improving success rates and shaping how we treat and prevent even the most challenging diseases. This is why technology plays a growing role in progressing our R&D towards vaccines and medicines not previously thought possible. It covers:

- data technology, which helps us to understand the patient and human biology, choose targets and design clinical trials. We have access to large, rich datasets thanks to our data-focused collaborations, including our recent collaboration with Tempus (see page 19) as well as established partnerships, for example with 23andMe, the UK Biobank, and the Laboratory of Genomic Research with the University of California (see page 18)
- platform technology, for the efficient design and development of new vaccines and medicines. We have access to a broad set of platform technologies, including an unrivalled suite within vaccines like mRNA, MAPS and adjuvant science, and a growing investment in oligonucleotides (see page 19)

Finding new ways to help patients through lifecycle innovation

We look to innovate throughout the lifecycle of our vaccines and medicines by exploring new ways for them to treat patients. Examples include:

- approval in the US for *Boostrix*, for immunisation during pregnancy to prevent whooping cough in newborn babies
- FDA approval for a new, more convenient presentation of our *Rotarix* vaccine to prevent gastroenteritis caused by rotavirus
- approval for *Priorix*, our vaccine against measles, mumps and rubella, in the US for children over 12 months
- approval of a two-dose regimen for *Cervarix*, our human papillomavirus vaccine for girls aged 9 to 14, in China
- approval in China for *Benlysta* to treat adults with active lupus nephritis (LN) and FDA approval for *Benlysta* for paediatric patients with active LN
- continue to develop a new monoclonal antibody, depemokimab, under development for its high affinity and long-acting suppression of IL-5 function

Pushing towards new discoveries through strategic business development

We work with commercial organisations and academic institutions to find new research and discovery opportunities, access new technology platforms or to progress the development of our pipeline. We remain agile and ambitious, looking for opportunities that address high unmet medical needs and complement our R&D strategy.

We look to grow our pipeline through acquisitions. In 2022, these included Affinivax adding a novel class of next-generation pneumococcal vaccine candidates and innovative MAPS technology (see page 20), and Sierra Oncology adding momelotinib for the treatment of mylefibrosis (see page 25).

We also announced five new collaborations, giving us access to exciting new vaccines, medicines and technologies, and deepening our understanding of how to prevent and treat disease. We partnered with precision medicine company Tempus, with oncology being a first area of focus. We added to our pipeline through new partnerships with Mersana Therapeutics for an option to co-develop and commercialise their XMT-2056 immunosynthen antibody-drug conjugate in oncology, with WuXi to progress bi-specific T-cell engaging antibodies for oncology and with Zheming to progress a phase I TLR8 agonist for hepatitis B virus (HBV). We announced a new partnership with Wave Life Sciences to drive discovery and development of oligonucleotide therapeutics, including a programme for alpha-1-antitrypsin deficiency with a novel RNA-editing mechanism of action, and we also announced an exclusive licence agreement with Spero Therapeutics for tebipenem HBr, a late-stage antibiotic that may treat cUTIs.

Genetics, genomics and advanced technologies

To get ahead of disease, we use innovative tools to maximise our chances of success and accelerate the pace of discovery. Genomics and the predictive power of AI/ML are changing how we find the right medicines for the right patients.

Advanced technologies and real-world data are bringing patients into the discovery and development process earlier. This, in turn, improves how researchers can integrate data into decision making. For diseases like cancer or neurological conditions, we're investigating how tools like genetic validation, wearables, genomics and AI/ML can provide important insights that make us better at choosing drug targets and the specific groups of patients in which to study them.

Data produced using these tools helps us:

- select novel targets that are genetically validated and so more likely to become approved medicines and vaccines
- design clinical trials to include the patients most likely to benefit from our potential medicines and vaccines
- recruit these patients faster, and accelerate the pace of our clinical trials

Improving drug discovery with the power of genomics and partnerships

Today, more than 70% of the projects in our pipeline are supported by human genetic evidence, informed by the large genetic datasets from our ongoing collaborations with the UK Biobank, 23andMe and FinnGen. In 2022, we were a founding member in the creation of Our Future Health, an ambitious UK effort aiming to recruit up to five million people to capture a wide range of medical and genetic information. We're also working with Genes & Health and Discover Me South Africa to further expand this work and ensure a diverse and robust genetic representation of diseases.

In our collaboration with the consumer genetics and research company 23andMe we have approximately 50 active joint drug discovery programmes for genetically validated targets. In 2022, we extended our collaboration for a fifth year to identify and validate additional new drug targets until July 2023. This year we also took on sole development responsibility for phase I of the collaboration programme consisting of an investigational antibody targeting CD96 as a novel immuno-oncology agent. This is an investigational antibody that is currently being evaluated for cancer alongside other GSK medicines.

Several collaborations in functional genomics are providing further insight to improve our target selection. We work with a range of institutions innovating in this fast-moving field, from CRISPR pioneers to start-ups. In the US, this includes dedicated genomics research centres, such as the Altius Institute in Seattle and the Broad Institute affiliated with MIT and Harvard University in Boston. We continue to partner with Adrestia, a British biotech, and with Open Targets, a UK consortium where we're a founding member.

These advances complement the progress we're making at the genomics lab we founded in 2019 with CRISPR pioneers at the University of California in San Francisco. The Laboratory for Genomic Research is now advancing a portfolio of 16 active technology and biology projects. By automating and advancing CRISPR, our scientists work side by side with academic researchers to uncover new knowledge about disease mechanisms for immunology, oncology and neurology. Scientists are creating new technologies that stem from CRISPR, and they are identifying additional applications of these technologies to find better starting points for new medicines.

CRISPR and other tools contribute to the data we have to understand the underlying causes of disease. Other information sources range from tissue and blood samples to human behaviour from wearable technology. Our proprietary AI/ML capabilities help our researchers interpret this volume of data and also make connections and predictions that help identify which targets are most likely to succeed. As assets move through our pipeline, both AI/ML and functional genomics continue to play a role, including in optimising clinical trial design, for example as happening now with bepivorisen.

Building in-house AI/ML teams and expanding our collaborations

AI/ML enables us to generate deeper insights from our own research data and our collaborations. Our work in applied AI/ML primarily focuses on two areas in R&D: at the early discovery stage to find genetically validated targets, and at the clinical stage to match patients with the right medicines.

We've built one of the largest in-house functions dedicated to AI/ML, and we work with partners to lead the way in these fields. Our AI/ML team includes more than 160 experts based at key GSK R&D sites, including London, San Francisco, Tel Aviv, Philadelphia and Boston. Combining our team with the resources and expertise of our partners helps us collect more data, find patterns in genetic data faster than we could before and, ultimately, helps us increase our success rates in making life-changing medicines. We continue to expand our partnerships with world leader data aggregation companies such as Tempus to further complement our internally generated data.

Research and development continued

Our models are becoming more and more advanced with every iteration. We've created a new imaging tool using AI/ML that we are using to inform target selection and potential business development opportunities in a challenging and complex disease area, non-alcoholic steatohepatitis (NASH).

Also, through a partnership with King's College London, we're using tumour models alongside digital pathology and AI to develop personalised immuno-oncology treatments for several solid cancers, including lung, gastrointestinal and women's cancers.

The Oxford-GSK Institute of Molecular and Computational Medicine (IMCM), which we established in partnership with Oxford University in December 2021, combines human genetics with functional genomics and ML to focus on neurological diseases like ALS, Alzheimer's and Parkinson's.

Our collaborations in data technology complement our existing capabilities and resources and include ongoing work with Cerebras, the pioneer in high performance AI computer systems, and NVIDIA, a global leader in AI hard and software. In 2022, we started two other data collaborations:

- PathAI, a global leader in AI-powered pathology, aimed at accelerating R&D in oncology and NASH. We'll combine our predictive and data-driven approach to drug discovery and trials with PathAI's models to build algorithms that uncover new insights. We'll integrate these into trials to help us predict which patients will be impacted most
- Tempus, which enables access to their library of de-identified patient data. Tempus' dataset draws from its work with over 40% of oncologists in the US at academic medical centres and community hospitals. We will work with Tempus to improve clinical trial design, speed up enrolment and identify drug targets, with an initial focus on oncology

Platform technology across vaccines and medicines

Our work to use technology to drive drug discovery also includes expanding our platform capabilities. These technologies allow us to broaden the range of options for future medicines and vaccines, going beyond existing modalities like small molecules, antibodies and adjuvants to help immune responses to vaccines, but importantly also ensure we remain highly competitive by being faster and more confident in identifying new medicines from our genetically validated targets.

We develop these technologies ourselves and through external collaborations. Key areas for new medicine and vaccine technologies that we're actively investing in include:

- MAPS (multiple antigen presenting system), a novel and highly efficient vaccine technology platform that potentially enables broader coverage, generating higher antibody responses. MAPS has mainly been directed at preventing pneumococcal disease and has also shown promise in addressing other infectious disease pathogens, including those that cause hospital-acquired infections
- mRNA, which was validated by the launch of the COVID-19 vaccines in 2020 and could potentially be applied across a number of diseases. We're progressing the development of the mRNA technology in-house, in parallel with our CureVac collaboration. We're currently evaluating a second generation mRNA backbone, which we developed with CureVac, in a phase I trial featuring modified mRNA vaccine candidates targeting COVID-19 and flu. Based on the promising preliminary analysis of these studies, evaluating safety, reactogenicity and immunogenicity, we are preparing to move these candidates into late-stage clinical testing
- RNAi and oligonucleotides including: ARO-HSD, a phase II programme for NASH, in-licensed from Arrowhead in 2021, consisting of an RNA interference (RNAi) molecule against a genetically validated target; and bepirovirsen, an anti-sense oligonucleotide designed to recognise HBV DNA, in phase III, which we in-licensed from Ionis in 2019. We also announced a collaboration with Wave Life Sciences, which allows us to advance up to eight preclinical programmes using Wave's PRISM oligonucelotide platform and includes the in-licensing of a novel RNA-editing oligonucleotide to treat liver and lung disease caused by alpha-1-antitrypsin deficiency
- monoclonal antibodies (mAbs) such as *Xevudy* for COVID-19, co-developed with Vir Biotechnology, as well as other research programmes
- new ways to understand the biology and pharmacology of genetically validated targets and how best to intervene in their disease processes. Our Chemical Biology group has developed several such methods, including chemogenomic libraries, encoded libraries, and reactive fragments, in part in collaboration with the Francis Crick Institute. These novel technologies help find critical starting points for drug discovery projects
- natural products derived from the biosphere, such as the collaboration we started with LifeMine Therapeutics in 2022, which gives us access to its platform for proprietary evolutionary-derived genomic drug discovery
- bi-specific antibodies for multiple auto-immune diseases that are advancing through preclinical phases
- digitisation to optimise each phase of vaccine development and production. Working with Siemens and Atos, two of the world's leading digital transformation and technology companies, we've developed a 'digital twin', a complete and real-time simulation of the vaccine manufacturing process.

Infectious diseases

Two-thirds of the vaccines and medicines in our pipeline address the global public health burden of infectious diseases, such as those caused by HIV, RSV, meningococci, hepatitis B, rotavirus and antibiotic resistant bacteria. These diseases cause significant morbidity and mortality and put strain on global healthcare systems.

In 2022, we generated pivotal data for our RSV candidate vaccine for older adults and positive interim analysis readout for gepotidacin, our antibiotic to treat uUTIs and gonorrhoea. Both have the potential to be first and best-in-class.

We also sought opportunities to boost our pipeline through business development. In 2022, we completed our acquisition of the clinical-stage biopharmaceutical company Affinivax. It has pioneered a novel class of next-generation pneumococcal vaccine candidates. These include a 24-valent vaccine candidate for adults, which has completed phase II, and a paediatric version currently in phase II. A 30-plus valent pneumococcal vaccine programme is in pre-clinical development. These vaccines incorporate the MAPS technology (see page 19).

Our new partnership with Spero Therapeutics, Inc. gave us an exclusive licence agreement for tebipenem HBr, a late-stage antibiotic being developed by Spero. This is the first oral carbapenem antibiotic, and it has the potential to treat cUTIs. With a clear FDA regulatory path to potential approval, tebipenem HBr will address an unmet medical need for a novel oral antibiotic as an alternative to intravenous hospital therapy for drug-resistant cUTIs.

RSV

RSV is a major cause of acute respiratory illness in older adults and is currently one of the major infectious diseases without a vaccine. RSV can worsen underlying conditions and cause pneumonia. It leads to approximately 420,000 hospitalisations and over 29,000 deaths a year in adults in industrialised countries. Around 94% of people hospitalised with RSV have underlying comorbidities.

In 2022, we became the first company to announce positive phase III efficacy data for a RSV older adult vaccine candidate. Interim results from our ARESVI-006 phase III pivotal trial showed vaccine efficacy of over 94%[1] observed against RSV lower respiratory tract disease (RSV-LRTD) in adults with at least one comorbidity of interest and in those with severe disease. Overall vaccine efficacy against RSV-LRTD was 82.6%[1], meeting the trial's primary endpoint. Consistent high vaccine efficacy was observed across a range of pre-specified secondary endpoints, including against severe disease, in adults aged 70-79 and across RSV A and B strains.

The vaccine was generally well tolerated, with a favourable safety profile. These data were presented as part of the Infectious Disease Society of America's IDWeek 2022 annual meeting in Washington, DC, in October. We also shared positive data on the co-administration of our RSV older adult vaccine candidate with a flu vaccine, a key finding for practical immunisation.

Based on these data, the vaccine candidate was granted Priority Review by the FDA. It was also accepted for accelerated assessment by the European Medicines Agency (EMA) and for review by the Japanese Ministry of Health, Labour and Welfare (MHLW).

We're committed to finding solutions for people at high risk of the serious consequences of RSV infection. In 2022, we started a clinical trial exploring the effect of the RSV older adult vaccine candidate in people aged 50-59, including those at increased risk of RSV-LRTD, compared to people 60 and over. We also began two further flu co-administration trials. The ARESVI-006 trial will also continue to evaluate an annual revaccination schedule and longer-term protection over multiple seasons.

Shingles

Approximately one in three adults develop shingles, a painful and potentially serious illness. *Shingrix* is the first approved shingles vaccine to combine a non-live antigen with one of our adjuvants. It may help overcome the natural age-related decline in immunity that contributes to the challenge of protecting people aged 50 and over from this disease.

Shingrix is now available in 26 countries, and we've continued to broaden access to it in 2022. In Japan, where *Shingrix* is already approved for people over 50, we've also submitted an application to extend the indications to include over 18-year-olds at risk, such as those with immune suppression and immune deficiency. The US Cancer Network has recommended *Shingrix* for cancer survivors over 19, and the vaccine has a preferential recommendation from the Brazilian Immunization Society.

We presented new data at IDWeek 2022 showing that *Shingrix* can provide at least 10 years of protection against shingles in the over 50s. In the primary endpoint analysis, the interim data showed overall efficacy of more than 80%[2] in the follow-up period of approximately six to ten years after initial vaccination. No new safety concerns were identified during the follow-up period. These data significantly add to the real-world evidence demonstrating the long-term benefit of *Shingrix*.

1 VE 94.1% (1 of 12,466 versus 17 of 12,494); 94.6% (1 of 4,937 versus 18 of 4,861); VE 82.6% (7 of 12,466 versus 40 of 12,494)

2 VE 81.6% (52 cases in 32673.8 f/u years versus 283 cases* in 32673.8 f/u years); *cases for the placebo group are estimated from the ZOE-50/70 placebo groups to assess vaccine efficacy during ZOE-LTFU study; f/u: follow up; (95% confidence interval [CI]: 75.2–86.6)

Research and development continued

Meningitis

Around 1.2 million people develop invasive meningococcal disease (IMD) each year. It can be fatal, and 10–20% of survivors will have long-term disabilities such as brain damage, deafness, nervous system problems or loss of limbs. Bacterial meningitis is also of particular concern. One in 10 people who are diagnosed with bacterial meningitis end up dying, and 1 in 5 are left with severe complications.

Bexsero, our meningitis B vaccine, and *Menveo*, our meningitis ACWY vaccine, are registered in more than 60 countries, and together protect against most forms of IMD. Since launch, more than 150 million doses of these vaccines have been distributed. In 2022, we received FDA approval in the US and ANVISA approval in Brazil for a fully liquid, ready-to-use single vial presentation of *Menveo*. This gives healthcare providers a more convenient option by removing the need to reconstitute the vaccine.

Our investigational first generation MenABCWY candidate pentavalent (5-in-1) vaccine combines the technologies used in our *Bexsero* and *Menveo* vaccines. The goal of introducing a 5-in-1 meningitis vaccine is to protect people against the five serotypes that cause most disease with just one vaccine, not two. A 5-in-1 meningitis vaccine has the potential to help improve vaccination rates by providing a more convenient way to prevent IMD.

MenABCWY is currently in phase III development, in a trial spanning five countries with 3,650 participants aged 10-25. We expect results in early 2023. New multivalent vaccines like this have the potential to support the global strategy to defeat meningitis by 2030, set out in the World Health Organization's Global Road Map.

A second-generation 5-in-1 meningitis vaccine is currently in phase II and is aimed at improving protection against B strains and allowing for broader age indications globally.

COVID-19

By the end of 2022, more than 650 million cases of COVID-19 had been reported around the world, and there had been over 6.5 million deaths. The disease continues to challenge healthcare systems. We and our innovation partners have been part of the response, developing treatments and vaccines.

Treating COVID-19 with *Xevudy*

Xevudy (sotrovimab) is our SARS-CoV-2 monoclonal antibody treatment, developed with Vir Biotechnology. It works by preventing the virus from entering and infecting healthy cells in the body. It has been an important part of early treatment to prevent high-risk patients from developing severe disease. With Vir, we developed sotrovimab from discovery to approval in less than 1.5 years. We have delivered over two million doses of *Xevudy* to over 30 countries including government purchases to meet current and future need.

Providing solutions with new COVID-19 vaccines

Our pandemic adjuvant technology is part of several protein-based COVID-19 vaccines we've developed, such as with Sanofi and SK bioscience, which are now licensed in some markets. These vaccines are important new options to help protect against COVID-19.

Chronic hepatitis B

Chronic hepatitis B (CHB) is a major global health issue with approximately 300 million people infected and approximately 900,000 people dying annually due to liver complications, including cirrhosis and liver cancer. The mainstay of therapy includes nucleoside/nucleotide analogues (NA) which are often taken for life because they suppress but rarely clear the virus.

Bepirovirsen is the only drug in development as a monotherapy for CHB that works to reduce virus replication, suppress surface antigen and stimulate the immune system. In November 2022, phase II full-study data published in The New England Journal of Medicine demonstrated that treatment with bepirovirsen resulted in sustained clearance of hepatitis B surface antigen (HBsAg) and HBV DNA in a sub-group of patients followed for six months after discontinuation of their bepirovirsen. Levels of HBsAg and HBV DNA together are key efficacy measures. When HBsAg and HBV DNA remain undetectable for more than six months without medications, patients are considered to have a functional cure, an outcome associated with significant decreased risk developing cirrhosis, hepatocellular carcinoma and death. Currently, standard of care treatment with NA rarely achieves functional cure, which is why new therapies are needed for patients diagnosed with chronic HBV. Our phase III study which started in early 2023 will build our understanding of how bepirovirsen works. Our aim for bepirovirsen is for it to become a potential monotherapy or the backbone of future therapy for hepatitis B patients. We are exploring potential sequential treatment trials and expect to share data later in 2023.

Other infectious diseases

Diptheria, tetanus and pertussis

Since 2010, there have been up to 48,000 cases of pertussis (whooping cough) in the US each year, with infants more likely to experience complications from the disease. *Boostrix*, our tetanus, diphtheria and pertussis vaccine (Tdap), received approval from the FDA in October 2022 for immunisation during the third trimester of pregnancy for the prevention of whooping cough in newborn infants. This makes it the first vaccine in the US approved specifically for use during pregnancy. The vaccine is approved in 80 countries, including in the EU, Canada, Australia and New Zealand.

Research and development continued

Rotavirus

In November 2022, the FDA approved the new fully liquid presentation of our *Rotarix* vaccine to prevent gastroenteritis caused by rotavirus. This new presentation makes it more convenient for healthcare providers to prepare *Rotarix* by removing the need to reconstitute the dose at the point of use. We expect it to be commercially available in early 2023.

Varicella

In February 2022, we started a phase II study in the US with children aged 12-15 months to compare the safety and immunogenicity of our varicella (chickenpox) new strain candidate vaccine with the vaccine currently available. The aim is to develop a vaccine that fits the Advisory Committee for Immunization Practices' (ACIP) recommended US immunisation schedule and offers healthcare professionals and parents an alternative to the current vaccine. This varicella new strain vaccine could also be used as a component of the measles-mumps-rubella-varicella vaccine in the US.

Herpes simplex virus

We have started a phase I study to investigate the potential of GSK 3943104A, an immunotherapeutic against herpes simplex virus (HSV). The aim is to offer a better solution for people with the virus than current standard of care. The study is gathering safety and immunogenicity data on GSK 3943104A in healthy people. Phase II development will focus on safety and immunogenicity, as well as proof-of-concept efficacy.

Human papillomavirus

Human papillomavirus (HPV) is a common sexually transmitted infection – around 14 million people a year become infected in the US alone. It often has no symptoms but can cause genital warts or cancer. We've begun a phase I/II study of our next-generation adjuvanted vaccine, developed in collaboration with Innovax, to protect against nine types of HPV. The study is evaluating the reactogenicity, safety and immunogenicity of an adjuvanted vaccine candidate for girls and women aged 16-26. The aim is to identify the most effective vaccine formulation to take into phase III trials.

We also received approval in China for *Cervarix*, our human papillomavirus vaccine for girls aged nine to 14, in a two-dose regimen.

Pneumococcal disease

Pneumococcal disease is the term for any illness caused by the bacterium Streptococcus pneumoniae, a leading cause of acute bacterial disease worldwide. Our acquisition of Affinivax adds a novel class of next-generation pneumococcal vaccine candidates that incorporate MAPS technology (see pages 19 and 20).

Antibiotics and antimicrobial resistance

According to the World Health Organization (WHO), antimicrobial resistance (AMR) is one of the top 10 global health threats. By undermining the effectiveness of antibiotics, it contributes to around 1.2 million worldwide deaths a year.

We're using our expertise in developing prevention and treatment options to focus on pathogens that have the highest probability of developing AMR, as identified by the Centers for Disease Control (CDC) and the WHO.

Progressing towards a new treatment for urinary tract infections and gonorrhoea

We are developing gepotidacin, a novel mechanism topoisomerase inhibitor, for uncomplicated UTIs and gonorrhoea, in partnership with the Biomedical Advanced Research and Development Authority (BARDA) in the US. In early November, we received positive results from EAGLE-2 and EAGLE-3 phase III trials evaluating gepotidacin, in female adults and adolescents with uUTIs. Following a recommendation by the Independent Data Monitoring Committee (IDMC) we stopped the trials early for efficacy and plan to submit a New Drug Application to the FDA in 2023. We are also studying gepotidacin as a potential treatment for urogenital gonorrhoea (GC) in the EAGLE-3 phase III trial, with potential to read out in the second half of 2023.

In November 2022, we started a phase I/II study to evaluate the safety and efficacy of a new vaccine candidate for gonorrhoea prevention. This vaccine candidate, based on our proprietary GMMA (generalised modules for membrane antigens), aims at protecting adolescents and adults against gonorrhoea infections.

In 2022, we also started a phase Ib study of our first-in-class FimH antagonist, a novel molecule that blocks binding of E. coli bacteria to the bladder epithelium, as a treatment for recurrent urinary tract infection.

Investigating our salmonella vaccine

In July 2022, we started a phase I study with the University of Oxford to investigate our candidate vaccine for invasive non-typhoidal salmonellosis (iNTS). The vaccine uses our generalised modules for membrane antigens (GMMA) technology. To explore its potential, we're partnering with Vacc-iNTS, a consortium of 12 partners from eight countries, including some where iNTS is endemic.

HIV

In recent years, we've made breakthroughs in treating and preventing HIV to transform patients' lives. We're now building on these achievements with new products, including long-acting injectables which, for many, means significantly reducing therapy to just a few times a year.

HIV is one of the world's biggest health threats, with 1.5 million new cases in 2021, including approximately 38,000 in the US. Around 38 million people were living with HIV worldwide in 2021, over half of them in sub-Saharan Africa.

In HIV, our work 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 treat, prevent and eventually cure HIV.

Transforming the experience of patients living with HIV

With our portfolio of 17 antiretroviral medicines, we're transforming the experience of people living with HIV. Instead of taking medicine orally every day, our *Cabenuva* (cabotegravir, rilpivirine) long-acting injectable regimen allows some patients to only have treatment six times a year. The treatment has established ViiV Healthcare as the industry leader in long-acting HIV medicines.

Cabenuva is approved for dosing every two months in the US, and in Europe as the combination of *Vocabria* (cabotegravir) and *Rekambys* (rilpivirine). This combination received marketing approval in Japan in 2022, again for dosage every two months. The FDA has also approved a label update for *Cabenuva* that means patients no longer have to take cabotegravir and rilpivirine tablets for a month before starting *Cabenuva* injections.

ViiV's dolutegravir is the world's most widely prescribed integrase inhibitor for HIV, taken by around 21 million people, or three out of four of those currently on HIV medications. It's the foundation for *Dovato* and *Juluca*, our two-drug regimen oral therapies, which are as effective as three-drug regimens and allow people to take fewer drugs while still maintaining viral suppression.

Working to prevent HIV

Preventing HIV is a central part of ViiV Healthcare's work. In late 2021, we received FDA approval for *Apretude* (cabotegravir), the first and only long-acting injectable pre-exposure prophylaxis (PrEP) option to reduce the risk of sexually acquired HIV-1. This approval was based on results from two pivotal phase III studies, HIV Prevention Trials Network (HPTN) 083 and 084, demonstrating superiority over the established standard of care.

In August 2022, we announced more data showing the continued superior efficacy of cabotegravir long-acting for PrEP over daily tablets. The unblinded portion of the HPTN 084 trial with women in sub-Saharan Africa showed a substantially lower rate of HIV acquisition.

Offering a range of options for people living with HIV

We offer different medicines to meet the varying needs of people living with HIV.

Our portfolio of antiretrovirals also includes *Tivicay* and *Triumeq*, which contain dolutegravir. *Triumeq* now has US approval in a dispersible once-daily tablet formulation for children weighing 10kg and above and the Committee for Medicinal Products for Human Use (CHMP) of the EMA issued a positive opinion recommending marketing authorisation for *Triumeq PD* for children 14kg and above at the end of 2022. With 1.7 million children living with the virus, it's important that this medicine, the first fixed-dose tablet regimen for children, is now available in a form that's easier for them to take. The FDA has also lowered the minimum weight at which a child can be prescribed the *Triumeq* tablet from 40kg to 25kg.

Our commitment is to leave no person with HIV behind. That includes working to develop medicines for heavily treatment-experienced adults who have very few treatment options because of safety concerns, intolerance, or resistance. In 2022, we announced five-year data for *Rukobia* (fostemsavir), a first-in-class attachment inhibitor. In the ongoing BRIGHTE study, week 240 data shows that these patients can take fostemsavir as part of their antiretroviral regimen and keep their virus suppressed over the long term.

Exploring more ways to improve the lives of people living with HIV

We're exploring new types of long-acting therapy, based on cabotegravir, that could give people living with HIV the option to take medicine at home. These involve combining cabotegravir with other assets in our early-stage pipeline to create medicines that patients can administer themselves.

We're also investigating ultra-long-acting medicines with dosing every three months or longer. Based on studies in 2022 and 2023, we will choose partners for cabotegravir and begin phase IIb and phase III studies of these combinations in 2024.

In October 2022, we announced positive phase IIa data for N6LS, a novel broadly neutralising antibody (bNAb). A study showed strong antiviral efficacy at two dosing levels. bNAbs can recognise different strains of HIV and stop them entering healthy cells, and so block the virus from replicating. They offer a potentially new approach to treatment and may help us combat treatment resistance in our efforts to end the HIV epidemic.

A European study of *Vocabria* (cabotegravir injection) and *Rekambys* (rilpivirine long-acting injectable suspension) showed the treatment was well received by people living with HIV and by clinic staff. In the CARISEL study, 81% of participants said the injectable treatment was less stigmatising than daily tablets, and the combination showed a high clinical effectiveness and a low rate of viral failure.

Immunology/respiratory

For 50 years, we have been leaders in medicines that advance the management of asthma and chronic obstructive pulmonary disease (COPD), and we've sold products for respiratory problems since the 1880s. Now we draw on our expertise in the science of the immune system to develop medicines for immune-mediated conditions including lupus, eosinophilic-driven diseases such as severe eosinophilic asthma and other inflammatory diseases. Our innovative medicines help millions of people with immune and respiratory conditions.

Widening access to *Benlysta* beyond systemic lupus erythematosus (SLE) to include lupus nephritis (LN)

SLE is a chronic autoimmune disease where the immune system mistakenly attacks healthy tissue in many parts of the body. It causes symptoms like swollen joints, fever, hair loss and facial rash, along with potential long-term complications including irreversible damage to vital organs like the heart and kidneys. SLE affects around five million people worldwide. LN, the kidney inflammation caused by lupus, can progress to kidney failure if left untreated. Approximately 40% of patients with SLE develop LN.

Our innovative research into the role of B cells in autoimmune conditions led to the development of *Benlysta* (belimumab), the only biologic approved for both SLE and LN. *Benlysta* is a monoclonal antibody that targets B-lymphocyte stimulator (BLyS), an underlying cause of SLE and LN, reducing autoantibody levels to help treat the short-term symptoms of inflammation and prevent irreversible damage to vital organs. In 2022, we received approval in China for *Benlysta* to treat adults with active LN. We also received FDA approval for *Benlysta* for paediatric patients with active LN. These followed earlier approvals for adult treatment in markets including EU member states, Japan and Brazil.

Our ambition is to improve outcomes for lupus patients with a 'treat to target' approach that aims for remission or reduced disease activity.

Innovating to treat eosinophil-driven diseases

Eosinophil-driven diseases are associated with heightened levels of eosinophils, a type of white blood cell. Increased levels of eosinophils in the blood or tissue can cause a range of symptoms across a variety of conditions. When eosinophils infiltrate certain tissues, they can cause inflammation and organ damage which, over time, can affect patients' day-to-day life.

Eosinophil-driven diseases are associated with poor symptom control such as worsening asthma, and can cause breathing difficulties and interfere with taste, smell and sleep.

Our first-in-class monoclonal antibody *Nucala* (mepolizumab), targets interleukin-5 (IL-5) to reduce the number of eosinophils. It's the only treatment in the US and Europe with indications across four eosinophilic diseases, including severe eosinophilic asthma (SEA), chronic rhinosinusitis with nasal polyps (CRSwNP), eosinophilic granulomatosis with polyangiitis (EGPA) and hypereosinophilic syndrome (HES).

In 2022 *Nucala* was approved in the US, Japan and Europe as a 40mg pre-filled syringe for 6-11-year-olds with SEA. The pre-filled syringe allows healthcare professionals or caregivers to administer *Nucala* at home. Previously, children could only receive the medicine in hospitals or physicians' offices, as pre-filled syringes were only available in adult strength.

We also continue to develop a new monoclonal antibody, depemokimab, under development for its high affinity and long-acting suppression of IL-5 function. Current IL-5 inhibitors are dosed every four weeks or every eight weeks. Depemokimab is designed to be administered every six months, which means it has the potential to be the first biologic to deliver ultra-long-acting treatment for patients with SEA. In 2022, we began phase III trials of depemokimab for CRSwNP, EGPA and HES, following initiation of trials in SEA in 2021.

Otilimab

Data from the ContRAst programme examining otilimab as a potential treatment for rheumatoid arthritis showed limited efficacy and did not support a suitable benefit/risk profile. As a result, we decided not to progress with regulatory submissions.

Other clinical advances

We moved two antibodies from phase I to phase II: anti-CCL17 – a novel anti-cytokine antibody for pain in both osteoarthritis and diabetic peripheral neuropathy, representing a novel non-opioid, non-NSAID analgesic therapy; and anti-IL18 – a novel anti-cytokine antibody for atopic dermatitis which was identified with the use of human genetics and human translational studies.

Oncology

Cancer remains a leading cause of death with unmet patient need. We have an emerging portfolio in oncology and will develop programmes using the science of the immune system with human genetics and new technology.

In oncology, we take a balanced and pragmatic approach to investment in our research areas of immuno-oncology, tumour cell-targeting therapies and synthetic lethality. We have 11 investigational medicines in our oncology pipeline that have the potential to make a meaningful difference for patients with cancer.

We also grow our oncology pipeline through targeted business development with acquisitions and collaborations. In 2022, we acquired Sierra Oncology, a biopharmaceutical company focused on therapies for rare forms of blood cancer, such as myelofibrosis. We also entered into an exclusive global licence option agreement with Mersana in a range of HER2-expressing tumours, such as breast, gastric and non-small-cell lung cancers, and an expanded global, non-exclusive licence and collaboration agreement with SpringWorks Therapeutics for multiple myeloma. In 2022, we also expanded our existing collaboration with precision medicine partner Tempus, with an initial focus in oncology (see page 19).

Positive readouts for *Jemperli*

Colorectal cancer is the third most common form of cancer, with over 1.9 million new cases in 2020. We're exploring an immunotherapy treatment with curative intent using *Jemperli* (dostarlimab) in a subset of rectal cancer. At ASCO 2022 breakthrough findings were presented and published in The New England Journal of Medicine by researchers at Memorial Sloan Kettering Cancer Center (MSK) confirming a clinical complete response in all 14 patients who received treatment with *Jemperli* as a neoadjuvant treatment for mismatch repair-deficient locally advanced rectal cancer. In February 2023 the FDA Oncologic Drugs Advisory Committee (ODAC) voted 8 to 5 that the two proposed single-arm trials would be sufficient to characterise the benefits and risks of *Jemperli* in the curative-intent setting for patients with mismatch repair-deficient/microsatellite instability-high locally advanced rectal cancer.

In late 2022, our phase II PERLA study comparing *Jemperli* plus chemotherapy to pembrolizumab plus chemotherapy for metastatic non-squamous non-small-cell lung cancer returned positive data. The results support our ambition for *Jemperli* to be the backbone of our immuno-oncology programme, either alone or combined with standard of care and novel cancer therapies, especially for patients with limited treatment options.

Our phase III COSTAR trial is studying *Jemperli* in combination with cobolimab, an investigational selective anti-TIM-3 monoclonal antibody, and chemotherapy in patients with advanced non-small-cell lung cancer who have progressed on anti-PD-(L)1 therapy and chemotherapy. The combination has the potential to be the first of its kind.

CD226 axis

Our work focused in immuno-oncology aims to help the immune system recognise and kill cancer cells more effectively. We're investigating how *Jemperli*, in combination with novel assets targeting the CD226 axis, can support anti-tumour activity.

We are the only company with access to antibodies targeting all three checkpoints on the CD226 axis, including PVRIG, TIGIT and CD96. We're executing a comprehensive development plan that will combine these investigational antibodies with *Jemperli*, in both doublet and triplet therapies. In addition to several early phase trials that are underway, our phase II platform study in first-line non-small-cell lung cancer began dosing patients with an initial combination of *Jemperli* and our TIGIT antibody, partnered with iTeos Therapeutics.

Gynaecologic and breast cancers

In 2020, nearly 1.4 million women around the world were diagnosed with a gynaecologic cancer.

We continue to explore the potential for our existing treatments to advance the standard of care for hard-to-treat gynaecologic cancers, both alone and in combination with each other and other agents. In second-line endometrial cancer, the FDA granted full approval for *Jemperli* in February 2023 for the treatment of adult patients with mismatch repair-deficient (dMMR) recurrent or advanced endometrial cancer, as determined by an FDA-approved test, that has progressed on or following a prior platinum-containing regimen in any setting and are not candidates for curative surgery or radiation.

Research and development continued

In December 2022, we announced positive headline results from the planned interim analysis, or Part 1, of our RUBY phase III trial investigating *Jemperli* in combination with chemotherapy as a frontline treatment for advanced or recurrent endometrial cancer. It showed a statistically significant and clinically meaningful progression-free survival (PFS) benefit in the prespecified dMMR/MSI-H patient subgroup and in the overall population. In Part 2 of the RUBY study, we will assess *Jemperli* in combination with *Zejula* in the same setting, with initial results anticipated in the second half of 2023. Our FIRST trial, is evaluating this combination as a potential new first-line maintenance therapy for ovarian cancer with results expected in the second half of 2023.[1]

Our phase III trial, ZEST, is exploring the efficacy and safety of *Zejula* (niraparib) as an early-stage treatment for breast cancer. 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 slow or stop the cancer's progress more effectively.

Investigating *Zejula* for lung cancer

We're evaluating *Zejula* in our phase III ZEAL lung cancer trial, which 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.

Blood cancers

Myelofibrosis is a rare blood cancer that affects around 20,000 patients in the US, most of whom either have anaemia when they're diagnosed or develop it eventually. Patients often need transfusions, and around 30% stop treatment because of anaemia.

Momelotinib may address the significant medical needs of myelofibrosis patients with anaemia by reducing dependence on transfusions while still treating other symptoms of the disease and enlarged spleen.

A New Drug Application and Marketing Authorisation Application for momelotinib is currently under review with the FDA and EMA, respectively. Momelotinib is not currently approved in any market. We anticipate a US launch in 2023.

Multiple myeloma is the world's third most common blood cancer, with more than 175,000 people developing it every year. *Blenrep* (belantamab mafodotin) is for patients with relapsed or refractory multiple myeloma who have received at least four other therapies.

Blenrep is approved in Europe and Hong Kong. Our DREAMM trials are investigating its potential in earlier lines of treatment, together with standard and novel therapies, as well as exploring dosing and scheduling modifications.

In November 2022, we announced we would withdraw *Blenrep* from the US market following the request of the FDA. This request was based on the outcome of the DREAMM-3 confirmatory trial, which did not meet the requirements of the FDA Accelerated Approval regulations. Other trials in the DREAMM clinical trial programme will continue. They are designed to demonstrate the benefit of *Blenrep* in combination with novel therapies and standard-of-care treatments in earlier lines of therapy and dosing optimisation to maintain efficacy while reducing corneal events. We anticipate data from the DREAMM-7 and DREAMM-8 phase III trials in the second half of 2023.

Early science and other collaborations

In 2022, we announced an exclusive global licence option agreement to co-develop and commercialise Mersana Therapeutics' XMT-2056 immunosynthen antibody-drug conjugate that targets a novel epitope of HER2. It's designed to activate the innate immune system through STING signalling in immune cells in tumours, and tumour cells themselves. Mersana has initiated a phase I clinical trial of XMT-2056 to investigate its potential in a range of HER2-expressing tumours, such as breast, gastric, colorectal and non-small-cell lung cancers. The FDA has granted an orphan drug designation to XMT-2056 for the treatment of gastric cancer.

Additionally, to further enhance our tumour-cell targeting portfolio, we entered into an agreement with WuXi Biologics for exclusive licences for up to four bi- and multi-specific T-cell engaging (TCE) antibodies developed using WuXi Biologics' proprietary technology platforms. This deal allows us to access potential best-in-class TCE antibodies that have been optimised for effective tumor killing with a desirable safety profile.

1 At the request of the FDA, in late 2022, we restricted the second-line ovarian cancer maintenance indication for *Zejula* in the US to only the patient population with deleterious or suspected deleterious germline BRCA mutations (gBRCAmut)

Opportunity driven

As well as our portfolio across therapy areas, we pursue other opportunities where the emerging science indicates the potential for important new opportunities to have major impact in addressing unmet need.

Transforming the treatment of anaemia with daprodustat

Over 700 million people suffer from chronic kidney disease (CKD) worldwide, and an estimated one in seven of them has anaemia. For many, the treatment options are limited. When left untreated or undertreated, anaemia of CKD is associated with poor clinical outcomes and leads to a substantial burden on patients and healthcare systems.

Daprodustat is our oral treatment in a class of medicines called oral hypoxia-inducible factor prolyl hydroxylase inhibitors (HIF-PHIs). It's based on human genetics and Nobel Prize-winning science showing how cells sense and adapt to oxygen availability. Daprodustat offers a potentially easier oral treatment than the current injection-based standard of care, while still managing haemoglobin levels effectively. It's approved as *Duvroq* in Japan.

In October 2022, we reported that the FDA Cardiovascular and Renal Drugs Advisory Committee (CRDAC) supported that the benefit of treatment with daprodustat outweighs the risks for adult dialysis patients with anaemia of CKD with a 13 to 3 vote. In adult non-dialysis patients with anaemia of CKD, the CRDAC did not support that the benefit of treatment with daprodustat outweighs the risks with a 5 to 11 vote.

On 1 February 2023, the FDA approved daprodustat under the name *Jesduvroq* for the treatment of anaemia of chronic kidney disease in adults on dialysis. In March 2022, the EMA validated the marketing authorisation application for daprodustat, which is currently under regulatory review with a decision anticipated mid-2023.

Progressing towards a new treatment for cholestatic pruritus in primary biliary cholangitis

Linerixibat is our ileal bile acid transporter (IBAT) inhibitor to potentially treat cholestatic pruritus in patients with primary biliary cholangitis (PBC). This is a rare autoimmune liver disease affecting approximately 15 per 100,000 people. Significant numbers of PBC patients suffer with cholestatic pruritus, a debilitating itch, and there has been no new pharmacologic therapy in this area in 60 years.

Our development programme demonstrates how we are using digital technology to modernise drug development, using novel platforms to run our studies with the potential to increase trial diversity. An example of this is a new decentralised clinical trial (DCT) design with the potential to improve patient recruitment and retention in GLISTEN, the phase III trial of linerixibat for cholestatic pruritus in patients with PBC. This is an emerging trial model where assessment of patients can occur at a patient's own home, improving accessibility for patients who may not live near to a specialist. This is a first and we expect this innovation to continue.

Linerixibat has received Orphan Drug Designation in Europe and the US.

Research and development continued

Pipeline overview

We have 69 assets in development, of which 18 are late-stage.

Phase III/Registration

Bexsero infants US (recombinant protein) MenB

SKYCovione (SK Bioscience)[1] COVID-19[4]

3536819 (conjugated, recombinant protein) MenABCWY 1st gen

3844766[1] (recombinant protein)[3] RSV older adults

gepotidacin[1] (BTI inhibitor) uUTI and GC

bepirovirsen[1] (HBV ASO) HBV

tebipenem pivoxil[1] (antibacterial carbapenem) cUTI[10]

Xevudy[1] (sotrovimab/VIR-7831 monoclonal antibody) COVID-19

Blenrep[1] (anti-BCMA ADC) multiple myeloma

Jemperli[1] (anti-PD-1) 1L endometrial cancer[2]

Zejula[1] (PARP inhibitor) ovarian, lung and breast cancer

momelotinib[1] (JAK1, JAK2 and ACVR1 inhibitor) myelofibrosis

cobolimab[1] (anti-TIM-3) NSCLC

latozinemab[1] (AL001, anti-sortilin) frontotemporal dementia[2,9]

depemokimab[1] (LA anti- IL5) asthma[2]

Nucala (anti-IL5) COPD

daprodustat (HIF-PHI) anaemia of chronic kidney disease[12]

linerixibat (IBAT inhibitor) cholestatic pruritus in primary biliary cholangitis

Phase II

3437949[1] (recombinant protein)[3] malaria fractional dose

4406371 (live, attenuated) MMRV new strain

3536852[1] (GMMA) *Shigella*

3528869[1] (viral vector with recombinant protein)[3] therapeutic HBV[6]

4023393 (conjugated, recombinant protein) MenABCWY 2nd gen[6]

4178116 (live, attenuated) varicella new strain

5101955[1] (MAPS) pneumococcal 24-valent – paediatric

5101956[1] (MAPS) pneumococcal 24-valent – adults

4106647[1] (protein-adiuvant)[3] HPV[6]

3036656[1] (leucyl t-RNA inhibitor) tuberculosis

sanfetrinem cilexetil[1] (serine beta lactamase inhibitor) tuberculosis

BVL-GSK098[1] (ethionamide booster) tuberculosis

VIR-2482[1] (neutralising monoclonal antibody)[5] influenza

3640254 (maturation inhibitor) HIV[13]

3810109[1] (broadly neutralising antibody) HIV

4428859[1] (anti-TIGIT) cancer

Benlysta (anti-BLyS) Systemic sclerosis associated interstitial lung disease[10]

4532990[1] (HSD17B13 siRNA) non-alcoholic steatohepatitis[10]

Phase I

2904545[1] (recombinant protein)[3] *C. difficile*

4429016[1] (bioconjugated, recombinant protein)[3] *K. pneumoniae*

3993129 (recombinant subunit)[3] CMV[6]

4382276[1] (mRNA) flu

4396687[1] (mRNA) COVID-19

4077164[1] (bivalent GMMA) iNTS (typhimurium + enteritidis)[2]

3943104[1] (recombinant protein)[3] Therapeutic HSV

4348413 (GMMA) gonorrhoea[6]

3536867[1] (bivalent conjugate) Salmonella (typhoid + paratyphoid A)

2556286[1] (Mtb inhibitor) tuberculosis

3186899[1] (CRK-12 inhibitor) visceral leishmaniasis[7]

3494245[1] (proteasome inhibitor) visceral leishmaniasis

3772701[1] (*P falciparum* whole cell inhibitor) malaria

3882347[1] (FimH antagonist) uUTI

3923868 (PI4kβ inhibitor) viral COPD exacerbations

4182137[1] (VIR-7832 monoclonal antibody) COVID-19[6]

3965193 (PAPD5/7 inhibitor) HBV

5251738[1] (TLR8 agonist) HBV

3739937 (maturation inhibitor) HIV

cabotegravir (400 mg/ml formulation) HIV

4004280 (capsid protein inhibitor) HIV

4011499 (capsid protein inhibitor) HIV

4524184[1] (integrase inhibitor) HIV

3745417 (STING agonist) cancer

4074386[1] (anti-LAG3) cancer

6097608[1] (anti-CD96) cancer

4381562[1] (anti-PVRIG) cancer

XMT-2056[1,11] (STING agonist ADC) cancer (wholly owned by Mersana Therapeutics)

4527226[1] (AL101, anti-sortilin) neurodegenerative diseases

3858279[1] (anti-CCL17) osteoarthritis pain

1070806 (anti-IL18) atopic dermatitis

3888130[1] (anti-IL7) multiple sclerosis

4172239[1] (DNMT1 inhibitor) – sickle cell disease[8]

Only the most advanced indications are shown for each asset.

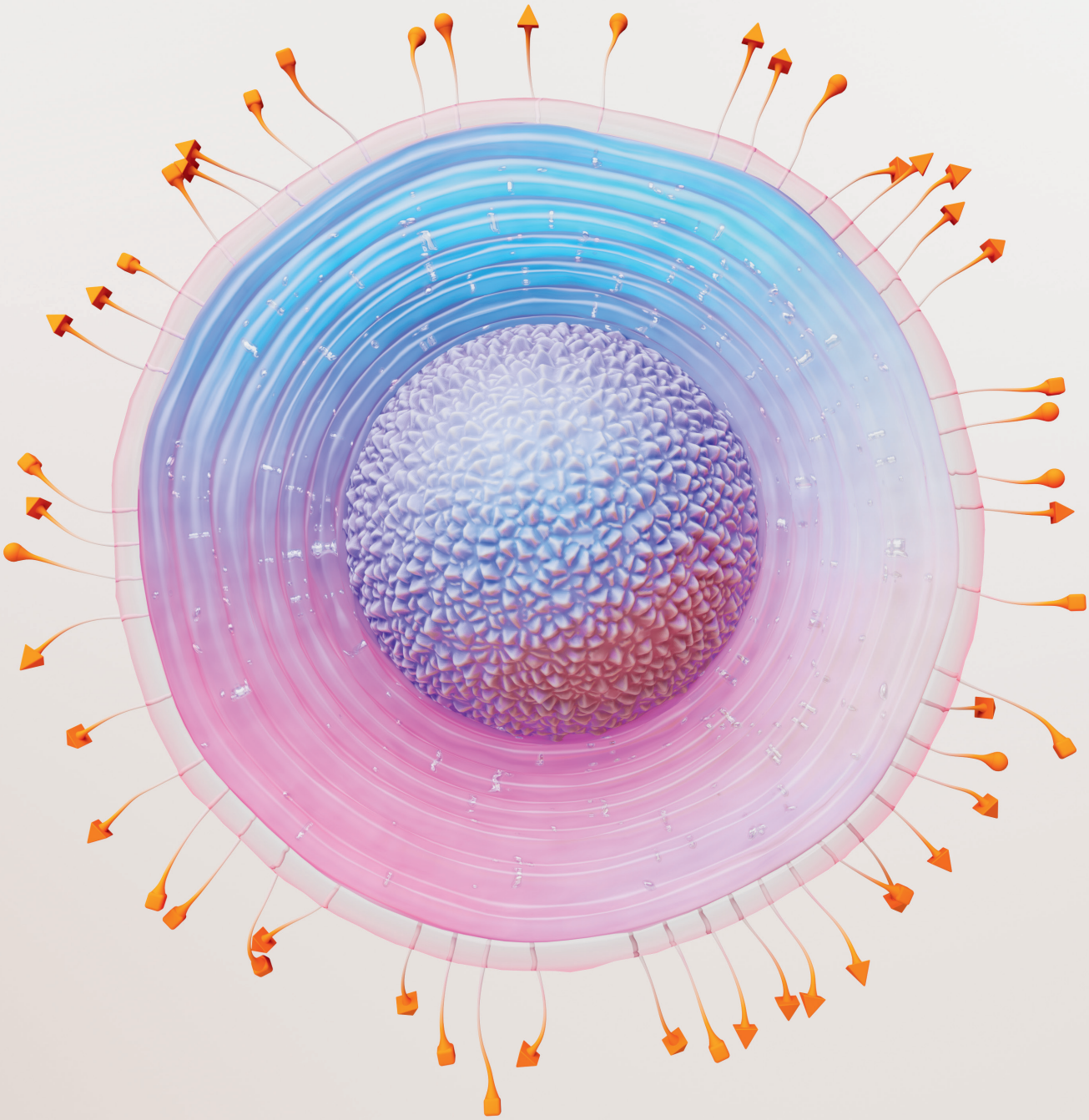
1 In-licence or other alliance relationship with third party
2 Additional indications or candidates also under investigation
3 Adjuvanted
4 GSK contributing pandemic adjuvant
5 GSK has exclusive option to co-develop post phase II
6 In phase I/II study
7 Transition activities underway to enable further progression by partner
8 Imminent study start
9 Phase III trial in patients with progranulin gene mutation
10 Phase II or III study start expected in 2023
11 GSK has an exclusive global license option to co-develop and commercialise the candidate
12 FDA approved in February 2023
13 Will not progress to phase III

MenB: meningitis B; RSV: respiratory syncytial virus; uUTI: uncomplicated urinary tract infection; GC: urogenital gonorrhoea; HBV: hepatitis B virus; cUTI: complicated urinary tract infection; ADC: Antibody drug conjugate NSCLC: non-small cell lung cancer; LA: long-acting ;COPD: chronic obstructive pulmonary disease; MMRV: measles, mumps, rubella & varicella; HSV: herpes simplex virus; siRNA: small interfering RNA; HPV: human papillomavirus; MAPS: multiple antigen presenting system; CMV: cytomegalovirus; GMMA: generalised modules for membrane antigens; iNTS: invasive non-typhoidal salmonella; ASO: antisense oligonucleotide

Commercial operations

Performance: Vaccines

Our broad vaccines portfolio targets infectious diseases at every stage of life, helping to protect people from meningitis, shingles, flu, polio and many more.



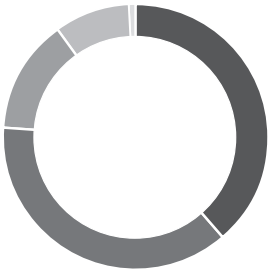
Herpes zoster virus (shingles)

Performance: Vaccines

Turnover

£7.9bn

+17% AER, +11% CER



- Established **£3,085m**
- Shingles **£2,958m**
- Meningitis **£1,116m**
- Influenza **£714m**
- Pandemic **£64m**

Key products

Product	Disease	Total revenue	Key information
Shingrix	Herpes zoster (shingles)	£2,958m +72% AER; +60% CER	Record sales year. Now launched in 26 markets
Bexsero	Meningitis group B	£753m +16% AER; +12% CER	Approved in France for National Immunisation Programme in 2022. Now available in 50 markets
Fluarix, FluLaval	Seasonal influenza	£714m +5% AER; -4% CER	Joint first to market with Sanofi in US enabling vaccinations to begin in July 2022
Boostrix	Diphtheria, tetanus, acellular pertussis booster	£594m +14% AER; +7% CER	US approval for maternal immunisation indication in 2022
Infanrix, Pediarix	Diphtheria, tetanus, pertussis, polio, hepatitis B, haemophilus influenza type B	£594m +9% AER; +3% CER	*Pediarix* leads in the US in market share by volume
Engerix, Twinrix, Havrix	Hepatitis	£571m +24% AER; +16% CER	Travel and routine immunisation for hepatitis recovering as expected in 2022
Rotarix	Rotavirus	£527m -3% AER; -3% CER	*Rotarix* fully liquid in the US and approved in France for National Immunisation Programme in 2022
Menveo	Meningitis group A, C, W and Y	£345m +27% AER; +18% CER	*Menveo* fully liquid in the US and Brazil in 2022
Synflorix	Invasive disease, pneumonia, acute otitis media	£305m -15% AER; -15% CER	Affinivax acquisition for next-generation PCV of 24 valents and greater
Priorix, Priorix Tetra, Varilrix	Measles, mumps, rubella and chickenpox	£188m -28% AER; -29% CER	US approval for *Priorix* in 2022 supporting continued expansion of our established portfolio
Cervarix	Human papilloma virus	£117m -15% AER; -20% CER	China approval for a two-dose schedule in 2022

Sales performance

We achieved strong growth in vaccines in 2022, driven by record sales for our shingles vaccine, and continued geographic expansion of our meningitis vaccine.

Vaccines turnover was £7,937 million, up 17% at AER, 11% at CER in total, and up 24% at AER, 17% at CER excluding pandemic adjuvant sales. The performance reflected a favourable comparator, which was impacted by COVID-19 related disruptions in several markets primarily in H1 2021, and strong commercial execution of *Shingrix*, particularly in the US and Europe.

Shingrix sales grew 72% at AER, 60% at CER to £2,958 million. All regions grew significantly reflecting post-pandemic rebound, strong uptake and new market launches with more than half of the growth contributed from outside of the US. In the US, *Shingrix* grew 46% at AER, 32% at CER to £1,964 million due to higher non-retail and retail demand and strong commercial execution. Germany and China contributed strongly to the *Shingrix* growth. *Shingrix* was launched in nine markets during 2022 and is now available in 26 countries.

Meningitis vaccines sales grew 16% at AER, 11% at CER to £1,116 million mainly driven by *Bexsero* up 16% at AER, 12% at CER to £753 million resulting from higher CDC demand and increased share in the US. *Menveo* sales were also up 27% AER, 18% CER to £345 million, primarily driven by post-pandemic vaccination catch-up and higher public demand in International, together with favourable pricing mix and share gain in the US.

Fluarix/FluLaval sales grew by 5% AER but decreased 4% CER to £714 million, primarily driven by lower post-pandemic demand in Europe and the US, partly offset by lower expected returns in the US.

Established Vaccines grew 4% AER but was stable at CER to £3,085 million mainly resulting from supply constraints in MMR/V vaccines and lower tender demand in International for *Synflorix*. This was offset by hepatitis vaccines demand rebound in the US and Europe and *Boostrix* post-pandemic demand recovery and increased share in the US.

Performance: Vaccines continued

Pandemic vaccines decreased 86% AER and CER primarily reflecting comparison to 2021 pandemic adjuvant sales to the US and Canadian governments partly offset by GSK's share of 2022 contracted European volumes related to the COVID-19 booster vaccine developed through a collaboration with Sanofi Pasteur (Sanofi).

Our strategy for growth

Vaccines play a critical role in our growth. We aim to reach 1.3 billion people with vaccines by 2031, a significant contribution to our overall ambition to positively impact the health of 2.5 billion people. We will achieve this through growth of our existing adult and paediatric vaccines and new launches. Our focus is on accelerating the vaccines pipeline, particularly RSV and MenABCWY, ensuring manufacturing capability and capacity for RSV, *Shingrix* and our established portfolio, and entering new markets. We also prioritise targeted business development which complements our existing vaccine portfolio and gives us access to new patients.

Vaccines are complex and highly technical both to develop and manufacture. As such there is no established generic industry and they therefore do not generally face the so-called 'patent cliff'. This longer lifecycle means that vaccines can remain in use for decades after their initial authorisation. For example *Boostrix*, *Infanrix*, *Priorix* and *Engerix* are beyond their patents but remain important parts of our portfolio in terms of contribution to performance. And importantly, our vaccines have a strong efficacy profile with 90% of our portfolio by sales having an efficacy level of above 90% – helping to protect our portfolio from potential disruption from new technologies.

Our portfolio of more than 20 marketed vaccines is one of the industry's broadest, helping to protect people throughout their lives against diseases, including meningitis, shingles, flu, polio, measles and many more. We deliver one and a half million doses of our vaccines every day; and around 40% of the world's children receive a GSK vaccine each year.

The full benefits of vaccination go beyond the health of individuals. Vaccination programmes help minimise health inequity and reduce costs to the healthcare system, potentially promoting economic growth and societal wellbeing. With our acquisition of Affinivax and, if we get approval, the future launch of our RSV vaccine for older adults, we are well positioned in the adult vaccination segment, which will be a key growth driver of the global vaccines market.

Our established platform technologies, and the new platforms we're building, such as the MAPS and mRNA technologies, are a key part of our vaccines growth strategy and are enabling us to tackle the most complex diseases from birth throughout adulthood (see page 19).

Drivers of growth across the portfolio

Record annual sales for *Shingrix* were driven by strong demand in existing markets and geographic expansion. *Shingrix* continues to be recommended for adults and at-risk groups in countries around the world, driving its uptake. By 2024, we aim to have launched in 35 markets which make up about 90% of the vaccine market by value.

We continue to strengthen our leadership position in meningitis vaccines with an aim to double sales by 2031 through continued market share growth, the geographic expansion of *Bexsero* and the anticipated launch of our pentavalent vaccine. During the year, France approved *Bexsero* for its National Immunisation Programme and we also launched *Bexsero* in Taiwan and received marketing authorisation in South Korea, making *Bexsero* available in a total of 50 countries.

We remain committed to growing our established portfolio, which represents about half of our total vaccines business. We continue to seek to expand the availability of our vaccines in markets around the world; our lifecycle management strategy has strengthened our presence in the US. For example, *Priorix*, our measles, mumps and rubella vaccine, has been protecting people worldwide for 25 years; its launch in the US this year underscores how it remains an important part of our established portfolio. Also in the US, we received FDA approval for fully liquid formulations of *Rotarix*, our rotavirus vaccine and *Menveo*, our meningitis ACWY vaccine. We were also first to receive FDA approval for a vaccine given in pregnancy, *Boostrix* maternal, which can be administered in the third trimester to help prevent whooping cough in young babies (see page 22).

Performance: Vaccines continued

Meeting the needs of healthcare professionals and patients (HCPs)

From the age of about 50, our immune system starts to decline and becomes less effective, leading to increased vulnerability to infectious diseases. Given this, we are focusing our efforts on helping to keep older adults healthy. We want to improve physician-patient dialogue on vaccination, to raise awareness in adults of vaccine-preventable diseases and to increase access to vaccination beyond the physician's office.

Our Vaccine Study 2022 Report explored attitudes and beliefs of HCPs and those over 50 years to vaccination. The study showed that HCPs are a patient's number one source of information about vaccines. But HCPs can't always meet their patients' needs because they lack time, want to avoid conflict or don't have enough information and training.

To ease some of the pressure on HCPs, we've started a digital channel partnership with NextDoor in the US, providing vaccination information directly to patients. We've also launched a consumer campaign about the importance of vaccination. We're working directly with HCPs through a series of Vaccinology Master Classes, helping to better equip them for conversations with their patients about vaccines.

With US research company IQVIA, we also launched Vaccine Track, a data platform to help improve adult vaccination nationwide. The platform gives HCPs information about the uptake of recommended adult immunisations. With this data, HCPs can target their efforts to increase discussion about vaccination and improve coverage in areas showing a relative decline in immunisation.

We're working with expert groups on adult vaccination calendars which show HCPs and their patients which vaccines they're eligible for.

In 2022, we launched a first-ever shingles awareness week with the International Federation on Ageing, reaching more than 900 million people globally. Such campaigns remain an important way of increasing awareness of vaccine preventable diseases, prompting patients to seek HCP guidance on next steps, including preventative options.

Globally, governments, policymakers and healthcare providers are recognising the potential advantages of having increased access to vaccination through additional channels such as vaccination centres as well as retail pharmacies. We're working with pharmacy chains to provide information for patients as they consider their vaccination options.

Strengthening our manufacturing network to support vaccines growth

In 2022, our 12 manufacturing sites in nine countries produced and delivered over 500 million vaccine doses. This was despite supply challenges with incoming materials and shipping impacts caused by COVID-19, the global economic environment and the conflict in Ukraine.

Our sites are routinely inspected by multiple regulatory agencies. In 2022, there were 45 inspections by health authorities across our manufacturing sites.

We are preparing our manufacturing and supply capabilities to support both our inline product growth and our pipeline products pending approval. This includes our RSV vaccine for older adults. In 2022, the RSV production facility in Wavre, Belgium, produced the first doses for the market at a 100% success rate. To be ready for demand, we announced a €70 million investment in a second manufacturing facility for RSV antigen production in Belgium. Also in Belgium, we invested in more capacity for lyophilised products as well as building our internal mRNA capabilities. Following the acquisition of Affinivax, we are adding MAPS to our production technology platforms by using capabilities at our Singapore site as well as new investments at GSK Binney Street in Cambridge, Boston.

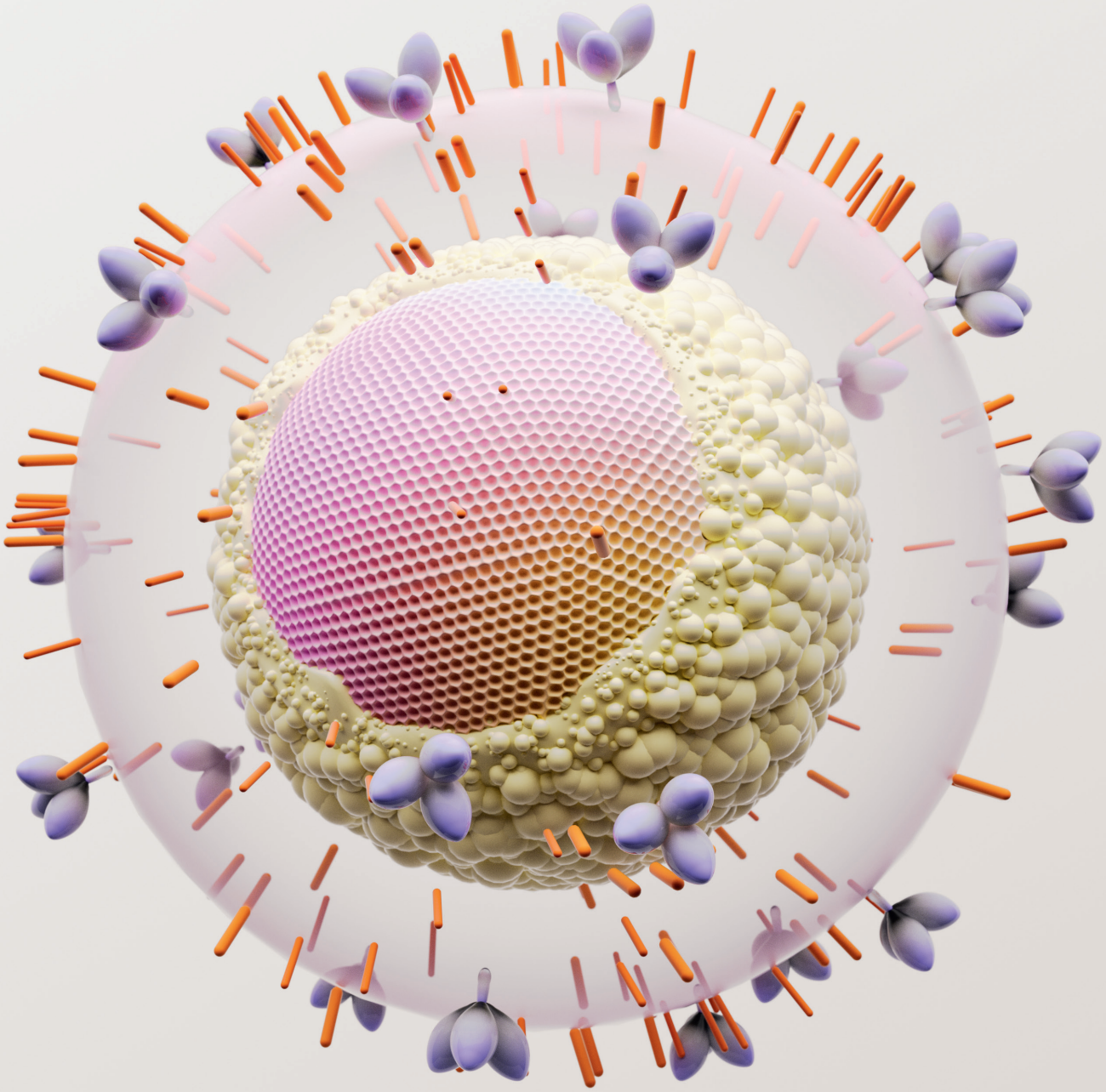
Overall, we're focused on increasing the control and robustness of our supply chain. A good example of this is the manufacturing of key adjuvants (AS01, AS03). We've brought production of MPL and QS21 (components of AS01) in-house at Hamilton. We've also formulated over 200 batches of adjuvant in Belgium since 2020 for current and future key assets such as *Shingrix*, *Mosquirix* or our RSV candidate vaccine for older adults.

Throughout the year we invested in modernising, digitising and automating our manufacturing network. For example, our quality control laboratories at all our sites went completely paperless. We'll transition more than 50 production lines at 10 sites to electronic batch records by 2025 as we build on our digital capability for better operational efficiency, compliance, yield and shorter lead times.

Commercial operations

Performance: Specialty Medicines

We continue to be global leaders in HIV medicines, focus on pioneering treatments for immune-mediated conditions and respiratory diseases, and have an emerging portfolio of cancer medicines.



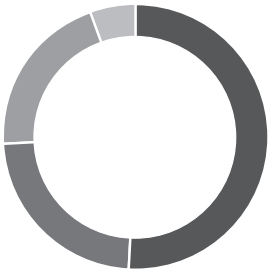
HIV virus

Performance: Specialty Medicines

Turnover

£11.3bn

+37% AER, +29% CER



- **HIV £5,749m**
- **Immuno-inflammation, respiratory and other £2,609m**
- **Pandemic £2,309m**
- **Oncology £602m**

Key marketed products

Product	Disease	Total revenue	Key information
Xevudy	COVID-19 treatment	£2,309m >100% AER; >100% CER	Monoclonal antibody treatment. Delivered more than two million doses to over 30 countries since approval
Triumeq	HIV treatment	£1,799m -4% AER; -11% CER	Dolutegravir-based fixed dose combination tablets. Marketed in 67 countries
Nucala	Respiratory eosinophil-driven diseases	£1,423m +25% AER; +18% CER	The only treatment to be indicated in the US and Europe for use across four eosinophil-driven diseases (see page 24)
Tivicay	HIV treatment	£1,381m flat% AER; -7% CER	Dolutegravir tablet for use in combination with other antiretroviral agents. Marketed in 71 countries
Dovato	HIV treatment	£1,375m +75% AER; +65% CER	Dolutegravir based two-drug regimen. Now launched in over 50 markets
Benlysta	Lupus and lupus nephritis	£1,146m +31% AER; +20% CER	Only biologic approved to treat both SLE and LN, in the US, Europe and elsewhere
Juluca	HIV treatment	£636m +23% AER; +14% CER	Dolutegravir based two-drug regimen. Marketed in 30 countries
Zejula	Ovarian cancer	£463m +17% AER; +12% CER	PARP inhibitor commercially available in 1L maintenance in 29 markets and in 2L maintenance in 29 markets
Cabenuva (Vocabria + Rekambys in Europe and Japan)	HIV treatment	£340m >100% AER; >100% CER	First and only complete long-acting injectable regimen (cabotegravir, rilpivirine). Launched in over 20 countries
Blenrep	Blood cancer – multiple myeloma	£118m +33% AER; +25% CER	An antibody-drug conjugate commercially available in 19 countries for patients with relapsed or refractory multiple myeloma
Rukobia	HIV treatment	£82m +82% AER; +64% CER	Extended-release tablets for people living with multi-drug resistant HIV-1 for use in combination with other antiretrovirals. Approved in the US, Canada and Europe
Apretude	HIV prevention	£41m	First and only long-acting injectable (cabotegravir) for HIV prevention. Launched in the US in 2022
Jemperli	Endometrial cancer	£21m >100% AER; >100% CER	PD-1-blocking antibody available in 15 countries that is continuing to be investigated for future monotherapy and combination regimens in multiple tumour types

Sales performance

Specialty Medicines sales were £11,269 million, up 37% at AER, 29% at CER, driven by consistent double-digit growth in all therapy areas. Specialty Medicines, excluding sales of *Xevudy*, were £8,960 million up 23% at AER, 15% at CER.

HIV sales were £5,749 million with growth of 20% at AER, 12% at CER. The performance benefited from strong patient demand for the new HIV medicines (*Dovato*, *Cabenuva*, *Juluca*, *Rukobia* and *Apretude*), which contributed approximately three quarters of the growth. US pricing favourability and year-end inventory build together contributed one third of the growth which was partially offset by International tender decline.

New HIV products delivered sales of over two billion to £2,474 million, up 78% at AER, 67% at CER, representing 43% of the total HIV portfolio compared to 29% last year. Growth was primarily driven by sales of *Dovato* and *Cabenuva*. *Dovato* recorded sales of £1,375 million up 75% at AER and 65% at CER and *Cabenuva* recorded sales of £340 million. *Apretude* delivered sales of £41 million.

Immuno-inflammation, Respiratory and Other sales were £2,609 million up 29% at AER, 20% at CER on strong performance of *Benlysta* and *Nucala*. *Benlysta* sales were £1,146 million, up 31% at AER, 20% at CER, representing strong underlying demand in US and worldwide. *Nucala* sales were £1,423 million, up 25% at AER, 18% at CER, reflecting continued strong patient demand and the launch of additional indications.

Performance: Specialty Medicines continued

Oncology sales were £602 million, up 23% at AER, 17% at CER. *Zejula* sales of £463 million were up 17% at AER, 12% at CER driven by the first-line indication, but with diagnosis and treatment rates continuing to be impacted by the pandemic especially in the US. Sales of *Blenrep* of £118 million grew 33% at AER, 25% at CER, and included the impact of withdrawal from US market in Q4 2022.

Sales of *Xevudy* were £2,309 million, compared to £958 million sales in 2021. Sales were delivered in all regions, comprising £828 million in the US, £456 million in Europe, and £1,025 million in International.

Our strategy for growth

Our portfolio of Specialty Medicines is focused on four therapeutic areas: infectious diseases, HIV, immunology/respiratory and oncology. We're leaders in infectious diseases and HIV innovation and we're also building our positions in immunology and oncology. In the next five years, we expect Specialty Medicines and HIV as a part of Specialty to continue to be an important part of our growth. The increasing convergence of disease prevention and treatment and our expertise in vaccines and medicines mean we are uniquely placed to focus on connections between treatment and prevention.

We do this by accelerating our pipeline as well as prioritising strategic business development which complements are existing portfolio, such as our acquisition of Sierra Oncology and global licence agreement with Mersana Therapeutics.

Drivers of growth across the portfolio

In HIV, our strategy for growth now and in the future is built on our innovative portfolio of medicines that are transforming the HIV treatment and prevention landscape.

- Launched in 2019, our dolutegravir-based two-drug regimen, *Dovato*, continues to build positive momentum, benefiting over 143,000 people living with HIV globally and delivering £1,375 million of revenue in 2022.
- Our long-acting therapies are also central to our growth and are delivering results as they launch across our markets.
- In 2021 we launched the only long-acting treatment regimen, *Cabenuva* (known as *Vocabria* + *Rekambys* in Europe and other markets). Non-inferior to daily anti-viral therapy and dosed once every two months, *Cabenuva* addresses the challenges associated with daily oral therapy of stigma, adherence and daily pill fatigue.
- In January 2022 we launched *Apretude* in the US. It's the only long-acting medicine for HIV prevention offering superior efficacy to daily oral prevention (FTC/TDF tablets) and two-monthly dosing. The launch was supported by a direct-to-consumer campaign, as well as innovative community-driven interventions focused on reaching key populations who could benefit most from a preventative option.
- By 2026 we estimate our long-acting regimens *Cabenuva* and *Apretude* will generate around £2 billion of sales, representing around a third of HIV net sales.

In immunology/respiratory, we continue to see strong demand from *Benlysta* and *Nucala*.

- *Benlysta* for systemic lupus erythematosus and lupus nephritis in adults and children continues to perform strongly, with around 9,000 US patients initiating therapy in 2022. It also became China's only biologic medicine of its kind, helping around 12,500 patients in 2022. We're focused on supporting earlier identification and greater urgency to treat patients before lupus progresses and organ damage occurs (see page 24)
- *Nucala*, the only targeted biologic therapy approved for use across four eosinophilic diseases, continues to be a driver of growth. We expanded access to *Nucala* in 2022 with approvals in Europe, Japan and the US for a 40mg syringe for use at home with children. This follows earlier approvals for at-home use for adults. The evidence behind *Nucala* continues to grow, and in 2022 we shared two-year data from REALITI-A, the real-world study with *Nucala* in patients with severe eosinophilic asthma, demonstrating how IL-5 inhibition in everyday practice can help to achieve treatment goals. Our pioneering work in IL-5 inhibition continues with the research into depemokimab, a monoclonal antibody specifically engineered with an increased affinity for IL-5 and a longer duration of action to allow longer periods of time between injections (see page 24)

In oncology, *Zejula* is the only monotherapy PARP inhibitor approved in first-line therapy for newly diagnosed patients with advanced ovarian cancer, regardless of biomarker. This group of patients represents a significant area of growth as healthcare providers are using PARPs more in a first-line setting. Since COVID-19 we have seen the number of patients presenting to their doctors with ovarian cancer symptoms decline and the volume of newly diagnosed ovarian cancer patients is 15-20% below pre-COVID (2019) monthly averages. We expect that numbers will increase again as patients return to normal health practices. We're now working to develop other combination therapies with *Zejula* (see page 26).

Daprodustat, our treatment for anaemia of chronic kidney disease, is the market-leading and preferred HIF-PHI in Japan, where it's available as *Duvroq*. In February 2023 daprodustat was approved as *Jesduvroq* in the US for adults on dialysis. We are seeking approval in the EU and expect to have a decision mid-2023 (see page 27).

Our COVID-19 treatment *Xevudy*, developed with Vir Biotechnology, continued to play an important role in pandemic response for vulnerable patients in 2022. To date we have delivered more than two million doses to over 30 countries, generating over £3 billion in sales.

Performance: Specialty Medicines continued

Building our commercial capabilities

We are delivering growth across our portfolio by continuing to focus on disciplined commercial and medical execution, capability enhancement, competitive resourcing in customer-facing activity and rigorous investment allocation.

Attaining and keeping leading positions in our markets means attracting and retaining the best people in our industry. We've focused on developing our leaders internally and we recruit specific marketing and commercial experts from outside the business.

Over the last year, 67% of senior commercial leadership appointments in Specialty Medicines were internal. We recruited senior people externally to drive growth in oncology and supplement our specialty global marketing capability in our top 10 markets.

We've also focused on strengthening sales execution capability in our markets. We appointed 16 general managers in 2022, bringing fresh leadership into 26% of these positions.

Maintaining strong links with healthcare professionals and patients

Connecting with HCPs and patients helps us to meet their needs. It also helps us to keep them informed about clinical data, products in our pipeline and upcoming launches. The more effectively we interact, the better they understand the science behind our products, their benefits and how best to use them.

We have scaled up our use of data-led omnichannel communication platforms to reach more patients face-to-face and digitally. To date, we've digitally enabled 27 brands and 447 campaigns across 44 markets, doubling our efforts compared to last year, and resulting in incremental growth and market share.

Our use of digital, data and analytics in 2022 extends to driving Medical Affairs effectiveness. Advanced analytics and text mining has produced medical insights which allow for high-quality scientific engagement with experts to improve patient outcomes. We'll continue to prioritise use of omnichannel communication platforms in Medical Affairs to engage HCPs on the latest scientific advances.

Managing our global supply chain

Our supply chain is a global network that enabled us to produce and deliver 1.8 billion packs in 2022. We've streamlined our network to make it smaller, more agile and more resilient, with the capacity and capability to bring the next generation of medicines to patients all over the globe.

Amid geopolitical uncertainties, we're focused on the availability of energy and commodities, and on managing constraints around freight and other resources needed to supply medicines to patients. Despite these challenges, our programme of productivity and efficiency improvements remains on track. This year we delivered £23 million in savings through the programme, taking the cumulative total to £62 million. Our target for the programme is to deliver £119 million in savings by 2025. These savings support improvements in gross margin.

We have 25 sites manufacturing medicines in our GSK network. Overall, site productivity has increased by 3.9% year on year over the last three years.

Strengthening our manufacturing base

Modern manufacturing facilities help us launch specialty medicines quickly so we can build and strengthen our market positions and performance.

In June 2022, we opened our new manufacturing facility at Barnard Castle in the UK. It is sustainably designed, paperless and fully automated, using robotic aseptic filling technology to increase efficiency. The facility will manufacture many of the existing and new biopharmaceutical assets in our pipeline.

Performance: Specialty Medicines continued

We also opened our expanded facility at Upper Merion, Pennsylvania, which is now one of the most advanced single-use facilities for the manufacture of bulk drug substances and able to manufacture a wide range of biopharmaceutical pipeline assets, including monoclonal antibodies. Our expanded facility at Rockville, Maryland, is on target to start manufacturing in 2023. This facility combines single-use systems, large-scale stainless steel manufacturing and automation to produce our lupus treatment, *Benlysta*. The investment of more than $150 million will increase capacity at Rockville by around 50%.

We're also investing over £60 million in our new oral solid dose facility at Ware in the UK to help us deliver new products at pace, in partnership with R&D. Product performance qualification (the first set of batches that confirm the commercial manufacturing process performs as expected) is due to start in the second half of 2023.

Streamlining our supply chain helps us control costs and allocate more capital to developing, launching and marketing medicines. This includes investing in AI/ML which helps us to optimise yield, inventory and on-time in-full (OTIF) delivery.

Maintaining a consistent and reliable supply

A reliable, high-quality supply of products is essential for us to meet patients' needs and maintain our performance. We routinely update our quality management system (QMS) to keep pace with the evolving regulatory environment and new scientific understanding of our products and processes. We've also made our policies and procedures simpler to understand and implement.

We've improved deviation rates, and reliability of supply remains strong with an OTIF measure of 97.2% across our full supply chain and 99.4% for Specialty Medicines.

+ **For information on product governance and data on recalls, regulatory inspections and audits, see pages 49 and 50**

Supporting our Innovation ambition

Our Specialty Medicines supply chain continues to support our innovation strategy by delivering launch products across therapy areas and regions worldwide. We are making our internal and external network flexible enough to enable on-time launches of our upcoming medicines. We're also working with R&D by investing in rapid knowledge transfer from chemistry manufacturing & control project teams to manufacturing sites.

Following a successfully managed rapid launch of our COVID-19 therapeutic *Xevudy* (sotrovimab), by the end of 2022 over two million doses of *Xevudy* had been supplied globally. We are also preparing for the successful launch and supply of late-stage assets like daprodustat and momelotinib (if approved) in 2023. Our Specialty Medicines supply chain will support multiple late-stage clinical programmes and further upcoming launches in the second half of 2023 and 2024.

+ **For details about the General Medicines supply chain, see page 40**

Commercial operations

Performance: General Medicines

From antibiotics to inhaled medicines for asthma and COPD, we have over 150 general medicine products, many of them leaders in their class, making life better for millions of people worldwide.

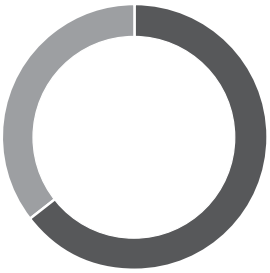
Escherichia coli (E. coli) bacteria

Performance: General Medicines

Turnover

£10.1bn

+5% AER, +1% CER



- Respiratory **£6,548m**
- Other General Medicines **£3,570m**

Key marketed products

Product	Disease	Total revenue	Key information
Trelegy Ellipta	COPD, asthma	£1,729m +42% AER; +32% CER	Most prescribed single inhaler triple therapy worldwide, reaching an estimated 5.1 million patients since launch
Seretide/Advair	Asthma, COPD	£1,159m -15% AER; -17% CER	One of the market-leading ICS/LABA[2] treatments worldwide
Relvar/Breo Ellipta	Asthma, COPD	£1,145m +2% AER; -2% CER	One of the leading ICS/LABA treatments worldwide powered by its 24-hour, sustained efficacy and the convenience of the *Ellipta* inhaler device
Ventolin	Asthma, COPD	£771m +7% AER; +2% CER	Global market-leading SABA[3] reliever
Augmentin	Common bacterial infections	£576m +35% AER; +38% CER	Global leader in oral antibiotics available in over 95 countries
Lamictal	Epilepsy, bipolar disorder	£511m +7% AER; +1% CER	No. 1 brand by sales value in the global lamotrigine market
Anoro Ellipta	COPD	£483m -4% AER; -9% CER	Global market leader in the LAMA/LABA[1] class approved in over 70 countries
Avodart & Duodart	Benign prostatic hyperplasia (BPH)	£330m -1% AER; -3% CER	Market leaders by sales value in the global dutasteride and dutasteride+tamsulosin FDC[4] market respectively, approved in over 85 countries
Avamys/ Veramyst	Allergic rhinitis	£321m +8% AER; +6% CER	Global leader in the inhaled corticosteroids prescription class
Dermovate, Betnovate, Cutivate, Eumovate	Inflammatory skin conditions	£200m 0%AER, +1% CER	Global leader in topical corticosteroids across 60 markets globally

1 LABA/LAMA: long-acting beta agonists/long-acting muscarinic antagonists
2 ICS/LABA: inhaled corticosteroid/long-acting beta agonists
3 SABA: short-acting beta agonist
4 FDC: fixed dose combination
Key information source IQVIA

Sales performance

General Medicines sales in the year were £10,118 million, up 5% at AER, 1% at CER, with the impact of generic competition in US, Europe and Japan offset by *Trelegy* growth in respiratory and the post-pandemic rebound of the antibiotic market since H2 2021, in Other General Medicines.

Respiratory sales were £6,548 million, up 8% at AER, 3% at CER. The performance was driven by *Trelegy* sales of £1,729 million, up 42% AER, 32% CER, including strong growth across all regions. *Advair/Seretide* sales of £1,159 million decreased 15% at AER, 17% at CER predominantly reflecting the adverse impact of generic competition, with growth in certain International markets due to targeted promotion offsetting the decrease.

Other General Medicines sales were £3,570 million, decreasing 1% at AER, 2% at CER. *Augmentin* sales were £576 million, up 35% at AER, 38% at CER, reflecting the post-pandemic rebound of the antibiotic market since H2 2021 in the International and Europe regions.

This partially offsets the ongoing adverse impact of generic competition, and approximately two percentage points impact at AER and CER from the divestment of cephalosporin products in Q4 2021.

Our strategy for impact

The General Medicines portfolio encompasses our primary care medicines from pre-launch R&D assets to growth and established products. In 2022, General Medicines contributed over one third of GSK's sales, helping to fuel growth and investment in R&D.

Our combination of more than 150 products, several of which are market leaders, are expected to impact the lives of millions of patients over the next 10 years. Our products are supplied in more than 112 countries worldwide, delivering over 80% of our total medicines supply volume. Every day, these medicines improve health and make life better for millions of people all over the world.

Performance: General Medicines continued

With expected growth from *Trelegy*, *Anoro*, the established products portfolio in emerging markets and, if successful, gepotidacin and, tebipenem, we are committed to positively impacting more lives every day.

We continue to focus on maximising investment in our growth brands and new opportunities, while managing the expected decline of other products in mature markets as they lose their exclusivity. The decline in established products is well managed, through targeted investments towards growth opportunities and reflects continued strong demand for our core products.

Drivers of growth across the portfolio

Our main sources of growth in General Medicines in 2022 were *Trelegy*, *Anoro* and *Augmentin*.

Trelegy, our single inhaler triple-therapy for asthma and COPD, has continued to accelerate strongly, with growth in all regions including the US and is the third biggest growth driver (excluding *Xevudy*) across GSK's portfolio this year. *Trelegy*, is now prescribed in more than 63 countries, with dual indications in key markets. Several new approvals were received in 2022, further expanding *Trelegy's* availability to asthma patients in Argentina, Taiwan, New Zealand, Oman, Bahrain, South Korea and Kuwait, and COPD patients in Kuwait and Indonesia.

Trelegy leads market share in our two largest markets, US and Japan, with market shares significantly exceeding the next largest competitor. In 2022 the competitive market position for *Trelegy* was further strengthened by a network meta-analysis of the triple therapy class demonstrating differentiation among the COPD single-inhaler triple therapies. We continue to expect *Trelegy* to be a key driver of growth in General Medicines in the coming years.

Anoro is approved in approximately 70 countries for the treatment of symptomatic COPD. *Anoro* remains the global market leader in the LAMA/LABA class, with continued growth in global sales (ex-US). *Anoro* has a robust clinical data profile which includes head-to-head data within the LAMA/LABA class and versus other common initial maintenance therapy options, such as LAMA.

Augmentin is a global leader in oral antibiotics and available in 95 countries. It has reached over 2.5 billion patients since launching 41 years ago, and continues to grow strongly in emerging markets. *Augmentin* grew 35% AER, 38% CER to £576 million with recovery in key emerging markets and Europe, recovering stronger than any competitor post-pandemic. Today, *Augmentin* is still being recognised for its impact and recently won the bronze in the best pharmaceutical product category for the Prix Galien Golden Jubilee awards in October 2022.

Two important products in our late-stage pipeline, anticipated to be future growth drivers for General Medicines, include gepotidacin, for uUTIs and urogenital gonorrhoea, and tebipenem HBr, a late-stage antibiotic licensed exclusively from Spero Therapeutics, that may treat cUTIs (see pages 20 and 22).

Maximising commercial capabilities

We have a targeted investment strategy to deliver returns, backing our largest opportunities, both branded and geographic, to maximise launches in new medicines and indications. In parallel, we target our investments appropriately to optimise returns in mature brands where there is a broader range of opportunity and risk.

We continue to invest in omnichannel and digital customer engagement. Digital plays an important role in how we connect with our customers, and this is especially important in General Medicines given our expansive global footprint. Our data-driven customer experience (DDCX) programme for *Trelegy* was recognised externally by the International Customer Experience Awards (iCXA) across all sectors. In 2021, among 120 companies and 353 initiatives entered, we won three silver awards for *Trelegy* competing across all industries, in the following categories:

- Best Business-to-Business Customer Experience Strategy
- Business Change and Transformation
- Customer Experience Team of the Year

Maintaining an efficient supply chain

Demand for many products in our General Medicines portfolio increased significantly as COVID-19 lockdowns lifted and global markets recovered from the effects of the pandemic. We increased packs supplied from 1.60 billion in 2021 to 1.64 billion in 2022. This growth demonstrated the resilience of our General Medicines brands. We anticipate this further increasing to 1.67 billion in 2023.

To keep our supply chain lean, we continue to simplify our portfolio by standardising packaging and formats and discontinuing products. By the end of 2022, General Medicines had reduced the number of brands in the portfolio by a further 9% from 194 to 177, and we plan to further discontinue non-priority brands in 2023.

We have also taken key decisions as part of our focus on productivity and efficiency, for example to outsource the manufacture of amoxicillin.

We rigorously benchmark the performance of our General Medicines supply chain against the competition and make thoughtful choices on how we optimise both our cost and cash footprint for the portfolio.

+ **For more about our global supply chain, which also covers Specialty Medicines, see pages 36 and 37**

Responsible business

Our approach to ESG is an integral part of our strategy and investment case. It helps us build trust and create value for our shareholders and society – so we can get ahead of disease together.

Responsible business

Being a responsible business means getting ahead of disease together in the right way. We therefore need to consider ESG impacts across everything we do, from the lab to the patient. That's why ESG is embedded in our strategy and supports our sustainable performance and long-term growth. It helps us build trust with and deliver returns to our stakeholders, reduce risk to our operations and deliver positive social impact.

Our six ESG focus areas

We can only deliver on our purpose if we embed ESG into everything that we do. We have identified six ESG focus areas that address what is most material to our business and the issues that matter to our stakeholders. These focus areas are core to our strategy and are the areas where we can have the greatest positive impact on some of society's most urgent challenges. These focus areas are:

- Access to healthcare
- Global health and health security
- Environment
- Diversity, equity and inclusion
- Ethical standards
- Product governance

Our approach is guided by extensive stakeholder engagement and the key issues relevant to our industry and company. The results of our most recent materiality assessment reaffirmed that the most material issues for our business were well aligned with our six ESG focus areas. We are aware, however, that being a responsible business is not a static requirement and our operating environment continues to change at pace. We will continue to adapt, respond and proactively change our approach, to ensure GSK continues to deliver strong ESG performance.

Our ESG Performance Rating

To support the integration of ESG into strategy delivery and to make our ESG performance measurable and verifiable, we have introduced a new ESG Performance Rating. The rating is one of our corporate KPIs and measures progress against key metrics aligned to each of our six focus areas. In 2022, this included 23 metrics, and we cover our performance against these in this section of the report.

The metrics were developed with stakeholder input, and our understanding of the key issues for our industry and our company. We are committed to ensuring that our ESG Performance Rating responds to stakeholder expectations, so we will continue to review the metrics as our business and external expectations change.

To create the ESG Performance Rating, management sought metrics that:

- Are well defined to ensure we have a standardised approach
- Can be used consistently in future years
- Are ambitious and achievable
- Can be externally assured
- Are meaningful for stakeholders

How we assess performance

GLT is accountable for delivering progress against the metrics and regularly reviews performance along with the Board's Corporate Responsibility Committee (CRC). Each individual metric is assessed as either: on track (metric met or exceeded); on track with work to do (at least 80% of metric has been achieved); or off track (metric missed by more than 20%).

In addition, in order to calculate the overall ESG Performance Rating, performance across all metrics is aggregated to a single score to illustrate whether we are on track, on track with work to do, or off track. This rating is defined below:

On track: 70% of all metrics are on track

On track with work to do: more than 50% of all metrics are either on track, or on track with work to do

Off track: more than 50% of all metrics are off track

2022 ESG Performance Rating

Our 2022 ESG Performance Rating is on track, based on 83% of all performance metrics being met or exceeded.

Assessment of performance against our annual targets has been reviewed, and the overall ESG Performance Rating score has been externally assured for 2022.

External benchmarking

Detailed below is how we perform in key ESG ratings that we are frequently asked about by investors:

- **Access to Medicines:** Ranked 1st in the Access to Medicines Index in 2022 and an industry leader in the 2021 Antimicrobial Resistance Benchmark
- **S&P Corporate Sustainability Assessment:** Ranked 2nd in the pharmaceuticals industry with a score of 86 (as at 17 February 2023) and included in the DJSI World and Europe indices
- **FTSE4Good:** Member of FTSE4Good Index since 2004
- **CDP:** A- in Climate change, B in Water security, A- in Forests (palm oil) and B in Forests (timber)
- **Sustainalytics:** Low risk rating
- **MSCI:** AA rating
- **Moody's ESG solutions:** Ranked 2nd in the pharmaceuticals sector
- **ISS Corporate Rating:** B+ rating

+ For full details of progress against our six focus areas, our latest materiality assessment and our ESG Performance Rating and 23 metrics, please see our ESG Performance Report

Access

Our ambition is to positively impact the health of 2.5 billion people by the end of 2030. We will achieve this by developing vaccines and medicines and making them available through responsible pricing, strategic access programmes and partnerships.

Our commitment

Make our products available at value-based prices that are sustainable for our business and implement access strategies that increase the use of our medicines and vaccines to treat and protect underserved people.

How we assess performance

- Develop and externally publish pricing and access principles
- Progress towards our 2030 goal of reaching 1.3 billion people in lower income countries with our products

Progress in 2022

Putting the right value on innovation

We follow a set of pricing and access principles, published for the first time in 2022. These help us to get the balance right between responsible pricing and a sustainable, profitable business that allows us to re-invest financial returns in future innovation, while ensuring people can access medicines and vaccines.

In 2022, in the US, through GSK and ViiV Healthcare's Patient Assistance Programs Foundation, we provided prescribed medicines and vaccines to more than 78,000 low-income uninsured, underinsured and Medicare Part D patients.

In the US, during the year, our combined average net price (after discounts, rebates or other allowances) for our pharmaceutical and vaccines portfolio increased by 1.4%, while the average list price increased by 3.8% compared to 4.9% (list) for the industry, which demonstrates we are responsible in our pricing decisions[1]. Over the past five years, the average net price for our products decreased by 1.1% annually, while the average list price rose by 3.9% compared to 5.0% (list) for the industry[1].

Reaching patients in lower income countries

Our goal is to reach 1.3 billion people in lower income countries with our products by the end of 2030, through access initiatives such as voluntary licensing, donations and our work with Gavi, the Vaccine Alliance. In 2022, we reached 73 million people with our products and supplied an additional 533 million doses of albendazole[2]. In 2022, we ranked first in the Access to Medicines Index for the eighth consecutive time.

Vaccines

We have been a partner with Gavi since its foundation in 2000. We reserve our lowest vaccine prices for Gavi and similar organisations and, in 2022, we passed the milestone of supplying Gavi with more than one billion vaccines since 2010.

Our partnership includes supplying *Cervarix*, a critical vaccine in lower income countries for addressing cervical cancer. In 2022, we supplied around 40 million doses of our pneumococcal vaccine, *Synflorix*, to eight Gavi-eligible countries at our lowest price. Our *Rotarix* vaccine against rotavirus reaches children across 27 Gavi-eligible countries and four former Gavi countries. Since March 2021, as well as *Synflorix*, we have also offered *Rotarix* through the Humanitarian Mechanism, to civil society organisations serving refugees and working in other emergency situations. We are also a long-standing supplier of oral polio vaccines (OPV) through UNICEF and, in 2022 alone, supplied around 95 million doses to help eradicate polio.

Neglected tropical diseases

In 2022, we donated 533 million doses of albendazole, a medicine used to help eliminate lymphatic filariasis and treat soil-transmitted helminths. We have also extended our soil-transmitted helminths commitment to include pre-school children and made an additional commitment to donate albendazole for treatment of echinococcosis.

HIV

In 2022, ViiV Healthcare and the Medicines Patent Pool (MPP) signed a new voluntary licensing agreement to allow generic manufacturers to develop, manufacture and supply cabotegravir long-acting for HIV pre-exposure prophylaxis.

ViiV Healthcare also has voluntary licensing agreements with 17 generic manufacturers to produce and sell low-cost single or fixed-dose combination products containing our HIV medicine dolutegravir for adults in 95 low- and middle-income countries, with one direct licence and the others via the MPP. There are similar agreements with 14 generic manufacturers for children, covering 123 countries. As a result of these voluntary licence agreements, around 21 million people living with HIV across 122 countries had access to a generic product containing dolutegravir by the end of 2022. This is at least 80% of people living with HIV on antiretrovirals in low- and middle-income countries.

In 2022, ViiV Healthcare donated around 7,200 packs of antiretroviral medicines to NGO partners and national HIV and AIDS programmes to support people living with HIV who have been impacted by the conflict in Ukraine. ViiV has also provided over £800,000 through its Positive Action programme to support 11 community-based organisations with humanitarian response activities, both within Ukraine and in surrounding countries hosting refugees.

1 Industry averages are sourced from *Drug Channels* annual brand-name drug list change report

2 The 73 million figure includes people reached with *Synflorix*, *Rotarix*, *Cervarix*, OPV and *Mosquirix* vaccines and people with access to a generic dolutegravir product through our voluntary licensing agreements; however it does not include people reached through albendazole, for which an assessment will be made in 2025 by the WHO and GSK

Positive Action, ViiV Healthcare's community grant-giving programme, celebrated its 30th anniversary in 2022 with a year-long campaign to showcase the people at the heart of the programme, the partners in implementation and the progress made through collaboration. It invested more than £12.6 million in 2022, reaching approximately 392,000 people and providing 137 grants across 33 countries.

Malaria

Working with our partners, more than 1.2 million children in Africa have now received at least one dose of our malaria vaccine, *Mosquirix* (RTS,S/AS01 E). In September 2022, the WHO awarded pre-qualification to the vaccine.

This is a prerequisite for UN agencies to procure the vaccine, and an important step in rolling it out in countries with moderate to high *P. falciparum* malaria transmission.

GSK, PATH and Bharat Biotech have agreed a product transfer to help ensure long-term supply of the RTS,S malaria vaccine. We have committed to supply up to 18 million doses over the next three years, in addition to our donation of up to 10 million doses to the WHO-coordinated Malaria Vaccine Implementation Programme in Ghana, Kenya and Malawi.

+ **For full details of our progress against our six focus areas, please see our ESG Performance Report**

Global health and health security

We use our expertise to address the biggest health challenges for underserved people around the world.

Our commitment

To develop novel products and technologies to treat and prevent priority diseases, including pandemic threats.

How we assess performance

– Progress three Global Health pipeline assets to address priority WHO diseases

Progress in 2022

Global health R&D

In June 2022, GSK, including ViiV Healthcare, announced a £1 billion investment in R&D to help us get ahead of infectious diseases in lower income countries. The 10-year investment will support R&D on new medicines and vaccines to prevent and treat tuberculosis (TB), malaria, HIV, enteric diseases, and neglected tropical diseases, and to reduce AMR. In 2022, we progressed 12 Global Health pipeline assets to address priority WHO diseases, including malaria and TB, exceeding our target of three.

We want to discover shorter, simpler and safer treatments for TB. In 2022, alongside our partners and through public-private research consortiums, we continued to progress our pipeline of novel TB medicines. In 2022, we announced positive phase IIa study results for GSK3036656, a new first-in-class candidate medicine for patients with TB. Results of the study demonstrated the potential for the candidate to become a component of simpler treatment regimens in the future.

In partnership with BioVersys, the University of Lille and the Innovative Medicines Initiative (IMI) project, TRIC-TB, we also successfully completed phase I trials of BVL-GSK098, which has the potential to help tackle drug resistance by boosting the activity of an existing antibiotic.

With our partners, we've brought two products for the prevention and treatment of malaria to market – the world's first vaccine against malaria, and a single-dose, radical cure for *P. vivax* malaria.

In March 2022, the Australian regulator, the Therapeutic Goods Administration, approved the use of single-dose medicine tafenoquine in children aged two and above in combination with chloroquine for the radical cure of *P. vivax* malaria.

The FDA approved *Triumeq PD*, the first dispersible single tablet formulation containing dolutegravir for children weighing more than 10kg, which increases the age-appropriate treatment options for children living with HIV. At the end of 2022, the CHMP of the EMA also issued a positive opinion recommending marketing authorisation for *Triumeq PD* for children 14kg and above.

Invasive non-typhoidal salmonella disease can be life-threatening for children in Africa and is a key driver of AMR. We're using our innovative vaccine technology in partnership with the University of Oxford and Vacc-iNTS, to develop a potential candidate vaccine using our Generalised Modules for Membrane Antigens technology.

To help support global R&D, in December 2022, we announced the fourth call for proposals as part of the Africa Open Lab. The call for proposals is aimed at African early-career scientists who are based in sub-Saharan Africa, with a focus on infectious diseases which disproportionately affect sub-Saharan populations, such as malaria, TB and neglected tropical diseases.

Getting ahead of antimicrobial resistance

We have more than 30 R&D projects across medicines and vaccines that are relevant to AMR, ranging from early- to late-stage development. These include gepotidacin, which could be the first novel oral antibiotic treatment for uncomplicated urinary tract infections in over 20 years; and in 2022, we announced an exclusive licence agreement with Spero Therapeutics for tebipenem HBr, a late-stage antibiotic that may treat complicated urinary tract infections. 13 of these projects target pathogens deemed 'critical' or 'urgent' by the WHO and the US CDC. See page 22 for more about our R&D pipeline.

Surveillance is central to tackling AMR. In 2022, we shared data from our long-running Survey of Antibiotic Resistance (SOAR) study, which tracks community-acquired respiratory infections, with the new AMR Register, developed by Vivli. In 2022, we also worked with the AMR Industry Alliance to publish a new Antibiotic Manufacturing Standard. This provides clear guidance to manufacturers in the global antibiotic supply chain to help ensure that their antibiotics are made responsibly and in compliance with scientifically robust discharge limits.

+ For full details of our progress against our six focus areas, please see our ESG Performance Report

Future pandemic preparedness

In July 2022, GSK, along with other major biopharmaceutical companies, signed up to the Berlin Declaration. This sets out the industry's vision for equitable access during future pandemics.

The declaration stated the sector's willingness to reserve an allocation of real-time production of medicines and vaccines for distribution to priority populations, as determined by health authorities, during future pandemics.

In 2022, GSK concluded a series of contracts under which we would provide at least 200 million doses of pandemic influenza vaccine to governments around the world.

In February 2022, we extended our pandemic influenza vaccine stockpile contract with the United States government. This was followed by a renewed agreement, in June 2022, for supply of pandemic influenza vaccines to the WHO, and in July 2022, a contract with the government of Canada for both seasonal and pandemic influenza vaccines. We signed an agreement with Europe for the reservation and future production and supply of pandemic influenza vaccines. We are also continuing to partner with the BARDA to manufacture and assess the safety and immunogenicity of pandemic influenza vaccine candidates.

Environment

We continue to work hard to do more to protect the environment, often in partnership with others. We've set clear and measurable targets to help achieve our goals.

Our commitment

Commit to a net zero, nature positive, healthier planet, with ambitious goals set for 2030 and 2045.

How we assess performance

The following metrics are included in our ESG Performance Rating and support delivery of our carbon and nature ambitions:

- Climate
  - Operational emissions reduction (scope 1 and 2 market-based emissions)
  - Industrialisation of green *Ventolin* initiated, and clinical and non-clinical data available to support regulatory submissions
  - Percentage of carbon offset volume in project pipeline
- Water
  - Average of the percentage of GSK sites and suppliers compliant with wastewater active pharmaceutical ingredient limits and the percentage of suppliers that are compliant with the AMR Industry Alliance Common Antibiotic Manufacturing Framework and discharge limits
- Waste and materials
  - Operational waste and material reduction at our sites
- Biodiversity
  - Number of high-risk materials implementing sustainable sourcing roadmaps

Progress in 2022

Climate

We have set a clear pathway to a net zero impact on climate with ambitious goals for 2030 and 2045. We have updated our climate targets to be in line with the new Science Based Targets initiative (SBTi) Net-Zero Standard. By 2030, we aim to reduce carbon emissions across all scopes by 80%, against a 2020 baseline, with the remaining 20% offset through investment in high-quality nature-based solutions. We have also now set a longer-term target to reduce carbon emissions by at least 90% with the remainder tackled through high-quality offsets by 2045. For additional context on these changes see pages 16 and 17 of the ESG Performance Report.

Targets[1]**:**

- 80% reduction in carbon emissions and investment in nature-based solutions for the remaining 20% of our footprint by 2030 (all scopes)[2]
- 100% renewable electricity by 2025 (scope 2)
- Net zero emissions across our full value chain by 2045 (all scopes)[3]

1 Targets are measured against a 2020 baseline

2 Previously stated as net zero by 2030

3 This is a new longer-term target, aligned to the SBTi Net-Zero Standard definition of net zero

Responsible business continued

Performance

In 2022, we reduced our scope 1 and 2 carbon emissions by 6% compared with 2021. This was primarily through increasing our use of renewable electricity and continued delivery of energy efficiency across our sites, such as the installation of new solar panels, upgraded lighting and replacing chillers to reduce the use of ozone depleting refrigerant. As a member of RE100, we have committed to source 100% renewable electricity by 2025. In 2022, we reached 73%, an increase of 6% since 2021 and 28% since 2020.

Following the demerger of our Consumer Healthcare business, we are restating our value chain carbon footprint for our baseline year 2020. In 2021 (our latest available data), our scope 3 emissions reduced by 13% compared with 2020. These reductions reflect the evolution of our product portfolio.

Approximately 29% of our total emissions footprint comes from the goods and services that we buy. In September 2022, we launched a Sustainable Procurement Programme, which will require our suppliers to, among other things, disclose emissions, set carbon reduction targets aligned with 1.5°C, and switch to renewable power and heat.

We are also working with our peers through the Energize programme to encourage the use of renewable energy throughout the pharmaceutical sector's supply chain. In 2022, nine suppliers formed the first Energize buyer's cohort, who together will purchase two terawatt-hours of renewable electricity.

See pages 55 to 62 for our disclosure on climate risk and resilience in line with the Task Force on Climate-related Financial Disclosures (TCFD) framework.

Nature

We are committed to working towards our goal of having a net positive impact on nature by 2030, by reducing our environmental impacts across water, waste and materials, and biodiversity and by investing in protecting and restoring nature.

Targets[1]:

- Achieve good water stewardship at 100% of our sites by 2025[2]
- Reduce overall water use in our operations by 20% by 2030
- Be water neutral in our own operations and at key suppliers in water-stressed regions by 2030[2]
- Zero impact active pharmaceutical ingredient (API) levels for all sites and key suppliers by 2030[3]
- Zero operational waste, including eliminating single-use plastics, by 2030[4]
- 25% environmental impact reduction for our products and packaging by 2030
- 10% waste reduction from our supply chain by 2030
- Positive impact on biodiversity at all sites by 2030
- 100% agricultural, forestry and marine-derived materials sustainably sourced and deforestation free by 2030

Performance

In 2022, we reduced overall water use in our operations by 5% since 2021 and by 1% in sites in high water stress regions. This is a decrease of 23% for overall water use and 6% for sites in high water stress regions against our 2020 baseline. This achieved our 2030 overall water use reduction target, which we will now review. 100% of our sites are now good water stewards, in line with the Alliance for Water Stewardship's definition.

We have initially identified three water basins in water-stressed areas in Algeria, India and Pakistan where we have manufacturing sites, and where we aim to be water neutral. At our manufacturing facility in Nashik, India, we have built plants for rainwater harvesting.

In 2022, 100% of our sites and 98% of our suppliers that manufacture antibiotics complied with AMR Alliance industry standards on safe discharges.

In 2022, we continued to reduce the waste from our sites and increase the amount of materials recovered through circular routes like reuse or recycling. We are also targeting materials across our existing product portfolio.

We are progressing our plans for net positive biodiversity at our own sites by investing in individual site action plans that improve habitats, protect species and improve soil and water quality. In 2022, we completed baseline biodiversity assessments for 80% of our sites. We have commenced biodiversity uplift projects at our three largest R&D facilities. We have also completed a full assessment of our biodiversity impact (across the entire value chain) and will be taking targeted actions to address the highly-stressed areas.

In the lead-up to the UN Convention on Biological Diversity, the critical COP15 conference in Canada at the end of 2022, we worked with partners to call for mandatory disclosure by businesses and financial institutions of their impacts and dependencies on nature.

We are part of the LEAF Coalition (Lowering Emissions by Accelerating Forest finance), a private-public effort to protect tropical forests. We are also testing a framework for voluntary carbon credits from the Voluntary Carbon Market Integrity Initiative, which is working to establish a globally-standardised benchmark to guide the use of carbon credits by companies.

See pages 62 to 63 for how we plan to disclose on our impacts and dependencies on nature in line with the emerging Taskforce on Nature-related Financial Disclosures (TNFD) framework.

+ **For full details of our progress against our six focus areas, please see our ESG Performance Report**

1 Targets are measured against a 2020 baseline

2 See our Environment Basis of reporting for definition

3 Zero impact against predicted no effect concentrations

4 Where regulatory obligations allow, and excluding plastics which are critical to product discovery and development and health & safety

Diversity, equity and inclusion

Diversity, equity and inclusion (DEI) are central to our purpose of getting ahead of disease together. Being an inclusive and diverse business – and doing business inclusively – makes us more successful, making the most of our people's potential and increasing our positive impact.

Our commitment

Create a diverse, equitable and inclusive workplace; enhance recruitment of diverse patient populations in our clinical trials; and support diverse communities.

How we assess performance

- 75% of phase III trials initiated in 2022 will have proactive plans in place designed to enrol appropriately diverse trial participants, consistent with disease epidemiology
- Performance towards 2025 aspirations through fair and equitable opportunities:
  - have women hold at least 45% of VP-and-above roles globally by the end of 2025
  - have at least 30% ethnically diverse leaders in our roles at VP and above in the US, and increase the percentage of Black or African American, and Hispanic or Latinx VP-and-above leaders year on year
  - have at least 18% ethnically diverse leaders in our roles at VP and above in the UK, and increase the percentage of Black VP-and-above leaders year on year
- Improve year-on-year spend with certified US-based diverse-owned suppliers

Progress in 2022

Building an inclusive business

We are committed to improving diversity in clinical trial enrolment and are already using our disease insights to set diversity enrolment goals. At the end of 2022, 100% of GSK's phase III trials had a diversity plan in place to enrol the groups most affected by the disease being studied, based on epidemiology data. For example, in our hepatitis B trials, a disease that disproportionately affects people of African and Asian descent, 52% of participants are of Asian origin, and we are actively working to improve the representation of participants of African descent.

Our supplier diversity programme is well established in the US, and an expansion plan is being developed for the UK. We have a target to increase spend annually with certified US-based diverse-owned suppliers. This was significantly exceeded in 2022 through a combination of spend increases with selected suppliers in marketing, sales and technology, as well as identification of new global diverse suppliers and a strong multi-year strategy of engagement with key advocacy groups.

Our *GSK Science in the Summer* initiative offers free, hands-on STEM learning to students in traditionally under-represented groups in STEM careers or from under-resourced communities in the US. In 2022, it reached more than 30,000 students nationwide.

Nurturing all our people

In 2022, 42% of women held VP-and-above roles globally, compared with 40% in 2021. Women made up 47% of all employees in 2022, and 50% of all management roles.

We published our sixth UK gender pay gap report in 2022. Our gender pay gap for all permanent UK-based GSK employees is -1.36% (mean), compared to the national average of 13.9%. We published our first UK ethnicity pay gap report for 2022 using the same approach as our gender pay gap. Our ethnicity pay gap for all permanent UK-based GSK employees is 0.06% (mean), at this time there is no national average comparator.

In those countries that meet our criteria for data confidentiality and anonymity, we disclose the race and ethnicity of our people at each level and set aspirational targets. Currently, the US and the UK meet those criteria. In the US in 2022, we have 31.3% of ethnically diverse leaders at VP level and above, reaching our 2025 aspirational target of at least 30%, and increasing the percentage of Black or African American and Hispanic or Latinx people in those roles year on year. In the UK in 2022, we have 14.3% of ethnically diverse leaders at VP and above, continuing to make progress towards our 2025 aspirational target of reaching at least 18%. Black representation at VP and above remains flat and we will be focused in our efforts to achieve our aspiration for year-on-year growth.

We are members of the UK government's Disability Confident scheme and are an active member of the Valuable 500 pledge, a grouping of 500 global companies committed to placing disability inclusion on the leadership agenda. We are delivering on the scheme's objectives through our long-term, measurable, disability confidence plan, which includes educating our people on the issue.

In 2022, we introduced a new global minimum standard of 18 weeks' parental leave for primary and secondary carers for all forms of family, a new global minimum standard for care of a family member for end of life or serious health emergencies, insured benefits to include same sex partners wherever possible, a new financial wellbeing service and mental health training – available to everyone.

This year, we were recognised as a Gold employer within Stonewall's Top Global Employers Index. Our Allyship programme received an award recognising the tangible impact the campaign has had on the lives of LGBT+ employees. We also achieved the Human Rights Campaign Foundation's Best Places to Work for LGBT+ Equality standard in 2022.

+ For full details of our progress against our six focus areas, please see our ESG Performance Report

Ethical standards

Our culture guides our people to do the right thing and Speak Up about any concerns they have. It is important that all our people live up to this, and we expect the same of our suppliers.

Our commitment

Promote ethical behaviour across our business by supporting our employees to do the right thing and working with suppliers that share our standards and operate in a responsible way.

How we assess performance

- 100% of employees and complementary workers complete GSK's 2022 mandatory training
- Percentage of employees who believe they 'can and do Speak Up if things don't feel right' is above the general industry benchmark[1]
- Number of employees leaving GSK's employment for misconduct in the last 12 months versus the three-year rolling average
- 80% of direct high-risk suppliers achieve GSK's minimum EcoVadis score or have an improvement plan in place

Progress in 2022

Supporting GSK people to do the right thing

In 2022, we launched our new Code of Conduct which reflects our purpose to unite science, technology and talent to get ahead of disease together. Our new Code sets out the commitments we make as a company and to each other to deliver on our purpose and ambitions. In 2022, 100% of employees and 98% of complementary workers completed the accompanying global mandatory learning curriculum where due by year end.

Those in certain high-risk roles or geographic regions also complete additional anti-bribery and corruption (ABAC) training. In 2022, 100% of employees and 96% of complementary workers completed this training where due by year end. Our approach to managing ABAC risk, and other risks relating to ethical standards, forms part of our well embedded risk management framework, which is described in detail on pages 51 to 52.

Reporting and investigating concerns

This year, we have updated how we report the breakdown of types of policy violations to provide more granularity by case class. In 2022, we saw an overall decrease in disciplinary cases, attributed to, in part, a revision to our procedures for discipline regarding late completion of mandatory training, now reported under the employee conduct category.

Upholding our commitment to human rights

We are signatories to the UN Global Compact and our Human Rights Position statement lays out our commitment to the UN Guiding Principles on Business and Human Rights. During the year, we established a Human Rights Steering Group, which has a formal reporting mechanism to the Board's Corporate Responsibility Committee.

In 2022, we developed guidance to enhance supplier visits to help employees better understand labour and human rights non-compliances. To support this guidance, we also developed and delivered labour rights training to environment, health and safety (EHS) and procurement employees to better equip them to spot human rights issues when visiting suppliers.

We are committed to the application of fair and equitable pay practices, which includes ensuring that all employees globally receive pay that is competitive in their local markets and sufficient to support a sustainable standard of living. In 2022, we completed the first global living wage review in partnership with the Fair Wage Foundation. We assessed the pay of all our employees (over 75,000 people in 87 countries) and differences were detected in fewer than 200 cases, in 11 countries. All necessary adjustments will be made by the end of the first quarter of 2023. We will be factoring the living wage data into our standard compensation processes to ensure that we continue to offer a fair wage, and have built an annual living wage review into our standard cycle.

Working with third parties

We expect our third parties to meet our ABAC and labour rights standards and to comply with our standards on quality, health and safety, and the environment. See pages 285 to 295 for further information.

We updated our Third-Party Risk Management (TPRM) programme, which evaluates and mitigates risks introduced by third parties engaged by GSK to provide goods or services.

In 2022, for our high-risk third parties – determined by location in high-risk markets and size of spend – we performed 7,168 assessments across 20 risk areas. Over 62% of these assessments presented risks in one or more areas. Most of these third parties are goods and services providers (77%), distributors and wholesalers (5%), contract manufacturers and suppliers (1%) and direct material suppliers (1%). We also use tools to assess how suppliers manage risks, including EcoVadis desktop assessments.

1 The general industry benchmark is 65% according to 2022 research by *KornFerry*

We visit sites, in person or virtually, to help suppliers better understand and control their risks. The relaxation of travel restrictions has allowed us to increase in-person visits to identify and reduce risk, enabling us to conduct 50 physical visits across 63 priority suppliers this year[1]. We completed warehouse safety surveys for 54 priority suppliers, 38 contract manufacturing suppliers and 15 large warehouses that hold stock this year. These surveys have generated corrective and preventative action plans, all of which we expect to complete in 2023.

In 2022, we conducted 47 supplier audits, compared with 49 in 2021, following industry standard Pharmaceutical Supply Chain Initiative guidelines, with any corrective and preventative actions tracked to completion. We have also trained more than 600 supplier employees on EHS and ESG fundamentals in 2022, revised EHS contractual obligations, tracked management actions to completion and have helped suppliers improve their EcoVadis scores[2]. See page 293 for further information.

Data and engagement

We have created a new digital, privacy and information security team within Legal and Compliance, to streamline support and provide expertise around GSK's digital and data strategy.

Privacy and the ethical use of data are part of the global mandatory learning curriculum Living our Code that all our people have to complete. We ensure that key privacy personnel have certifications and sufficient training and experience to carry out their roles effectively.

We are investing in our AI/ML capability to, for example, help analyse patients' genetic data. We are mindful that AI and machine learning can raise ethical issues and are subject to evolving decisions from policymakers on how best to promote trust in these systems and avoid unintended outcomes or harmful impacts.

In R&D, we have oversight boards and a new advisory panel that oversees controls to manage how we use or re-use data and respond to bioethical questions in our research activities.

Political engagement

As a major multinational company, we seek to contribute to public policy debate, especially in relation to life sciences and healthcare. In all of our political engagements, we are committed to ensuring that we adhere to the highest ethical standards and legislative requirements. We do not make corporate political contributions, nor do we sponsor party political meetings anywhere around the world.

+ For full details of our progress against our six focus areas, please see our ESG Performance Report

Product governance

Ensuring the quality, safety and reliable supply of our products is critical to protecting patients and delivering health impact.

Our commitment

We commit to maintaining robust quality and safety processes, and using data and new technologies responsibly.

How we assess performance

- Average number of critical and major findings by FDA/MHRA/EMA regulators[3]
- Percentage of inspections from all regulators with no critical findings or official action indicated
- Number of FDA warning letters
- Total number of Class I/II external product recalls across all markets
- Register and disclose all human subject research of GSK products. Specifically, register protocol summaries for studies initiated in 2022; and disclose results summaries for studies with results due in 2022

Progress in 2022

A focus on quality management

Our GSK Quality Management System is a detailed and specific framework which describes how we comply with regulatory requirements and other standards across our markets. It addresses global and local regulations across manufacturing and distribution processes, and is based on principles defined by the International Council for Harmonisation of Technical Requirements for Pharmaceuticals for Human Use.

1 Our EHS priority suppliers are API suppliers who are, or will be, medically-, R&D- or revenue-critical to GSK, or are high spend suppliers

2 The 600 supplier employees trained includes data from our previous Consumer Healthcare business

3 We consider any observations from the FDA as major

Responsible business continued

Inspections, recalls and audit

In 2022, we had 122 regulatory inspections at our manufacturing sites and local operating companies, compared with 111 in 2021. We remain prepared for inspections from regulators and received no warning letters from the US FDA or critical findings from the Medicines and Healthcare products Regulatory Agency (MHRA) and EMA regulators in 2022; however we received one critical finding from the Chinese regulator[1]. We continue to learn from and respond to all inspection findings, taking the necessary action to address them.

Throughout 2022, we had no Class I product recalls. There were fewer Class II and III recalls than in 2021[2]. We will not hesitate to voluntarily recall products to protect patients.

Working with our suppliers on quality

We expect all our contract manufacturers and suppliers to comply with GSK standards, and regularly conduct audits to verify that they do. In 2022, we conducted 1,060 quality audits of suppliers, with an increased focus on API suppliers.

We have a comprehensive quality oversight model that is aligned to our Quality Management System and uses a risk-based approach to assess, qualify, manage and monitor our third-party suppliers, driving continuous performance.

Maintaining pharmacovigilance

Pharmacovigilance aims to protect those who use medicines and vaccines and support public health programmes with reliable, comprehensive information on the overall benefit-risk balance of our products. We have a well established and rigorous worldwide system to monitor and review the safety of our products throughout clinical development and after regulatory approval.

Vigilance against falsified medicines and vaccines

We have a robust approach to handling all falsified product incidents, ensuring that cases of confirmed counterfeit products are reported to the WHO and to relevant regulatory authorities. We actively participate in legal proceedings against illegal actors, provide regular training to customs and local authorities and we monitor online marketplaces and social media to request takedowns of sites illicitly selling prescription-only medicines.

Committed to transparency

As part of our commitment we have made 7,377 protocol summaries and 6,295 summaries of results available since the set-up of the GSK trial register in 2004. We have also listed 2,559 studies for data sharing via www.vivli.org and www.clinicalstudydatarequest.com.

+ For full details of our progress against our six focus areas, please see our ESG Performance Report

1 Critical finding from one inspection by the Chinese regulator of a third-party manufacturing facility used by GSK

2 Class I recalls are triggered by a reasonable probability that the use of or exposure to a violative product will cause serious adverse health consequences or death. Class II recalls address the use of or exposure to a violative product which may cause temporary or medically reversible adverse health consequences, or where the probability of serious adverse health consequences is remote. Class III recalls relate to the use of or exposure to a violative product which is not likely to cause adverse health consequences

Risk management

Our Board continuously reviews and oversees our risk management and internal control framework, which reflects who we are as a responsible biopharma company with bold ambitions for patients.

Managing our risks in line with our long-term priorities

Our well embedded risk management and internal control framework gives our Board the ability to evaluate and oversee how the company manages principal and emerging risks in line with our strategy and long-term priorities as a fully-focused biopharma company, following this year's demerger of Haleon. Our company-wide policy sets out the requirements, roles and responsibilities for the management and governance of risks and controls, as well as supporting guidance on the essential elements of our internal control framework. We routinely evaluate our framework for improvements.

Board oversight of risk appetite and management systems

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 that fall within their defined remits. Our Risk Oversight & Compliance Council (ROCC) helps the ARC, CRC and Science Committee to oversee the risks, and the strategies used to address them. Alongside this, risk management and compliance boards across the Group promote the 'tone from the top', establish our risk culture and oversee the effectiveness of risk management activities, while also communicating information about internal controls. Management is held accountable for delivering on its objectives in line with the established risk appetite pertaining to principal risks. An enterprise risk owner is responsible for each principal risk, overseen by a GLT member. Risk owners report risk and mitigation to ROCC and the appropriate Board committee each quarter. 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.

Assessing emerging and current risks

Our risk assessment process considers the likelihood and impact of risks, and the timescale over which a risk could occur. As well as considering current risks, we evaluate emerging risks that could affect our ability to achieve our long-term priorities – that is, risks on the three-year horizon, in line with our viability statement. We also define risks as 'emerging' if we need to know more about how likely they are to materialise, or what impact they would have if they did. We'll evaluate whether to investigate further before classifying them as principal risks.

Our 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. At the same time, we 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.

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, forming the basis for the following year's risk management focus.

Enabling effective risk management, in line with our culture

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. These plans enable our Board committees to assess the effectiveness of our risk management strategies.

We report risks to ROCC and the Board committees every quarter, 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 key risk indicators, with risk reporting thresholds aligned to risk appetite. We include risks and mitigations associated with relevant events around us, such as COVID-19 and geopolitical tensions.

Risk management continued

Our Code sets out the overarching expectations for our employees and complementary workers. Our risk management framework complements our culture and Speak Up processes in making sure that we identify and mitigate risks effectively. We monitor our most important risks and take action to address issues. Our annual confirmation exercise checks that key risks are well managed, or that actions are in place to address gaps. Our principal risks include controls for responding to problems within their risk plans. We also have business continuity planning embedded in our framework and our critical processes, so we can continue business operations in the event of a crisis.

Our current risks

The table starting on page 53 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, see Principal risks and uncertainties on pages 285 to 295. The Separation principal risk was removed in July 2022 following successful demerger and analysis of any residual risk.

Other risks, not at the level of principal risks, and opportunities, related to ESG, including environmental sustainability and climate change, are managed through our six focus areas, as described in our ESG Performance Report. Additional information on climate-related risk management is in our climate-related financial disclosures, see pages 55 to 61.

COVID-19 pandemic

The potential impact of the COVID-19 pandemic on GSK's trading performance and all its principal risks is continually assessed, with appropriate mitigation plans put in place on an as-needed basis. In 2022, GSK was encouraged by the uptake of its vaccines and medicines. The company remains confident in the underlying demand for its vaccines and medicines, especially given the significant number of COVID-19 vaccinations and boosters administered worldwide. However, the pandemic remains a dynamic ongoing risk, with the WHO continuing to monitor the emergence of new variants. The current rate of infection is predominantly driven by the circulation of the BA.5 subvariant and its descendent lineages, which are still the dominant subvariants of Omicron globally. While COVID-19 vaccines are being updated with Omicron variants to provide broader immunity against circulating and emerging variants, these subvariants and potential future variants of concern could potentially impact GSK's trading results, clinical trials, supply continuity and its employees materially.

Changes to our risks for 2023

In our December 2022 annual risk review, the ARC agreed to ROCC's recommendation of our principal risks for 2023, which remain largely unchanged. We identified a new principal risk, Legal Matters, which brings into greater focus a range of legal risks. As a result, Anti-bribery and Corruption will no longer be a stand-alone principal risk in 2023. Additionally, we expanded our Information Security principal risk to explicitly include cyber risks. We also identified data management as a new emerging risk for 2023, which we will evaluate during the year. The 2022 emerging risks of geopolitical tensions and healthcare reform were embedded in our risk management activities throughout the year and will not be reported separately for 2023.

+ Viability statement, see page 64
+ ARC report, see page 124
+ Internal control framework, see page 125
+ Legal proceedings, see page 265
+ Environment, see page 45
+ Climate-related financial disclosures report, see page 55

2022 Principal risks summary

Risk	Trend versus prior year	Assessment and mitigation activities
Patient safety	→ External	The external risk environment remains stable. The regulatory environment remains challenging, with recent examples of evolving regulatory requirements related to safety reporting for clinical trials. Also, there is a risk that external parties, including regulatory agencies and technology companies, may reach conclusions and communicate information about the safety of our products based on real-world evidence that is not available to us. This could inhibit our ability to make timely decisions and take appropriate action in relation to the safety of our products, or to confirm or refute conclusions asserted by external parties.
	→ GSK	Our risk exposure remains stable. We continue to balance resources between change programmes while maintaining routine activities. In 2022, we've allocated resources to optimise pharmacovigilance operations, advance innovative solutions for safety case management, and simplify key safety processes. Change initiatives have the short-term potential to distract focus from our key business priorities. However, such changes will reduce our overall risk exposure by increasing workload capacity and organisational capability.
Product quality	→ External	The external risk environment is stabilising and remains high 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. The regulatory environment is evolving with respect to continued use of titanium dioxide in medicines, with the EMA due to make a decision on potential discontinuation in 2024.
	→ GSK	Our risk exposure has stabilised as we return to pre-pandemic levels of health authority inspections. We continue with inspection readiness programmes to ensure full preparedness. We've continued to invest in technology and digital platforms to strengthen our controls around good data management practices. We've completed all nitrosamine product assessments in line with regulatory expectations.
Financial controls and reporting	↑ External	The external risk environment remains challenging due to political uncertainty, proposed increases in the obligations of directors and auditors, increasing threats of cyber attacks and fraud, and increasing ESG disclosure requirements.
	→ GSK	Our risk exposure remains 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 setting standards.
Anti-bribery and corruption (ABAC)	→ External	The external risk environment remains stable. The enforcement of anti-corruption laws and regulations remains a priority in many countries, in particular the US and the UK, with a continued focus on investigating the use of third parties to bribe foreign public officials. As a result, rigorous anti-bribery and corruption controls are expected. Disruption to global supply chains and the commercial pressures caused by higher-than-usual inflation rates may increase the risks of bribery and corruption in certain contexts in the coming years.
	→ GSK	Our risk exposure remains stable as we continuously improve our ABAC programme to make sure that our controls match evolving and emerging risks. We've enhanced our mandatory ABAC training for all employees, and we provide role- and risk-tailored ABAC training on an ongoing basis. We also impose stringent ABAC training requirements on certain third parties who provide services for or on our behalf.
Commercial practices	→ External	The external risk environment has stabilised. Macroeconomic factors such as energy price increases, inflationary pressure, and ongoing effects of the COVID-19 pandemic contribute to a challenging environment for all stakeholders. Competitive pressure remains intense across therapy areas and market segments. Governments remain focused on initiatives to drive down medicine and vaccine costs for consumers.
	→ GSK	Our risk exposure remains stable. We have a mature and robust control environment, which has evolved to match the competitive enhancements to our commercial practices, including higher volumes of engagement with healthcare professionals and strengthened sales force incentive schemes.

2022 Principal risks summary continued

Risk	Trend versus prior year	Assessment and mitigation activities
Scientific and patient engagement	→ External	The external risk environment remains stable. It continues to be characterised by complex, dynamic disease areas and treatments with increased patient-centric focus during all phases of the product lifecycle, increasing diversity of engagement platforms and more virtual engagements.
	→ GSK	Our risk exposure remains stable. We continue to mitigate risk by modernising and adjusting our engagement practices and internal controls to the rapidly evolving environment. We have internal networks to foster collaboration and best practice sharing, as well as the identification of emerging risks associated with scientific and patient engagement activities.
Data ethics and privacy	↑ External	The external risk environment continues to increase as the global landscape of data protection, privacy and cyber laws develops. Given that the current pace of technology-focused innovation is expected to continue, companies need to be mindful of relevant potential legislation and regulations. The increasing trend for data sovereignty, initially affecting tech companies, could affect healthcare companies in their ability to drive medical innovation and to effectively operate internationally.
	↑ GSK	Our risk exposure is increasing in the context of an unstable privacy regulatory environment and our multinational footprint, as we re-align with our digital transformation and focus on data-driven science. Laws in our key markets such as the US, EU, UK, China and India continue to evolve, including those relating to international data transfer mechanisms.
Research practices	→ External	The external risk environment remains stable. Research remains critical to the development of safe and effective products. Advances in technology, use of data, societal expectations and ethical considerations and new entrants to the sector continue to influence the environment. Global regulations and quality standards continue to evolve, and are particularly impactful when expectations change or there are country-specific requirements.
	→ GSK	Our risk exposure remains stable, as laws and regulations are continually evolving. We continue to perform robust risk scanning and assessments that inform the evolution of our control framework in response to regulatory changes, ensuring clear accountabilities for actions.
Environment, health and safety (EHS)	→ External	The external risk environment remains stable. Manufacturing sites are operating at full staffing levels. Work location arrangements have been made to maintain the safety and wellbeing of employees affected by the Ukraine conflict.
	→ GSK	Our risk exposure remains stable. We've continued to focus on safety leadership training, embedding our Life Saving Rules, and adhering to our EHS standards. We're introducing our Safety Leadership Experience across Global Supply Chain, and R&D operations. This programme trains leaders to take EHS accountability and make sure all our people understand the importance of adhering to our EHS standards.
Information security	↑ External	The external risk environment continues to rise as digital footprints increase and threats from hackers become more sophisticated. Growing geopolitical conflicts have significantly increased cyber risk to large corporations. Governments are tightening regulatory frameworks with regards to data and information, and we are seeing a rise in enforcement of them.
	↑ GSK	Our risk exposure continues to increase as we operate in an increasingly digital healthcare ecosystem and continue to expand our own digital footprint. In response, our cyber security maturity programme continues to improve our controls and governance to identify, protect, detect, respond to and recover from cyber incidents.
Supply continuity	↑ External	The external risk environment is increasing due to unpredictable external forces that put pressure on the resilience of our supply chains. These include geopolitical tensions and growing nationalistic approaches (including US-China decoupling).
	→ GSK	Our risk exposure remains stable. Across our Medicines and Vaccines supply chains, we continue to focus on strategic materials planning parameters, adapting to changes in the external environment, including inventory strategies, safety stocks and hedging. We're making a concerted effort to stabilise and accelerate newly acquired assets and we're focusing on making sure we recruit the right people to support our future portfolio.

Climate-related financial disclosures

GSK climate-related financial disclosures are consistent with the recommendations and recommended disclosures of the Task Force on Climate-related Financial Disclosures (TCFD) including the TCFD all-sector guidance, and in compliance with the requirements of LR 9.8.6R.(8) (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. This year we have updated the climate scenarios used to model transition and physical risks, which enabled us to extend the timeframe to model risks to 2050 where data was available and to broaden the scope to include GSK's supply chain. We will continue to monitor for emerging risks and new data to include in future assessments.

Governance

Board

The Board considers climate-related matters throughout the year assessing the risk management processes in place and challenging and endorsing the business plan and budgets, including overseeing major capital expenditures, acquisitions and divestments. The Committee that exercises oversight, provides guidance and reviews our ESG performance, including climate-related risks and opportunities, and environmental performance against targets is the CRC.

The Committee is supported by GLT and ROCC which receive quarterly updates on environmental sustainability, including climate. Regular attendees include the CEO, and the President Global Supply Chain. See the CRC report on page 107 for further details of the Board architecture.

In 2022 the CRC met four times. Key areas of focus were:

- discussed climate-related issues on three separate occasions with management, including: progress in delivering against our climate ambitions; implications of the geopolitical landscape; key milestones and decisions required to achieve net zero targets
- reviewed mid-year performance for key environmental metrics, including climate-related metrics, as part of reviewing GSK's ESG Performance Rating
- approved GSK's TCFD statement and public environmental reporting and disclosures

In 2022 the Remuneration Committee, with the support of the CRC, introduced a 10% measure into GSK's long-term incentive plan opportunity for senior leaders based on key metrics related to GSK's ESG performance.

These metrics include climate-related metrics such as reduction in scope 1 & 2 emissions and reaching key milestones in the R&D programme to reduce greenhouse gas emissions (GHG) in metered dose inhalers for asthma and chronic obstructive pulmonary disease, see page 148.

GSK Leadership Team (GLT)

The GLT meets regularly and is an opportunity for members to discuss strategic, financial and reputational matters.

Regis Simard, President, Global 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 manage the risks and opportunities across each of our business units along with delivering on the commitments made to a net zero, nature positive, healthier planet, with ambitious goals set for 2030 and 2045 across our entire value chain.

Regis is supported by GSK's Vice President (VP) Sustainability who regularly reviews progress with him and who co-chairs the quarterly GSK Sustainability Council.

In 2022 GLT reviewed and discussed the mid-year performance for key environmental metrics, including climate-related ones, as part of reviewing GSK's ESG Performance Rating.

GSK Sustainability Council

The Sustainability Council, held quarterly, is attended by senior leaders from across the business who play a key role in delivering our commitment to a net zero, nature positive, healthier planet, with ambitious goals set for 2030 and 2045 across our entire value chain. Members include leaders from procurement, finance, HR, Compliance, R&D and manufacturing. The Council is co-chaired by the President Global Supply Chain and the VP Sustainability and supported by the global sustainability team who provides specialist expertise and advice to the business.

In 2022 the Council:

- received monthly performance dashboards covering key performance metrics and escalations of any potential concerns or issues
- held quarterly performance reviews across all areas of programme delivery and focused reviews of aspects of the programme such as the implementation of the sustainable sourcing strategy, and recommendations for refreshing GSK's Science Based Target commitments. The Council reviews include decisions on interventions or support required to maintain progress towards 2030 targets
- reviewed insights on ESG trends and regulations
- approved the proposed Sustainability Data Strategy

Risk management continued

In order to address the key priorities of the climate impact from GSK's metered dose inhaler, a specific council was established in 2022 and is attended by senior leaders from across the commercial, supply chain, regulatory and R&D businesses aligned to GSK's respiratory business. This council is chaired by the President Global Supply Chain and is the decision-making body for:

- the programme to reduce the climate impact of metered dose inhalers which contribute to approximately 50% of GSK's total GHG emissions by up to 90%, if the clinical trials are successful
- advocacy and engagement with regulators and policymakers
- industrialisation strategy and progress

Other business support

- the Sustainability Programme Steering Team co-ordinates the sustainability programme and associated workstreams and has oversight for monitoring performance and progress of the enablers required to deliver the sustainability programme
- business unit sustainability councils meet quarterly to review business unit performance and delivery against the company sustainability ambition
- the Capital Allocations Board (CAB) which includes the CFO and Group Financial Controller reviews climate-related capital expenditure as part of its 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

GSK's commitment to a net zero, nature positive, healthier planet is embedded in GSK's strategic long-term priorities, always considering the social, environmental and governance impacts of everything we do from laboratory to patient.

There are many teams across GSK involved in this process, to ensure that we make sound strategic decisions. The process for identifying and assessing climate-related risks and opportunities is set out under Risk Management as part of this TCFD section. To achieve our climate ambition, active holistic management of all climate-related risk components is important. In addition to risk, we also continue to identify opportunities for GSK. These risks and opportunities are described further in the table on pages 58 and 59.

In order to achieve reductions in emissions across our operations by 2030, as part of our transition plans, we are focusing on:

- maximising energy efficiency in our sites
- transitioning to 100% renewable electricity by 2025
- increasing the use of electric vehicles by our sales fleet

Supply chain emissions are a shared challenge across our sector, and we are working with our peers on collaborative initiatives such as:

- the Activate programme to help Active Pharmaceutical Ingredients (API) suppliers accelerate decarbonisation initiatives
- the Energize programme to encourage the use of renewable energy throughout the pharmaceutical sector's supply chain
- the Manufacture 2030 initiative to encourage suppliers to measure, manage and reduce their emissions

In September 2022, we launched a Sustainable Procurement Programme which will require our suppliers to disclose emissions and set carbon reduction targets aligned with 1.5°C.

The use of our metered dose inhalers by patients for asthma and chronic obstructive pulmonary disease makes up around 50% of our total climate impact. We are investing in an R&D programme to reduce greenhouse gas emissions from this vital medicine that could potentially reduce the climate impact by up to 90%. If the clinical studies confirm that the new propellant could be an appropriate replacement, GSK will work on securing approval from regulators in markets where the new product could be made available to patients. This process can take time, but GSK is focused on meeting our commitment and we have made considerable investments towards achieving this goal.

The Science Based Targets initiative (SBTi) accredited our climate targets, set prior to our demerger, as aligned to the 1.5°C pathway. Our reduction pathway to 2030 is significantly more ambitious and we are currently seeking reaccreditation from the SBTi for our targets as a fully focused biopharma company.

We recognise that the global energy crisis as described on page 13 is disrupting and delaying the green transition across the world. This may impact the pace of decarbonisation in the short term but any setback to the energy transition is expected to be time-limited.

In 2021, we developed a three-year plan to further embed climate risk analysis across material areas of our business and focused on risks impacting our direct operations. In 2022, we updated the climate scenarios used to model transition and physical risks, which enabled us to extend the timeframe to model climate risks out to 2050 where data was available and to broaden the scope to include GSK's sites and suppliers across all geographies with a strategic revenue dependency aligned to other supply chain risk management processes.

Risk management continued

We will continue to monitor for emerging risks and new data to include in future assessments, using external parties to provide horizon scanning insights on ESG trends and regulations.

GSK prioritised scenario modelling of the following risks in 2022:

- changes to regulations governing the supply of high global warming potential (GWP) substances by the EU, UK and US governments could restrict GSK's ability to manufacture metered dose inhalers
- future regulatory policy responses to address climate change could lead to the imposition of carbon taxes by countries where GSK manufactures and sources goods from third parties
- increasing levels of water stress that could lead to interruptions to supply of water to GSK and third-party supply sites
- increasing frequency and impact of extreme weather events that could cause disruption to GSK and third-party supplier sites

Climate scenarios

We reviewed and updated our climate scenarios, developing four climate scenarios. We used three of these scenarios for modelling transition risks (Net Zero, Low Carbon and Current Trajectory), and three scenarios for modelling physical risks (Low Carbon, Current Trajectory, and Breach of Planetary Boundaries).

Net zero scenario (SSP 1 – RCP 1.9)

This scenario sets out a narrow but achievable pathway for the global energy sector to achieve net zero CO_2 emissions by 2050[1]. It does not rely on emissions reduction from outside the energy sector to achieve its goal. The scenario is consistent with limiting the global temperature rise to 1.5°C without a temperature overshoot. Net zero means huge declines in the use of coal, oil and gas and a shift to renewable energy sources.

Low carbon scenario (SSP 1 – RCP 2.6)

In this scenario, all current net zero pledges are achieved in full and there are extensive efforts to realise near-term emissions reductions; advanced economies reach net zero emissions by 2050, China around 2060, and all other countries by 2070 at the latest[2]. The scenario is consistent with limiting the global temperature rise to below 2°C. With some level of net negative emissions after 2070, the temperature rise could be reduced to 1.5°C in 2100.

Current trajectory scenario (SSP2 – RCP4.5)

This scenario sets out to show to what extent announced ambitions and targets are on the path to deliver the emissions reductions required to achieve net zero emissions by 2050[3]. The temperature rise will exceed 2°C by 2100, with a more noticeable shift to happen in the latter half of the century. A net zero pledge for emissions within the scenario does not necessarily mean that CO_2 emissions from the energy sector need to reach net zero, there is an allocation for carbon offsetting within the pledges.

Breach of planetary boundaries scenarios (SSP 5 – RCP 8.5)

This scenario is not aligned to any of the pledges laid out within the Paris Agreement and is one where countries are unable to meet the United Nations Sustainable Development Goals. This scenario will have the most severe physical consequences for the planet. The temperature rise will exceed 4°C by 2100, leading to high loss of biodiversity and species extinction.

Each risk and opportunity was analysed including how they are being managed by GSK and the metrics and targets in place and the potential impact on our profit using a low (<£100 million), medium (£100 million-£250 million) or high (>£250 million) threshold.

Due to the inherent uncertainty, and the nature of the risks across GSK strategy and business model, the climate-related issues are monitored within these time horizons: short term (less than 3 years); medium term (3-10 years) and long term (> 10 years).

In comparison to the 2021 disclosure, we have extended the timeframe for climate risk assessments out to 2050 where data is available to be able to differentiate between the potential long-term outcomes in different climate scenarios.

Based on the different climate scenarios analysis performed and taking into consideration the climate risk and opportunities identified across all geographies, as described in the table below, we have tested the resilience of GSK's business strategy and did not identify any material impact to our business resilience.

1 IEA Net Zero emissions scenario, https://www.iea.org/reports/global-energy-and-climate-model/net-zero-emissions-by-2050-scenario-nze last accessed 17 November 2022

2 IEA World Energy Outlook 2021, Chapter 2, p94, download report from https://www.iea.org/reports/world-energy-outlook-2021/overview, last accessed 17 November 2022

3 IEA Announced Pledges, https://www.iea.org/reports/global-energy-and-climate-model/announced-pledges-scenario-aps last accessed 17 November 2022

Risk management continued

Physical risk/ description	GSK response	Scenario	Potential financial impact/ timeframe	Metrics	Targets
The risk from increasing levels of water stress leading to interruptions to supply of water to GSK sites and third-party supply sites. GSK and its third-party suppliers use freshwater as the main source of water to manufacture medicines and vaccines. If water availability was restricted at a factory, then production operations would be interrupted.	We have identified three water basins in water-stressed areas in Algeria, India and Pakistan where we have manufacturing sites, and where we aim to be water neutral. At our manufacturing facility in Nashik, India we have built plants for rainwater harvesting. The climate scenario analysis has identified a number of sites and supplier sites located in water basins that could become water stressed by 2040 which have been added to a watch list. We will monitor changes to the risk levels and update our site water risk assessments appropriately.	Current trajectory	Medium (£100m-£250)m/ Long term (> 10 years)	Sites that have achieved water stewardship Total supplied water	Achieve good water stewardship at 100% of our sites by 2025 Reduce overall water use in our operations by 20% by 2030
		Breach of planetary boundaries	Low (< £100m)/ long term (> 10 years)		
Increasing frequency of extreme weather events causing disruption to GSK and third-party supplier sites. Extreme weather events from any one of precipitation (rainfall), flood from precipitation, tidal flood, extreme wind, wildfire, extreme heat or extreme cold can result in short-term interruptions to manufacturing at GSK or supplier sites.	The climate scenario modelling indicated that of the seven physical perils, flood from rainfall presents the highest likelihood of an acute interruption. However, the risk of flooding from rainfall and from the other extreme weather events is expected to remain very low. 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 impacts of extreme weather events including adopting appropriate mitigation plans. 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.	Low carbon scenario	Low (< £100m)/ Long term (> 10 years)	Business continuity plans are reviewed annually	Where climate-related risks to business continuity are identified, we have taken action to mitigate the risk
		Current trajectory scenario			
		Breach of planetary boundaries scenario			
Regulations governing the use of high global warming potential (GWP) substances are being updated in the EU and UK and were updated recently in the US. This could lead to increasing costs and restrict the ability to manufacture our metered dose inhaler (MDI) products that use a high GWP propellant (HFA134a).	We are investing in an R&D programme to reduce greenhouse gas emissions from metered dose inhalers used to treat asthma and COPD and have made good progress towards reformulating an alternative gas that could potentially reduce the climate impact by up to 90%, if the clinical trials are successful. We already have a portfolio of Dry Powder Inhaler products that do not use propellants that are not impacted by this risk.	Current trajectory scenario	High (> £250m)/ medium (3-10 years)	On/off track against delivery of key milestones on the R&D programme plan	80% and 90% reduction in carbon emissions (all scopes) by 2030 and 2045, respectively

Risk management continued

Transitional risk/ description	GSK response	Scenario	Potential financial impact/ timeframe	Metrics	Targets
Future regulatory policy responses to address climate change could lead to the imposition of carbon taxes by countries where GSK manufactures and source goods from third parties.	GSK is managing this risk by reducing Scope 1 and 2 emissions through the following: – GSK's energy efficiency programme – Transitioning to 100% renewable electricity by 2025 – Investigating options for renewable heat technology – Transitioning sales fleet to electric vehicles by 2030 – Using shadow carbon pricing on capital investments of US$ 100 per tonne of GHG emissions GSK is managing this risk by reducing Scope 3 emissions through the following: – R&D programmes to reduce greenhouse gas emissions from metered dose inhalers – The new supply chain programme requiring our suppliers to take action on carbon, set targets aligned with 1.5°C and switch to renewable power and heat – Collaborating with sector peers in the Energize and Activate programmes and the Manufacture 2030 initiative – Joining the Sustainable Markets Initiative Health Systems Task Force to reduce healthcare supply chain emissions	Net zero scenario Low carbon scenario Current trajectory scenario	Medium (£100-250m) in both medium (3-10 years) and long term (> 10 years) Medium (£100-250m) in the medium (3-10 year) term falling to low (< £100m) in the long term (> 10 years) Low (< £100)/ in the medium (3-10 years) and long term (> 10 years)	Scope 1 & 2 carbon emissions Scope 3 carbon emissions	80% and 90% reduction in carbon emissions (all scopes) by 2030 and 2045, respectively

Opportunities	GSK response	Scenario	Potential profit impact/ timeframe	Metrics	Targets
At COP26 in November 2021, more than 50 countries around the world committed to provide low carbon healthcare systems. This could lead to increasing demand for low carbon medicines and vaccines.	We are reducing our own Scope 1 & 2 carbon emissions which in turn reduces the Scope 3 footprint of our customers and suppliers; for example, at our site in Irvine in Scotland, a closed loop heat system has helped to drive reductions in operating costs, and onsite renewables and biogas will provide 85% of its energy. We have an Eco-design programme to reduce the impacts of all our products and packaging. We are investing in an R&D programme to reduce greenhouse gas emissions from metered dose inhalers used to treat asthma and COPD and have made good progress towards reformulating an alternative gas that could potentially reduce the climate impact by up to 90% if the clinical trials are successful. We have a portfolio of dry powder inhaler products that have low carbon footprints.	Net zero scenario Low carbon scenario Current trajectory scenario	Low < £100m/ Long (> 10 years)	Scope 1 & 2 and 3 carbon emissions Total waste and materials	80% and 90% reduction in carbon emissions (all scopes) by 2030 and 2045, respectively Zero operational waste
There have been several reports exploring the impact of climate change and health showing that climate change affects water- and vector-borne diseases. This could lead to an increasing demand for new medicines and vaccines.	In September 2022, GSK and Microsoft announced an innovative collaboration with the Centre for Health and Disease Studies (CHDS) Nepal. The pilot project, which will leverage Microsoft's Premonition systems and GSK's expertise in health and disease, will investigate how AI and robotics can support local community response to vector-borne diseases and climate change. In July 2022, GSK's annual Palio conference explored the role of vaccines in finding solutions for global healthcare to protect people and the planet.	Current trajectory scenario	Long (> 10 years)	Not applicable	Not applicable

Risk management

As described in the Risk management section on page 51, GSK's risk management policies are designed to address all types of risks, including the Group principal risks and uncertainties and our climate risk assessment follows the same policy and framework.

The nature of the risks and opportunities from climate change depends not only on the physical aspects of climate change, but also regulatory and commercial changes in the markets in which GSK operates, including pressures to reduce the climate impact of GSK's metered dose inhaler medicines.

In terms of GSK climate risk management policies, a specific and dedicated environmental sustainability risk management plan was put in place in 2020. 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. Policy developments at global and national level are monitored for their potential impact. For example, as a result of the UN Montreal Protocol 2016 Kigali amendment that mandates a global phase down of the use of high global warming potential hydrofluoroalkane gases, governments are introducing or proposing to introduce quota restrictions to HFA134a that is used by GSK to manufacture metered dose inhalers used to treat asthma and COPD. GSK has been part of an industry consultation with the UK Department for Environment, Food & Rural Affairs as the UK government develops its UK specific regulations on the control of F-gases.

GSK has policies and procedures in place to identify risks from climate change when things change, for example to assess the climate impact of merger and acquisition activity, or the construction of new buildings, or major capital expenditure. Furthermore, 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.

For the purposes of our TCFD disclosures we have made use of the TCFD distinction between "physical" and "transition" climate-related risk.

Risks which may be identified include potential effects on operations at asset level, performance at business level and developments at regional level from extreme weather or the transition to a lower carbon economy.

Physical risks are typically identified at the asset or project level and are managed depending on the level of risk assessed. Increasing levels of water stress is a physical risk and could reduce the availability of water for our operations in affected locations. This is an important risk as GSK uses freshwater as the main source of water to manufacture medicines and vaccines. If water availability was restricted at a factory, then production operations could be interrupted. We perform water stewardship risk assessments for our manufacturing sites and update them every three years.

Transition risks are typically identified at enterprise level and at market level. Currently the transitions risks which are a priority for GSK are regulatory and commercial risks which we manage through our investment decisions and through our sustainability transformation programme. From a legal point of view, we consider risks which may arise from product claims based on environmental performance. To manage this risk, we use external accreditation processes and organisations to review the evidence used to support environmental claims for our products criteria. From a technological point of view, GSK has developed tools to incorporate eco-design principles into the design and development of new products and to identify opportunities to reduce the environmental impacts of existing products. Our communications and governance affairs team manages corporate reputation through identification and monitoring of climate-related issues and then undertake both proactive and reactive engagement with relevant stakeholder groups to communicate GSK's position.

On an annual basis a cross-functional team from GSK's business units, sustainability team and finance perform a review of risks from climate change to identify any new or emerging risks and to determine if an updated risk assessment is required for any existing risks. Climate-related risks are considered from a strategic and operational perspective to ensure we maintain a comprehensive view of the different types of climate risks we face and the different time horizons in which they may affect GSK. This review is approved by the VP Sustainability and Finance VPs from each of GSK's business units.

The identified risks are assessed by a climate risk working group who consider the likelihood and financial impact of each risk on GSK under different climate scenarios. The impact assessments are approved by the President, Global Supply Chain who has company level responsibility for Environmental Sustainability, the VP Sustainability and Finance VPs from each of GSK's business units. The results are shared with Business Unit Risk Management Control Boards (RMCB) and the Finance RMCB to ensure risks are both contextualised with other business risks and managed appropriately. This allows management to take a holistic view and optimise risk mitigation responses, to ensure that responses to climate-related risks are properly integrated into the relevant businesses' and functions' activities.

Risk management continued

Metrics and targets

GSK commits to a net zero, nature positive, healthier planet, with ambitious goals set for 2030 and 2045 across our entire value chain. GSK reports progress in reducing Scope 1 & 2 carbon emissions, Scope 3 carbon emissions[1], energy use, water, waste annually in our ESG Performance Report for detailed performance data and other environmental KPI and in our public responses to the CDP Climate, Water and Forest questionnaires.

a. Disclose the metrics used by the organisation to assess climate risks and opportunities in line with its strategy and risk management process	GSK has considered the key metrics following the guidance of Tables A1.1 and A1.2 as well as the metrics consistent with cross-industry, climate-related metrics as described in TCFD. Based on that, our strategic metrics are: – Scope 1 & 2 emissions (market-based and location-based approach), described in the table below – Scope 3 emissions, described in the table below – % renewably sourced electricity, described in the table below – Total supplied water, described in the table below – Total waste and materials, described in the table below – ESG composite metric, as part of our senior leaders' remuneration policy see page 148 – Sites that have achieved water stewardship, described in the table below Our ESG Performance Report includes additional metrics used to support the strategic metrics listed above.
b. Disclose Scope 1, 2 and if applicable Scope 3 GHG emissions and related risks	In Energy and carbon emissions, see table below – Scope 1 emissions from energy – Scope 1 from other sources – Scope 2 emissions (market-based) – Scope 2 emissions (location-based) – Scope 3 emissions metrics – Scope 1 & 2 emissions from intensity metrics Prioritised physical and transition risks are included in the Strategy Section on page 56.
c. Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets	Our targets (measured against a 2020 baseline where applicable) are: – 80% reduction in carbon emissions and investment in nature-based solutions for the remaining 20% of our footprint by 2030 (all scopes) – 100% renewable electricity by 2025 (Scope 2) – Net zero emissions across our full value chain by 2045 (all scopes) – Achieve good water stewardship at 100% of our sites by 2025 – Reduce overall water use in our operations by 20% in 2030 – Zero operational waste by 2030. – Be water neutral in our own operations and at key suppliers in water-stressed regions by 2030 The performance against our targets can be found on pages 45 and 46.[1]

1 See Basis of Reporting 2022 in the ESG resources section of GSK.com (https://www.gsk.com/en-gb/responsibility/esg-resources/) for detailed methodologies for measuring and reporting all GSK environmental KPIs

Metrics data

Carbon emissions[1,2]

Carbon emissions '000 tonnes CO_2e	2022	2021	2020
Scope 1 emissions (from energy)	**320**	333	355
Scope 1 emissions (other[3])	**306**	300	358
Scope 2 emissions (market-based)	**88**	131	169
Scope 2 emissions (location-based)	**265**	285	309
Scope 3 emissions[4]	**–**	8,624	9,949
UK Scope 1 & 2 emissions	**111**	126	138

Other metrics	2022	2021	2020
Scope 1 and 2 emissions from energy/sales revenue (tonnes CO_2e/£m)	**13.9**	18.8	21.5
Scope 1 and 2 emissions from energy/FTE (tonnes CO_2e/FTE)	**5.9**	6.5	7.2
Total energy used (GWh)	**2,759**	2,871	3,085
UK energy used (GWh)	**735**	807	917
% renewably sourced electricity	**73%**	63%	46%
Total supplied water million m^3	**7.5**	7.9	9.7
Total waste and materials '000 metric tonne	**57.2**	63.1	63.0
% sites that have achieved water stewardship	**100%**	100%	89%

1 All data reported excludes our previous Consumer Healthcare business unless otherwise specified

2 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, Deloitte, to provide limited assurance to ISAE 3000 for energy, Scope 1, 2 and selected Scope 3 carbon emission data, water and wastewater data. Methodologies for reporting and measurements are provided in the Basis of Reporting 2022 in the ESG resources section of gsk.com (https://www.gsk.com/en-gb/responsibility/esg-resources/)

3 'Other' refers to emissions from sales force vehicles, propellant emissions released during manufacture of inhalers (the majority of propellant emissions, released during patient use, are included in Scope 3 carbon emissions), 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 2021 as the process of compiling the 2022 data is not yet complete, except for 2022 Scope 3 emissions from patient use of inhalers which are disclosed in the ESG Performance Report. We will publish this data once it becomes available and it will be included in the 2023 ESG Performance Report

Nature-related financial disclosure

At GSK we are committed to playing our part to minimise our impact and dependencies on nature, as well as helping to protect and restore nature. We have performed a full assessment of our impacts on nature across our value chain and are setting targets to reduce these pressures in line with evolving guidance from Science Based Targets for Nature (SBTN). In line with our commitment to nature and building on the achievements of our climate-related financial disclosures, GSK is currently piloting the recommendations of the Taskforce on Nature-related Financial Disclosures (TNFD) ahead of the launch of the TNFD's final framework expected in September 2023.

As part of the pilot, we are working to understand how we can utilise the TNFD guidelines to report the risks that our impacts and dependencies on nature present to our business. We are making an initial disclosure with a particular focus on strategy, metrics and targets. Some early findings from the results of our in-progress analysis are included below.

Strategy

We are committed to have a net positive impact on nature by 2030 by reducing our environmental impacts across water, waste and materials biodiversity and by investing in nature protection and restoration. In 2022, we conducted an assessment of GSK's nature-related risks and opportunities, in line with the latest TNFD guidance from November 2022. By following the latest TNFD LEAP (Locate, Evaluate, Assess and Prepare) methodology, we have been able to better understand the magnitude of GSK's physical and transitional risks across each Nature pressure. We will continue to refine our assessment, following the methodology from TNFD, and will look to report against it once the final version is available.

Additionally, GSK is one of the first companies to conduct a materiality assessment for its full value chain, in line with the SBTN methodology, to better understand our impacts and dependencies.

This process has clearly indicated that to achieve Net Nature Positive by 2030 requires us to build a portfolio of pressure-specific initiatives that drive action in targeted landscapes and regions of impact. As part of our commitment, we acknowledge that collaboration across different stakeholders will continue to be an imperative in this multi-year journey. Ultimately, the direction provided by the SBTN technical guidance will help shape our strategy to ensure we minimise our impacts and dependencies on nature globally.

Metrics and targets

To address GSK's pressures on Nature, we have existing targets across water, waste, materials and biodiversity (see page 46).

Our targets will continue to evolve as we incorporate the findings of our materiality assessment and progress towards achieving Net Nature Positive by 2030. To support progress, we actively engage with external partners including the SBTN and World Business Council for Sustainable Development to ensure targets and metrics are meaningful and robust.

Addressing our impacts on the natural world and understanding the impacts of the changing state of nature globally on GSK is no small undertaking, but we are proud to be pioneering the use of nature-related financial disclosures in our industry. Ultimately, delivering positive outcomes for the environment is fundamental to delivering positive outcomes on human health. At GSK we are excited to continue on this path, uniting science, technology and talent to get ahead of disease together.

Non-financial information statement

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

Employees by gender

	Male	Female	Total
Board	8	3	**11**
Management*	8,318	8,201	**16,519**
All employees	36,782	32,618	**69,400**

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

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 51 to 54 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's business strategies and aligned 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 the market opportunities in medicines and vaccines. This approach is aligned to GSK's model of achieving balanced growth by investing in high quality, innovative products for patients 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 medicines and vaccines 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. The Plan assumes the next several years to be challenging for the healthcare industry with continued pressure on pricing of pharmaceuticals. GSK assumes no premature loss of exclusivity for key products over the period and for all anticipated launches to proceed as planned. Despite the ongoing recovery of healthcare systems from the impact of the COVID-19 Pandemic, uncertain economic conditions prevail across many markets in which GSK operates.

The downside scenarios consider GSK's cash flows, sustainability of dividends, funding strategy, insurance provision and recovery as well as other key financial ratios over the period. These metrics have been subject to sensitivity analysis, which involves flexing a number of the main assumptions underlying the forecasts both individually and in combination, along with mitigating actions that could realistically be taken to avoid or reduce the impact or occurrence of the underlying risk.

The following hypothetical downside scenarios have been evaluated:

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

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

Scenario 3: Principal risks. This scenario includes a severe assessment of the potential loss impact from the principal risks related to patient safety, product quality, supply chain continuity and environmental harm as well as anti-bribery and corruption and any consequent regulatory actions, fines or significant litigation, all of which could fundamentally threaten our operations. These risks are managed through mitigating activities described on pages 285 to 295.

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

The 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 will be able to continue in operation and meet its liabilities as they fall due over the three-year period of assessment.

Group financial review

In this section

Group financial review

Summary full year results

	Full year 2022 £m	Growth AER %	Growth CER %	Full year 2021[1] £m	Full year 2020[1] £m
Turnover	**29,324**	19	13	24,696	24,354
Total continuing operating profit[1]	**6,433**	48	31	4,357	5,979
Total EPS[1]	**371.4p**	>100	>100	109.6p	144.4p
Total continuing EPS[1]	**110.8p**	34	18	82.9p	122.4p
Total discontinued EPS[1]	**260.6p**	>100	>100	26.7p	22.0p
Adjusted operating profit[1]	**8,151**	26	14	6,493	6,656
Adjusted EPS[1]	**139.7p**	27	15	110.3p	114.4p
Cash generated from operations attributable to continuing operations[1]	**7,944**	10		7,249	7,674
Free cash flow	**3,348**	1		**3,301**	**3,683**

(1) The amounts presented above for continuing operations and Adjusted results excludes the Consumer Healthcare business discontinued operation. The amounts presented for discontinued EPS are for the demerger of the Consumer Healthcare business. The presentation of continuing and discontinued operations under IFRS 5 are set out on page 192. The 2021 and 2020 comparative results have been restated on a consistent basis from those previously published to reflect the demerger of the Consumer Healthcare business (see page 238) and the impact of the Share Consolidation implemented on 18 July 2022 (see page 233).

Total Turnover

Total turnover in 2022 was £29,324 million, up 19% at AER, 13% at CER, reflecting strong performance in all three product groups. Commercial Operations turnover, excluding COVID-19 solution sales, grew 16% at AER, 10% at CER. Specialty Medicines included £2,309 million sales of *Xevudy*, and double-digit growth across all therapy areas. Vaccines growth reflected strong *Shingrix* and Meningitis performance, partially offset by pandemic adjuvant sales in 2021. General Medicines reflected the recovery of the antibiotics market and the strong performance of *Trelegy* in respiratory across all regions.

Specialty Medicines

Specialty Medicines sales were £11,269 million, up 37% at AER, 29% at CER, driven by consistent double-digit growth in all therapy areas. Specialty Medicines, excluding sales of *Xevudy*, were £8,960 million up 23% at AER, 15% at CER.

Vaccines

Vaccines turnover was £7,937 million, up 17% at AER, 11% at CER in total, and up 24% at AER, 17% at CER excluding pandemic adjuvant sales. The performance reflected a favourable comparator, which was impacted by COVID-19 related disruptions in several markets primarily in H1 2021, and strong commercial execution of *Shingrix*, particularly in the US and Europe.

General Medicines

General Medicines sales in the year were £10,118 million, up 5% at AER, 1% at CER, with the impact of generic competition in US, Europe and Japan offset by *Trelegy* growth in respiratory and the post-pandemic rebound of the antibiotic market since H2 2021, in Other General Medicines.

Total Continuing Operating Profit

Total operating profit from continuing operations was £6,433 million compared with £4,357 million in 2021.

This included the £0.9 billion upfront income received from the settlement with Gilead Sciences, Inc. (Gilead), increased profits on turnover growth of 13% at CER and fair value gains on investments, partly offset by higher remeasurement charges for contingent consideration liabilities.

Total continuing Adjusted operating profit

Adjusted operating profit was £8,151 million, 26% higher at AER and 14% at CER than 2021. The Adjusted operating margin of 27.8% was 1.5 percentage points higher at AER and 0.3 percentage points higher at CER compared to 2021. This primarily reflected the impact from low margin COVID-19 solutions sales (*Xevudy*). This was offset by operating leverage from strong sales growth, mix benefit, lower inventory adjustments and write-offs and higher royalty income.

Total Earnings per Share

Total EPS was 371.4p compared with 109.6p in 2021. The increase primarily reflected the profit after taxation for discontinued operations recognised on the Consumer Healthcare business demerger, upfront income received from the settlement with Gilead, increased profits and fair value gains on investments, partly offset by higher remeasurement charges for contingent consideration liabilities and an unfavourable comparison due to a credit of £397 million to Taxation in 2021.

Group financial review continued

Total continuing Earnings per Share

Total EPS from continuing operations was 110.8p compared with 82.9p in 2021. This primarily reflected the upfront income received from the settlement with Gilead, increased profits from turnover growth and fair value gains on investments, partly offset by higher remeasurement charges for contingent consideration liabilities and an unfavourable comparison due to a credit of £430 million to Taxation in 2021.

Total discontinued Earnings per Share

EPS from discontinued operations was 260.6p, compared with 26.7p in 2021. The increase primarily reflected the gain arising on the demerger of Consumer Healthcare recognised in Profit after taxation for discontinued operations.

Adjusted Earnings per Share

Adjusted EPS was 139.7p compared with 110.3p in 2021. Operating leverage from strong sales growth, beneficial mix and lower inventory adjustments and write-offs, higher royalty income and a lower effective tax rate was partly offset by increased investment behind launches, higher supply chain, freight and distribution costs and higher non-controlling interests.

Cash generated from operations attributable to continuing operations

Cash generated from operations attributable to continuing operations for the year was £7,944 million (2021: £7,249 million). The increase primarily reflected a significant increase in operating profit, favourable exchange impact and favourable timing of collections, partly offset by unfavourable timing of profit share payments for *Xevudy* sales, increased cash contributions to the UK defined benefit pension schemes, increased contingent consideration payments and a higher increase in inventory.

Free cash flow

Free cash inflow from continuing operations was £3,348 million for 2022 (2021: £3,301 million). The increase primarily reflected a significant increase in operating profit, favourable exchange, reduced purchases of intangible assets and favourable timing of collections. This was partly offset by unfavourable timing of profit share payments for *Xevudy* sales, increased cash contributions to pensions, increased contingent consideration payments, higher tax payments, lower proceeds from disposals, higher capital expenditure and a higher increase in inventory.

Financial performance

The Total results of the Group are set out below.

	2022		2021[1]		Growth	
	£m	% of turnover	£m	% of turnover	£%	CER%
Turnover	**29,324**	**100**	24,696	100	19	13
Cost of sales	**(9,554)**	**(32.6)**	(8,163)	(33.1)	17	16
Gross profit	**19,770**	**67.4**	16,533	66.9	20	12
Selling, general and administration	**(8,372)**	**(28.6)**	(7,070)	(28.6)	18	13
Research and development	**(5,488)**	**(18.7)**	(5,019)	(20.3)	9	4
Royalty income	**758**	**2.6**	417	1.7	82	81
Other operating (expenses)/income	**(235)**		(504)			
Operating profit	**6,433**	**21.9**	4,357	17.6	48	31
Net finance costs	**(803)**		(755)			
Loss on disposal of interest in associates	**–**		(36)			
Share of after-tax (losses)/profits of associates and joint ventures	**(2)**		33			
Profit before taxation	**5,628**		3,599		56	37
Taxation	**(707)**		(83)			
Profit after taxation from continuing operations for the year	**4,921**		3,516		40	23
Profit after taxation from discontinued operations and other gains from the demerger	**3,049**		1,580			
Remeasurement of discontinued operations distributed to shareholders on demerger	**7,651**		–			
Profit after taxation from discontinued operations	**10,700**		1,580		>100	>100
Total profit after taxation for the year	**15,621**		5,096		>100	>100
Profit attributable to non-controlling interests from continuing operations	**460**		200			
Profit attributable to shareholders from continuing operations	**4,461**		3,316			
Profit attributable to non-controlling interests from discontinued operations	**205**		511			
Profit attributable to shareholders from discontinued operations	**10,495**		1,069			
	15,621		5,096		>100	>100
Total profit attributable to non-controlling interests	**665**		711			
Total profit attributable to shareholders	**14,956**		4,385			
	15,621		5,096		>100	>100
Earnings per share from continuing operations (p)	**110.8p**		82.9p		34	18
Earnings per share from discontinued operations (p)	**260.6p**		26.7p		>100	>100
Total earnings per share (p)	**371.4p**		109.6p		>100	>100
Earnings per ADS from continuing operations (US$)	**2.75**		2.29			
Earnings per ADS from discontinued operations (US$)	**6.46**		0.73			
Total earnings per ADS (US$)	**9.21**		3.02			

The Adjusted results for the Group are set out below. Reconciliations between Total results and Adjusted results for 2022 and 2021 are set out on pages 81 to 82.

	2022		2021[1]		Growth	
	£m	% of turnover	£m	% of turnover	£%	CER%
Turnover	**29,324**	**100**	24,696	100	19	13
Cost of sales	**(8,741)**	**(29.8)**	(7,346)	(29.7)	19	18
Selling, general and administration	**(8,128)**	**(27.7)**	(6,749)	(27.3)	20	15
Research and development	**(5,062)**	**(17.3)**	(4,525)	(18.3)	12	6
Royalty income	**758**	**2.6**	417	1.6	82	81
Adjusted operating profit	**8,151**	**27.8**	6,493	26.3	26	14
Adjusted profit attributable to shareholders	**5,625**		4,415		27	15
Adjusted profit attributable to non-controlling interest	**595**		441			
Adjusted profit after tax	**6,220**		4,856		28	16
Adjusted earnings per share (p)	**139.7p**		110.3p		27	15

(1) The 2021 comparative results have been restated on a consistent basis from those previously published to reflect the demerger of the Consumer Healthcare business (see page 238) and the impact of the Share Consolidation implemented on 18 July 2022 (see page 233).

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 70.

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 profits from discontinued operations from the Consumer Healthcare business (see details on page 238) and the following items in relation to our continuing operations 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

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 2022, 2021 and 2020, are set out on pages 81 to 83.

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 from continuing operations over the last three years[1] can be summarised as follows:

	2022 £m	2021[2] £m	2020[2] £m
Total operating profit from continuing operations	**6,433**	4,357	5,979
Intangible amortisation	**739**	761	724
Intangible impairment	**296**	347	200
Major restructuring	**321**	424	1,178
Transaction-related items	**1,750**	1,143	1,237
Divestments, significant legal and other items	**(1,388)**	(539)	(2,662)
Adjusted results	**8,151**	6,493	6,656

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

	2022 £m	2021[2] £m	2020[2] £m
Contingent consideration on former Shionogi-ViiV Healthcare JV (including Shionogi preferential dividends)	**1,431**	1,026	1,114
ViiV Healthcare put options and Pfizer preferential dividends	**85**	48	(52)
Contingent consideration on former Novartis Vaccines business	**193**	27	172
Contingent consideration on acquisition of Affinivax	**17**	–	–
Other adjustments	**24**	42	3
Transaction-related items	**1,750**	1,143	1,237

(1) Three year financial data is presented reflecting the restated results following the demerger of Consumer Healthcare business. The financial results of 2019 and 2018 are not restated and are not presented.

(2) The 2021 and 2020 comparative results have been restated on a consistent basis from those previously published to reflect the demerger of the Consumer Healthcare business (see page 238).

Full reconciliations between Total and Adjusted results for 2020–2022 including continuing and discontinued operations are set out on pages 81 to 83. Further explanations on the Adjusting items for 2022 are reported on pages 84 to 85.

Other non-IFRS measures

Free cash flow

Free cash flow is defined as the net cash inflow/outflow from continuing 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 continuing operating activities to free cash flow is set out on page 86.

Working capital

Working capital represents inventory and trade receivables less trade payables.

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.

Total net debt

Net debt is defined as total borrowings less cash, cash equivalents, liquid investments, and short-term loans to third parties that are subject to an insignificant risk of change in value. Please see Note 30 'Net Debt' for the calculation of net debt.

Total Operating Margin

Total Operating margin is operating profit dividend by turnover.

Compound Annual Growth Rate (CAGR)

CAGR is defined as the compound annual growth rate and shows the annualised average rate of revenue growth between a number of given years, assuming growth takes place at an exponentially compounded rate.

Group financial review continued

Reporting framework continued

Non-controlling interests in ViiV Healthcare

Trading profit allocations

As 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, Inc. (Pfizer) 11.7% and Shionogi & Co. Ltd (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 83% of the Total earnings and 82% of the Adjusted earnings of ViiV Healthcare for 2022. 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 2022 were £1,100 million.

As 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.

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:

	2022 £m	2021 £m
Contingent consideration at beginning of the year	**5,559**	5,359
Remeasurement through income statement and other movements	**1,431**	1,026
Cash payments: operating cash flows	**(1,031)**	(721)
Cash payments: investing activities	**(69)**	(105)
Contingent consideration at end of the year	**5,890**	5,559

Of the contingent consideration payable (on a post-tax basis) to Shionogi at 31 December 2022, £940 million (31 December 2021: £937 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.

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

	2022 £m	2021 £m
Pfizer put option	**1,093**	1,008

Group financial review continued

Reporting framework continued

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

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 in 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 impact of the settlement with Gilead on the contingent consideration liability (CCL) was 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. The liability which is discounted at 8% is £5,890 million at 31 December 2022 on a post-tax basis. The impact of the settlement on the Pfizer put option liability was an increase of £114 million and was included in the re-measurement at 31 December 2021.

Reporting definitions

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 by 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.

Share Consolidation

Shareholders received 4 new Ordinary shares with a nominal value of 31¼ pence each for every 5 existing Ordinary shares which had a nominal value of 25 pence each. Earnings per share, diluted earnings per share, adjusted earnings per share and dividends per share were retrospectively adjusted to reflect the Share Consolidation in all the periods presented.

Earnings per share

Earnings per share has been retrospectively adjusted for the Share Consolidation on 18 July 2022, applying a ratio of 4 new Ordinary shares for every 5 existing Ordinary shares.

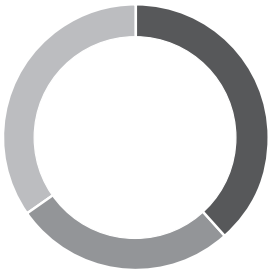
Total Earnings per share

Unless otherwise stated, Total earnings per share refers to Total basic earnings per share. The same principle applies to continuing and discontinued earnings per share.

Financial performance

Group turnover

Group turnover by business



Specialty Medicines
£11.3bn
AER growth 37% CER growth 29%

Vaccines
£7.9bn
AER growth 17% CER growth 11%

General Medicines
£10.1bn
AER growth 5% CER growth 1%

Group turnover by geographic region

US
£14.5bn
AER growth 22% CER growth 10%

Europe
£6.3bn
AER growth 18% CER growth 19%

International
£8.4bn
AER growth 14% CER growth 14%

Group turnover

GSK has revised its operating segments during the year. Previously, GSK reported results under four segments: Pharmaceuticals; Pharmaceuticals R&D; Vaccines and Consumer Healthcare. GSK now reports results under two segments namely Commercial Operations and Total R&D. See Note 6 to the consolidated financial statements for more details.

The Commercial Operations segment has three product groups of Specialty Medicines, Vaccines and General Medicines.

- Specialty Medicines products which includes GSK's marketed products for HIV, oncology, immuno-inflammation, respiratory and other specialty medicines (including *Nucala*) and the pandemic solution, *Xevudy*;
- Vaccines products, including sales of GSK's AS03 adjuvant as part of the pandemic solutions;
- General Medicines products, which include products previously reported as Established Pharmaceuticals and sales of *Trelegy Ellipta* and *Anoro Ellipta* (previously reported within the Respiratory category under Specialty products). These products are typically accessed by patients through primary care settings.

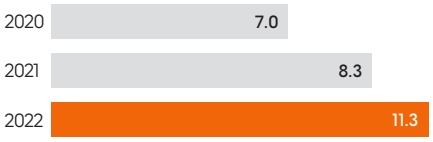
Group turnover was £29,324 million in the year, up 19% at AER, 13% at CER. In 2022 sales grew 16% at AER, 10% CER excluding COVID-19 solutions.

Specialty medicines

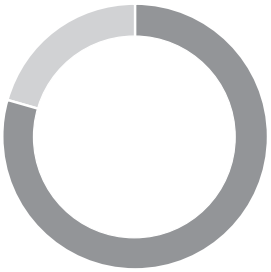
Turnover (£bn)

£11.3bn
38% of Group turnover

AER growth 37%
CER growth 29%



Specialty medicines turnover



Specialty turnover excluding COVID-19 solutions
£9.0bn
AER growth 23% CER growth 15%

Pandemic turnover
£2.3bn
AER growth >100% CER growth >100%

	2022 £m	2021 (revised) £m	Growth £%	Growth CER%
HIV	**5,749**	4,777	20	12
Oncology	**602**	489	23	17
Immuno-inflammation, respiratory and other	**2,609**	2,027	29	20
	8,960	7,293	23	15
Pandemic	**2,309**	958	>100	>100
Specialty medicines	**11,269**	8,251	37	29

2021 has been revised to reflect changes to product groups previously reported as Established Pharmaceuticals.

HIV

HIV sales were £5,749 million with growth of 20% at AER, 12% at CER. The performance benefited from strong patient demand for the new HIV medicines (*Dovato*, *Cabenuva*, *Juluca*, *Rukobia* and *Apretude*), which contributed approximately three quarters of the growth. US pricing favourability and year-end inventory build together contributed one third of the growth which was partially offset by International tender decline.

New HIV products delivered sales of over two billion to £2,474 million, up 78% at AER, 67% at CER, representing 43% of the total HIV portfolio compared to 29% last year. Growth was primarily driven by sales of *Dovato* and *Cabenuva*. *Dovato* recorded sales of £1,375 million up 75% at AER and 65% at CER and *Cabenuva*, the first long acting injectable for the treatment of HIV-1 infection, recorded sales of £340 million. *Apretude*, the first long acting injectable for the prevention of HIV-1 delivered sales of £41 million.

Group financial review continued

Financial performance continued

Oncology

Oncology sales were £602 million, up 23% at AER, 17% at CER. *Zejula* sales of £463 million were up 17% at AER, 12% at CER driven by the first line indication, but with diagnosis and treatment rates continuing to be impacted by the pandemic especially in the US. Sales of *Blenrep* of £118 million grew 33% at AER, 25% at CER, and included the impact of withdrawal from US market in Q4 2022.

Immuno-inflammation, respiratory and other

Immuno-inflammation, Respiratory and Other sales were £2,609 million up 29% at AER, 20% at CER on strong performance of *Benlysta* and *Nucala*. *Benlysta* sales were £1,146 million, up 31% at AER, 20% at CER, representing strong underlying demand in US and worldwide. *Nucala* sales were £1,423 million, up 25% at AER, 18% at CER, reflecting continued strong patient demand and the launch of additional indications.

Pandemic

Sales of *Xevudy* were £2,309 million, compared to £958 million sales in 2021. Sales were delivered in all regions, comprising £828 million in the US, £456 million in Europe, and £1,025 million in International.

Vaccines

Turnover (£bn)

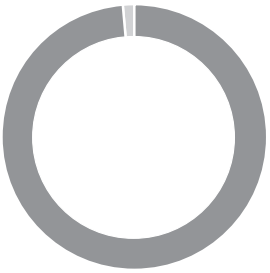
£7.9bn

27% of Group turnover

AER growth 17%

CER growth 11%

Vaccines turnover



Vaccines turnover excluding COVID-19 solutions

£7.9bn

AER growth 24% CER growth 17%

Pandemic turnover

£64 million

AER decline -86% CER decline -86%

	2022 £m	2021 £m	Growth £%	Growth CER%
Meningitis	**1,116**	961	16	11
Influenza	**714**	679	5	(4)
Shingles	**2,958**	1,721	72	60
Established Vaccines	**3,085**	2,970	4	–
	7,873	6,331	24	17
Pandemic Vaccines	**64**	447	(86)	(86)
Vaccines	**7,937**	6,778	17	11

Meningitis

Meningitis vaccines sales grew 16% at AER, 11% at CER to £1,116 million mainly driven by *Bexsero* up 16% at AER, 12% at CER to £753 million resulting from higher CDC (Center for Disease Control) demand and increased share in the US. *Menveo* sales were also up 27% AER, 18% CER to £345 million, primarily driven by post-pandemic vaccination catch-up and higher public demand in International, together with favourable pricing mix and share gain in the US.

Influenza

Fluarix/FluLaval sales grew by 5% AER but decreased 4% CER to £714 million, primarily driven by lower post-pandemic demand in Europe and the US, partly offset by lower expected returns in the US.

Group financial review continued

Financial performance continued

Shingles

Shingrix sales grew 72% at AER, 60% at CER to £2,958 million. All regions grew significantly reflecting post-pandemic rebound, strong uptake and new market launches with more than half of the growth contributed from outside of the US. In the US, *Shingrix* grew 46% at AER, 32% at CER to £1,964 million due to higher non-retail and retail demand and strong commercial execution. Germany and China contributed strongly to the *Shingrix* growth. *Shingrix* was launched in 9 markets during 2022 and is now available in 26 countries.

Established Vaccines

Established Vaccines grew 4% AER but were stable at CER to £3,085 million mainly resulting from supply constraints in MMR/V vaccines and lower tender demand in International for *Synflorix*. This was offset by hepatitis vaccines demand rebound in the US and Europe and *Boostrix* post-pandemic demand recovery and increased share in the US.

Pandemic Vaccines

Pandemic Vaccines decreased 86% AER and CER primarily reflecting comparison to 2021 pandemic adjuvant sales to the US and Canadian governments partly offset by GSK's share of 2022 contracted European volumes related to the COVID-19 booster vaccine developed through a collaboration with Sanofi Pasteur (Sanofi).

General Medicines

Turnover (£bn)

£10.1bn

35% of Group turnover

AER growth 5%

CER growth 1%

General Medicines turnover

	2022 £m	2021 (revised) £m	Growth £%	Growth CER%
Respiratory	**6,548**	6,048	8	3
Other general medicines	**3,570**	3,619	(1)	(2)
General medicines	**10,118**	9,667	5	1

2021 has been revised to reflect changes to product groups previously reported as Established Pharmaceuticals.

Respiratory

Respiratory sales were £6,548 million, up 8% at AER, 3% at CER. The performance was driven by *Trelegy* sales of £1,729 million, up 42% AER, 32% CER, including strong growth across all regions. *Advair/Seretide* sales of £1,159 million decreased 15% at AER, 17% at CER predominantly reflecting the adverse impact of generic competition, with growth in certain International markets due to targeted promotion offsetting the decrease.

Other general medicines

Other General Medicines sales were £3,570 million, decreasing 1% at AER, 2% at CER. *Augmentin* sales were £576 million, up 35% at AER, 38% at CER, reflecting the post pandemic rebound of the antibiotic market since H2 2021 in the International and Europe regions. This partially offsets the ongoing adverse impact of generic competition, and approximately two percentage points impact at AER and CER from the divestment of cephalosporin products in Q4 2021.

Group financial review continued

Financial performance continued

Turnover by regions

US

In the US, sales were £14,542 million, up 22% at AER, 10% at CER. Sales adjusted for COVID-19 solutions were up 24% AER, 12% CER. Sales of *Xevudy* were £828 million.

In Specialty, HIV sales of £3,756 million were up 30% at AER, 17% at CER. Growth benefited from strong patient demand for all new HIV products, pricing favourability and year-end inventory build. New HIV medicines (*Dovato*, *Cabenuva*, *Juluca*, *Rukobia* and *Apretude*) sales were £1,685 million up 88% at AER, 70% at CER. *Nucala* in respiratory and *Benlysta* in immunology both continued to grow double-digit and reflected ongoing strong patient demand. Oncology sales increased 14% at AER, 3% at CER with diagnosis and treatment rates continuing to be impacted by the pandemic for *Zejula*, and the withdrawal of *Blenrep* from the US market in Q4 2022.

Vaccine sales were £4,243 million, up 22% at AER, 10% at CER, excluding the impact of pandemic adjuvant sales in 2021, sales increased 31% at AER, 18% at CER. The performance was primarily driven by *Shingrix* sales of £1,964 million up 46% at AER, 32% at CER, mostly due to higher non-retail and retail demand and strong commercial execution. Demand recovery in Established Vaccines and share gains in Meningitis vaccines also contributed to growth.

General Medicines sales were £3,572 million up 10% at AER down 1% at CER. *Trelegy* was up 47% at AER, 32% at CER reflecting increased patient demand and growth of the single inhaler triple therapy market, and *Flovent* grew on launch of authorised generics in the year. Overall, there was a three-percentage point reduction in growth of US General Medicines due to prior period Returns and Rebates (RAR) adjustments in the year.

Europe

In Europe, sales were £6,348 million, up 18% at AER, 19% at CER, including COVID-19 solution sales of £513 million contributing 8 percentage points of growth at AER and CER.

In Specialty Medicines, HIV sales were £1,310 million up 10% at AER, 10% at CER primarily driven by strong patient demand for *Dovato*, *Cabenuva* and *Juluca*. *Dovato* delivered sales of £478 million, *Juluca* £127 million and *Cabenuva* £40 million. *Benlysta* in immunology, *Nucala* in respiratory, and Oncology medicines *Zejula*, *Blenrep* and *Jemperli* all continued to show strong double-digit growth.

Vaccine sales were £1,884 million, up 31% at AER, 32% at CER. The performance was driven by *Shingrix* sales of £688 million, >100% at AER and CER, particularly in Germany. Pandemic adjuvant sales of £57 million contributed four percentage points of growth at AER and CER.

General Medicines sales of £2,079 million decreased 3% at AER and CER, reflecting the ongoing impact of generic competitive pressures on *Seretide* and the divestment in Q4 2021 of cephalosporin products which caused one percentage point of drag on growth at AER and CER. This was partly offset, however, by strong demand for *Trelegy* and the growth of *Augmentin* following the post-pandemic rebound of the antibiotic market since H2 2021.

International

International sales were £8,434 million, up 14% at AER and CER, including *Xevudy* sales of £1,025 million. Sales grew 7% AER and 6% CER excluding sales of COVID-19 solutions.

In Specialty, HIV sales were £683 million, stable at AER and decreased 3% at CER, primarily driven by tender decline. Excluding tenders, International grew driven by strong *Dovato* growth. Combined *Tivicay* and *Triumeq* sales were £506 million, down 12% at AER and 15% at CER. *Nucala* sales of £242 million grew 24% at AER and 28% at CER reflecting strong market growth and patient uptake. *Benlysta* sales of £114 million grew 44% at AER, 43% at CER reflecting growth in the biological market in Japan and inclusion on China's National Reimbursement Drug List.

Vaccine sales were £1,810 million, down 3% at AER, 5% at CER, reflecting an 11 percentage points drag at AER and CER from COVID-19 vaccine adjuvant sales in 2021. Growth excluding COVID-19 solutions was driven by strong *Shingrix* take-up in China, Canada and Japan more than offsetting the impact of supply constraints in MMR/V vaccines and lower *Synflorix* tender demand across several markets.

General Medicines sales were £4,467 million up 5% at AER and CER. Respiratory sales of £1,955 million increased 10% at AER, 9% at CER, with *Trelegy* sales up 47% at AER, 48% at CER reflecting strong demand and inclusion on China's National Reimbursement Drug List. Sales of *Advair/Seretide* were up 3% at AER, 1% at CER with the adverse impact of generic competition offset by growth in certain markets due to targeted promotion. Other General Medicines sales of £2,512 million increased 1% at AER, 2% at CER, and reflected growth of *Augmentin* following the post-pandemic rebound of the antibiotic market since H2 2021, partially offset by generic competition and price reductions in certain markets.

Group financial review continued

Financial performance continued

Cost of sales

	2022 £m	2021[1] £m	Growth £%	Growth CER%
Total cost of sales	**(9,554)**	(8,163)	17	16
Adjusted cost of sales	**(8,741)**	(7,346)	19	18

(1) The 2021 comparative results have been restated on a consistent basis from those previously published to reflect the demerger of the Consumer Healthcare business (see page 238).

Total cost of sales as a percentage of turnover was 32.6%, 0.5 percentage points lower at AER and 0.9 percentage points higher in CER terms than 2021.

Adjusted cost of sales as a percentage of turnover was 29.8%, 0.1 percentage points higher at AER and 1.3 percentage points higher at CER compared with 2021. This primarily reflected higher sales of lower margin *Xevudy* compared to 2021 which included higher margin pandemic adjuvant sales, increasing cost of sales margin by 2.5 percentage points at AER and CER, as well as the impact of increased commodity prices and freight costs. This was partially offset by a favourable mix primarily from increased sales of *Shingrix* in the US and Europe and increased sales of HIV medicines in the US, lower inventory adjustments and write offs in Vaccines and continued contribution from restructuring savings.

Selling, general and administration

	2022 £m	2021[1] £m	Growth £%	Growth CER%
Total selling, general and administration	**(8,372)**	(7,070)	18	13
Adjusted selling, general and administration	**(8,128)**	(6,749)	20	15

(1) The 2021 comparative results have been restated on a consistent basis from those previously published to reflect the demerger of the Consumer Healthcare business (see page 238).

Total SG&A costs as a percentage of turnover were 28.6%, 0.1 percentage points lower at AER and stable at CER compared to 2021. This included a reduction in restructuring charges.

Adjusted SG&A costs as a percentage of turnover were 27.7%, 0.4 percentage points higher at AER and 0.5 percentage points higher at CER than in 2021. Adjusted SG&A costs increased 20% at AER, 15% at CER which primarily reflected an increased level of launch investment in Specialty Medicines particularly HIV and Vaccines including *Shingrix* to drive post-pandemic recovery demand and support market expansion. The growth in Adjusted SG&A also reflected an unfavourable comparison to a beneficial legal settlement in 2021 as well as impairment provisions relating to Russia and Ukraine. This growth was partly offset by the continuing benefit of restructuring and tight control of ongoing costs.

Research and development

	2022 £m	2021[1] £m	Growth £%	Growth CER%
Total research and development	**(5,488)**	(5,019)	9	4
Adjusted research and development	**(5,062)**	(4,525)	12	6

(1) The 2021 comparative results have been restated on a consistent basis from those previously published to reflect the demerger of the Consumer Healthcare business (see page 238).

Total R&D expenditure was £5,488 million up 9% at AER, 4% at CER. This included amortisation and impairments.

Adjusted R&D expenditure in the full-year increased by 12% at AER, and 6% at CER, to £5,062 million. This reflected continued increased investment across Vaccines clinical development, including investments into our mRNA technology platforms, continued investment in the late-stage portfolio and several early discovery programmes, as well as expenditure related to our recent acquisition of Affinivax, Inc (Affinivax).

In addition, in Specialty Medicines, the level of R&D investment increased to support the phase III respiratory programme for depemokimab, a potential new medicine to treat severe asthma, and bepirovirsen, our study in chronic hepatitis B, in preparation for the start of the phase III trial. In Oncology, investment increased in our early-stage immuno-oncology assets and in momelotinib (MMB), our potential new treatment of myelofibrosis patients with anaemia, acquired as part of the recent Sierra Oncology acquisition. These increases in investment were offset by decreases related to the completion of several late-stage clinical development programmes and reduced R&D investment in COVID-19 pandemic solutions versus 2021.

Royalty income

Royalty income was £758 million (2021: £417 million), up 82% at AER, 81% at CER, the increase primarily reflecting royalty income from Gilead under the settlement and licensing agreement with Gilead announced on 1 February 2022 and Gardasil royalty income increasing to £446 million due to higher sales.

Group financial review continued

Financial performance continued

Other operating income/(expense)

Net other operating expense was £235 million (2021: £504 million) reflecting accounting charges of £1,726 million (2021: £1,101 million) arising from the remeasurement of contingent consideration liabilities and the liabilities for the Pfizer put option and Pfizer and Shionogi preferential dividends in ViiV Healthcare. This included a remeasurement charge of £1,431 million (2021: £1,026 million) for the contingent consideration liability due to Shionogi, including the unwinding of the discount of £410 million and a charge for £1,021 million primarily from changes to exchange rates as well as adjustments to sales forecasts. This was partly offset by £922 million upfront income received from the settlement with Gilead, fair value gain on investments including £229 million on the retained stake in Haleon plc (Haleon), reflecting an increase in share price since listing and milestone income from disposals.

Operating profit

Total operating profit from continuing operations was £6,433 million compared with £4,357 million in 2021.

This included the £922 million upfront income received from the settlement with Gilead, increased profits on turnover growth of 19% at AER, 13% at CER and fair value gains on investments including £229 million on the retained stake in Haleon, partly offset by higher remeasurement charges for contingent consideration liabilities. Adjusted operating profit was £8,151 million, 26% higher at AER and 14% at CER than 2021 on a turnover increase of 13% at CER. The Adjusted operating margin of 27.8% was 1.5 percentage points higher at AER and 0.3 percentage points higher at CER compared to 2021. This primarily reflected the impact from low margin COVID-19 solutions sales (*Xevudy*), which reduced Adjusted Operating profit growth by 3% AER and CER and reduced the Adjusted operating margin by approximately 1.4 percentage points at AER and approximately 1.3 percentage points at CER. This was offset by operating leverage from strong sales growth, mix benefit, lower inventory adjustments and write offs and higher royalty income.

Contingent consideration cash payments 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 2022 amounted to £1,137 million (2021: £856 million). These included cash payments made to Shionogi of £1,100 million (2021: £826 million).

Adjusted operating profit by business

Commercial Operations operating profit was £13,590 million, up 19% at AER and 10% at CER on a turnover increase of 13% at CER. The operating margin of 46.3% was 0.1 percentage points lower at AER, 1.2 percentage points lower at CER than in 2021. This primarily reflected strong sales of lower margin *Xevudy*, increased investment behind launches in Specialty Medicines including HIV and Vaccines plus higher commodity, freight and distribution costs as well as an adverse comparison to a favourable legal settlement in 2021. This was partly offset by leverage from strong sales growth, mix and lower inventory adjustments and write-offs, continued tight control of ongoing costs, benefits from continued restructuring and increased royalty income from Biktarvy and Gardasil sales.

R&D segment operating expenses were £5,060 million, up 11% at AER, 5% at CER, primarily reflecting increased investment in Vaccines including priority investments for mRNA, late stage portfolio and expenditure from the acquisition of Affinivax and in Specialty Medicines in early stage HIV and depemokimab. This was partly offset by decreases related to the completion of several late-stage clinical development programmes and reduced R&D investment in COVID-19 pandemic solutions versus 2021.

Group financial review continued

Financial performance continued

Net finance costs

Finance income	2022 £m	2021[1] £m
Interest and other income	62	13
Fair value movements	14	1
	76	14
Finance expense		
Interest expense	(789)	(735)
Unwinding of discounts on provisions	(7)	(2)
Remeasurements and fair value movements	(20)	(2)
Finance expense on lease liabilities	(30)	(27)
Other finance expense	(33)	(3)
	(879)	(769)

(1) The 2021 comparative results have been restated on a consistent basis from those previously published to reflect the demerger of the Consumer Healthcare business (see page 238).

Total net finance costs were £803 million compared with £755 million in 2021. Adjusted net finance costs were £791 million compared with £752 million in 2021. The increase is mainly driven by costs associated with the Sterling Notes repurchase in Q4 2022 and higher interest on tax offset by increased interest income due to higher interest rates and larger cash balances as a result of the Consumer Healthcare demerger.

Share of after tax profits of associates and joint ventures

The share of after tax loss of associates and joint ventures was £2 million (2021: £33 million share of profit).

Loss on disposal of interest in associates

In 2021, the Group also reported a net loss on disposal of interests in associates of £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 £5,628 million compared with £3,599 million in 2021.

Taxation

	2022 £m	2021[1] £m
UK current year charge	200	119
Rest of world current year charge	1,351	593
Charge/(credit) in respect of prior periods	(60)	219
Total current taxation	1,491	931
Total deferred taxation	(784)	(848)
Taxation on total profits	707	83

(1) The 2021 comparative results have been restated on a consistent basis from those previously published to reflect the demerger of the Consumer Healthcare business (see page 238).

The charge of £707 million represented an effective tax rate on Total results of 12.6% (2021: 2.3%) and reflected the different tax effects of the various Adjusting items. Included in 2021 was a credit of £430 million resulting from the remeasurement of deferred tax assets following enactment of the proposed change of UK corporate income tax rates from 19% to 25%. Tax on Adjusted profit amounted to £1,138 million and represented an effective Adjusted tax rate of 15.5% (2021: 15.9%).

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

Non-controlling interests

The allocation of Total profit from continuing operations to non-controlling interests amounted to £460 million (2021: £200 million). The increase was primarily due to an increased allocation of ViiV Healthcare profits of £416 million (2021: £197 million), including the Gilead upfront settlement income, partly offset by increased credits for remeasurement of contingent consideration liabilities, as well as higher net profits in some of the Group's other entities with non-controlling interests.

The allocation of Adjusted earnings from continuing operations to non-controlling interests amounted to £595 million (2021: £441 million). The increase in allocation primarily reflected an increased allocation of ViiV Healthcare profits of £551 million (2021: £438 million), as well as higher net profits in some of the Group's other entities with non-controlling interests.

Earnings per share from continuing operations

Total EPS from continuing operations was 110.8p compared with 82.9p in 2021. This primarily reflected the £922 million upfront income received from the settlement with Gilead, increased profits on turnover growth of 13% at CER and fair value gains on investments including the retained stake in Haleon, partly offset by higher remeasurement charges for contingent consideration liabilities and an unfavourable comparison due to a credit of £430 million to Taxation in 2021 resulting from the remeasurement of deferred tax assets.

Adjusted EPS was 139.7p compared with 110.3p in 2021, up 27% at AER, 15% at CER on a 13% CER turnover increase. Operating leverage from growth in sales of Specialty Medicines including HIV and Vaccines, beneficial mix and lower inventory adjustments and write-offs, higher royalty income and a lower effective tax rate was partly offset by increased investment behind launches in Specialty Medicines including HIV and Vaccines plus higher supply chain costs, freight and distribution costs and higher non-controlling interests. Growth in lower margin COVID-19 solutions sales reduced Adjusted EPS growth by 4% AER and 3% CER.

Group financial review continued

Financial performance continued

Profit and earnings per share from discontinued operations

Discontinued operations include the Consumer Healthcare business and certain Corporate costs directly attributable to the Consumer Healthcare business. Profit after taxation from discontinued operations amounted to £10,700 million (2021: £1,580 million). This includes £10,084 million for the gain arising on the demerger of Consumer Healthcare split between the amount distributed to shareholders on demerger of £7,651 million and profit after taxation on discontinued operations for the retained stake of £2,433 million. In addition, the Profit after taxation from discontinued operations for the Consumer Healthcare business was £616 million (2021: £1,580 million).

EPS from discontinued operations was 260.6p, compared with 26.7p in 2021. The increase primarily reflected the gain arising on the demerger of the Consumer Healthcare business. For further details see page 238.

Total earnings per share

Total EPS was 371.4p compared with 109.6p in 2021. The increase primarily reflected the profit after taxation for discontinued operations recognised on the Consumer Healthcare business demerger, upfront income received from the settlement with Gilead, increased profits and fair value gains on investments, partly offset by higher remeasurement charges for contingent consideration liabilities and an unfavourable comparison due to a credit of £397 million to Taxation in 2021.

Dividends

The Board has declared four interim dividends resulting in a total dividend for the year of 61.25p per share retrospectively adjusted for the share consolidation. The 2021 dividend per share was 100p retrospectively adjusted for the share consolidation. 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 guided by a 40 to 60 percent pay-out ratio through the investment cycle. The dividend policy, the total expected cash distribution, and the respective dividend pay-out ratios for GSK remain unchanged.

GSK has previously stated that it expected to declare a 27p per share dividend for the first half of 2022, a 22p per share dividend for the second half of 2022 and a 45p per share dividend for 2023 (before the Share Consolidation) but that these targeted dividends per share would increase in step with the Share Consolidation to maintain the same aggregate dividend pay-out in absolute Sterling terms. Accordingly, using the consolidation ratio, GSK's expected dividend for the fourth quarter of 2022 converts to 13.75p per new ordinary share. This results in an expected total dividend for the second half of 2022 of 27.5p per new ordinary share. The expected dividend for 2023 converts to 56.5p per new ordinary share in line with the original expectation converted for the Share Consolidation and rounded up.

Guidance and Outlook

GSK expects 2023 turnover to increase between 6 to 8 per cent, Adjusted operating profit to increase between 10 to 12 per cent and Adjusted earnings per share to increase between 12 to 15 per cent. This guidance is provided at CER and excludes any contributions from COVID-19 solutions.

In outlining the guidance for 2023, the Group has made certain assumptions about the healthcare sector, the different markets in which the Group operates and the delivery of revenues and financial benefits from its current portfolio, pipeline and restructuring programmes. Due to the phasing of quarterly results in 2022 and the resulting comparators, GSK expects turnover and Adjusted operating profit growth to be slightly lower in the first half of 2023 including a challenging comparator in Q1 2022 and somewhat higher in the second half, relative to full-year expectations. Despite the ongoing recovery of healthcare systems from the impact of the COVID-19 pandemic, uncertain economic conditions prevail across many markets in which GSK operates and we continue to expect to see variability in performance between quarters.

We expect sales of Specialty Medicines to increase mid to high single-digit per cent, sales of Vaccines to increase mid-teens per cent and sales of General Medicines to decrease slightly.

COVID-19 solutions

Based on known binding agreements with governments, GSK does not anticipate any significant COVID-19 pandemic-related sales or operating profit in 2023. Sales of COVID-19 solutions were £2.4 billion in 2022 and therefore we expect a reduction in Turnover growth by approximately 9% and a reduction in Adjusted Operating profit growth by 6% to 7%. However, the Company continues to discuss future opportunities to support governments, healthcare systems, and patients whereby its COVID-19 solutions can address the emergence of any new COVID-19 variant of concern.

Adjusting items

Adjusted results reconciliation 31 December 2022

	Total results £m	Profit from discontinued operations £m	Intangible asset amortisation £m	Intangible asset impairment £m	Major restructuring £m	Transaction-related £m	Divestments, significant legal and other items £m	Adjusted results £m
Turnover	29,324							29,324
Cost of sales	(9,554)		648		102	45	18	(8,741)
Gross profit	19,770		648		102	45	18	20,583
Selling, general and administration	(8,372)				180	13	51	(8,128)
Research and development	(5,488)		91	296	39			(5,062)
Royalty income	758							758
Other operating (expense)/income	(235)					1692	(1,457)	–
Operating profit	6,433		739	296	321	1,750	(1,388)	8,151
Net finance costs	(803)				2		10	(791)
Share of after-tax losses of associates and joint ventures	(2)							(2)
Profit before taxation	5,628		739	296	323	1,750	(1,378)	7,358
Taxation	(707)		(150)	(64)	(87)	(242)	112	(1,138)
Tax rate	*12.6%*							*15.5%*
Profit after taxation from continuing operations	4,921		589	232	236	1,508	(1,266)	6,220
Profit after taxation from discontinued operations and other gains/(losses) from the demerger	3,049	(3,049)						
Remeasurement of discontinued operations distributed to shareholders on demerger	7,651	(7,651)						
Profit after taxation from discontinued operations	10,700	(10,700)						
Total profit after taxation for the year	15,621	(10,700)	589	232	236	1,508	(1,266)	6,220
Profit attributable to non-controlling interests from continuing operations	460					135		595
Profit attributable to shareholders from continuing operations	4,461		589	232	236	1,373	(1,266)	5,625
Profit attributable to non-controlling interest from discontinued operations	205	(205)						
Profit attributable to shareholders from discontinued operations	10,495	(10,495)						
	15,621	(10,700)	589	232	236	1,508	(1,266)	6,220
Total profit attributable to non-controlling interests	665	(205)				135		595
Total profit attributable to shareholders	14,956	(10,495)	589	232	236	1,373	(1,266)	5,625
	15,621	**(10,700)**	**589**	**232**	**236**	**1,508**	**(1,266)**	**6,220**
Earnings per share from continuing operations	110.8p		14.6p	5.8p	5.9p	34.1p	(31.5)p	139.7p
Earnings per share from discontinued operations	260.6p	(260.6)p						
Total earnings per share	371.4p	(260.6)p	14.6p	5.8p	5.9p	34.1p	(31.5)p	139.7p
Weighted average number of shares (millions)	4,026							4,026

Group financial review continued

Financial performance continued

Adjusted results reconciliation 31 December 2021[1]

	Total results £m	Profit from discontinued operations £m	Intangible asset amortisation £m	Intangible asset impairment £m	Major restructuring £m	Transaction-related £m	Divestments, significant legal and other items £m	Adjusted results £m
Turnover	24,696							24,696
Cost of sales	(8,163)		660		102	28	27	(7,346)
Gross profit	16,533		660		102	28	27	17,350
Selling, general and administration	(7,070)				277	9	35	(6,749)
Research and development	(5,019)		101	347	45		1	(4,525)
Royalty income	417							417
Other operating (expense)/income	(504)					1,106	(602)	
Operating profit	4,357		761	347	424	1,143	(539)	6,493
Net finance costs	(755)				2		1	(752)
Loss on disposal of interest in associates	(36)						36	–
Share of after-tax profits of associates and joint ventures	33							33
Profit before taxation	3,599		761	347	426	1,143	(502)	5,774
Taxation	(83)		(153)	(81)	(79)	(179)	(343)	(918)
Tax rate	*2.3%*							*15.9%*
Profit after taxation from continuing operations	3,516		608	266	347	964	(845)	4,856
Profit after taxation from discontinued operations and other gains/(losses) from the demerger	1,580	(1,580)						
Profit after taxation from discontinued operations	1,580	(1,580)						
Total profit after taxation for the year	5,096	(1,580)	608	266	347	964	(845)	4,856
Profit attributable to non-controlling interests from continuing operations	200					241		441
Profit attributable to shareholders from continuing operations	3,316		608	266	347	723	(845)	4,415
Profit attributable to non-controlling interest from discontinued operations	511	(511)						
Profit attributable to shareholders from discontinued operations	1,069	(1,069)						
	5,096	(1,580)	608	266	347	964	(845)	4,856
Total profit attributable to non-controlling interests	711	(511)				241		441
Total profit attributable to shareholders	4,385	(1,069)	608	266	347	723	(845)	4,415
	5,096	(1,580)	608	266	347	964	(845)	4,856
Earnings per share from continuing operations	82.9p		15.2p	6.6p	8.7p	18.1p	(21.2)p	110.3p
Earnings per share from discontinued operations	26.7p	(26.7)p						
Total earnings per share	109.6p	(26.7)p	15.2p	6.6p	8.7p	18.1p	(21.2)p	110.3p
Weighted average number of shares (millions)	4,003							4,003

(1) The 2021 comparative results have been restated on a consistent basis from those previously published to reflect the demerger of the Consumer Healthcare business (see page 238) and the impact of Share Consolidation implemented on 18 July 2022 (see page 233).

Group financial review continued

Financial performance continued

Adjusted results reconciliation 31 December 2020[1]

	Total results £m	Profit from discontinued operations £m	Intangible asset amortisation £m	Intangible asset impairment £m	Major restructuring £m	Transaction-related £m	Divestments, significant legal and other items £m	Adjusted results £m
Turnover	24,354							24,354
Cost of sales	(7,929)		649	–	585	23	–	(6,672)
Gross profit	16,425		649	–	585	23	–	17,682
Selling, general and administration	(7,437)			2	395	(1)	16	(7,025)
Research and development	(4,793)		75	198	198			(4,322)
Royalty income	321							321
Other operating (expense)/income	1,463					1,215	(2,678)	–
Operating profit	5,979		724	200	1,178	1,237	(2,662)	6,656
Net finance costs	(842)				2		2	(838)
Share of after-tax profits of associates and joint ventures	33							33
Profit before taxation	5,170		724	200	1,180	1,237	(2,660)	5,851
Taxation	(67)		(142)	(38)	(213)	(231)	(125)	(816)
Tax rate	*1.3%*							*13.9%*
Profit after taxation from continuing operations	5,103		582	162	967	1,006	(2,785)	5,035
Profit after taxation from discontinued operations and other gains/(losses) from the demerger	1,285	(1,285)						
Profit after taxation from discontinued operations	1,285	(1,285)						
Total profit after taxation for the year	6,388	(1,285)	582	162	967	1,006	(2,785)	5,035
Profit attributable to non-controlling interests from continuing operations	230					251		481
Profit attributable to shareholders from continuing operations	4,873		582	162	967	755	(2,785)	4,554
Profit attributable to non-controlling interest from discontinued operations	409	(409)						
Profit attributable to shareholders from discontinued operations	876	(876)						
	6,388	(1,285)	582	162	967	1,006	(2,785)	5,035
Total profit attributable to non-controlling interests	639	(409)				251		481
Total profit attributable to shareholders	5,749	(876)	582	162	967	755	(2,785)	4,554
	6,388	(1,285)	582	162	967	1,066	(2,785)	5,035
Earnings per share from continuing operations	122.4p		14.6p	4.1p	24.3p	19.0p	(70.0)p	114.4p
Earnings per share from discontinued operations	22.0p	(22.0)p						
Total earnings per share	144.4p	(22.0)p	14.6p	4.1p	24.3p	19.0p	(70.0)p	114.4p
Weighted average number of shares (millions)	3,981							3,981

(1) The 2020 comparative results have been restated on a consistent basis from those previously published to reflect the demerger of the Consumer Healthcare business (see page 238) and the impact of Share Consolidation implemented on 18 July 2022 (see page 233).

Group financial review continued

Adjusting items continued

Profit from discontinued operations

Discontinued operations include the Consumer Healthcare business and certain Corporate costs directly attributable to the Consumer Healthcare business. Profit after taxation from discontinued operations amounted to £10,700 million (2021: £1,580 million). This includes £10,084 million for the gain arising on the demerger of Consumer Healthcare split between the amount distributed to shareholders on demerger of £7,651 million and profit after taxation on discontinued operations for the retained stake of £2,433 million. In addition, the Profit after taxation from discontinued operations for the Consumer Healthcare business was £616 million (2021: £1,580 million).

Intangible asset amortisation

See page 211 for description and information on Intangible asset amortisation.

Intangible asset impairment

See page 211 for description and information on Intangible asset impairment. No individual intangible asset accounted for a material impairment.

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 2022 were £321 million (2021[1]: £424 million), analysed as follows:

	2022			2021[1]		
	Cash £m	**Non-cash £m**	**Total £m**	Cash £m	Non-cash £m	Total £m
Separation preparation restructuring programme	**177**	**110**	**287**	353	59	412
Significant acquisitions	**20**	**–**	**20**	–	–	–
Legacy programmes	**9**	**5**	**14**	32	(20)	12
	206	**115**	**321**	385	39	424

(1) The 2021 comparative results have been restated on a consistent basis from those previously published to reflect the demerger of the Consumer Healthcare business (see page 238).

Cash charges of £177 million under the Separation Preparation programme primarily arose from the restructuring of some administrative functions as well as Global Supply Chain, R&D functions and commercial. The non-cash charges of £110 million primarily reflected the write-down of assets in administrative and manufacturing locations and impairment of IT assets.

Total cash payments made in 2022 were £388 million (2021: £551 million), £332 million (2021: £428 million) relating to the Separation Preparation restructuring programme, £17 million relating to significant acquisitions (2021: £nil) and £39 million (2021: £123 million) relating to other legacy programmes including the settlement of certain charges accrued in previous quarters.

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

	2022 £m	2021[1] £m
Cost of sales	**102**	102
Selling, general and administration	**180**	277
Research and development	**39**	45
Total Major restructuring costs from continuing operations	**321**	424

(1) The 2021 comparative results have been restated on a consistent basis from those previously published to reflect the demerger of the Consumer Healthcare business (see page 238).

The benefit in 2022 from restructuring programmes was £0.5 billion, primarily relating to the Separation Preparation restructuring programme.

The Group initiated in Q1 2020 a Separation Preparation programme to prepare for the separation of GSK into two companies: The programme aims were:

- Drive a common approach to R&D with improved capital allocation
- Align and improve the capabilities and efficiency of global support functions to support GSK
- Further optimise the supply chain and product portfolio, including the divestment of non-core assets
- Prepare Consumer Healthcare to operate as a standalone company

The programme delivered £0.9 billion of annual savings by 2022 and targets to deliver £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.

Group financial review continued

Adjusting items continued

Transaction-related adjustments

Transaction-related adjustments from continuing operations resulted in a net charge of £1,750 million (2021: £1,143 million). This included a net £1,726 million accounting charge for the re-measurement of the contingent consideration liabilities and the liabilities for the Pfizer put option and Pfizer and Shionogi preferential dividends in ViiV Healthcare.

Charge/(credit)	2022 £m	2021[1] £m
Contingent consideration on former Shionogi-ViiV Healthcare Joint Venture (including Shionogi preferential dividends)	**1,431**	1,026
ViiV Healthcare put options and Pfizer preferential dividends	**85**	48
Contingent consideration on former Novartis Vaccines business	**193**	27
Contingent consideration on acquisition of Affinivax	**17**	–
Other adjustments	**24**	42
Total transaction-related charges	**1,750**	1,143

(1) The 2021 comparative results have been restated on a consistent basis from those previously published to reflect the demerger of the Consumer Healthcare business (see page 238).

The £1,431 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 £410 million and a charge of £1,021 million primarily from adjustments to sales forecasts and the settlement with Gilead as well as updated exchange rate assumptions. The £85 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. An explanation of the accounting for the non-controlling interests in ViiV Healthcare is set out on page 71.

Divestments, significant legal charges and other items

Divestments, significant legal charges and other items primarily included the £922 million upfront settlement income received from Gilead, a fair value gain on investments including £229 million on the retained stake in Haleon as well as milestone income and gains from a number of asset disposals, partly offset by certain other Adjusting items.

Discontinued operations

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"). These are presented as part of discontinued operations. Total separation costs incurred in 2022 were £366 million (2021: £314 million). This includes £103 million relating to transaction costs incurred in connection with the demerger and preparatory admission costs related to the listing of Haleon.

Total separation costs to date are £748 million including £141 million relating to transaction costs.

Cash generation and conversion

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

	2022 £m	2021 £m
Total net cash inflow from operating activities	7,403	7,952
Total net cash (outflow) from investing activities	(8,772)	(1,777)
Total net cash inflow/(outflow) from financing activities	823	(7,589)
Decrease in cash and bank overdrafts	(546)	(1,414)
Cash and bank overdrafts at beginning of year	3,819	5,262
Exchange adjustments	152	(29)
Decrease in cash and bank overdrafts	(546)	(1,414)
Cash and bank overdrafts at end of year	3,425	3,819
Cash and bank overdrafts at end of year comprise:		
Cash and cash equivalents	3,723	4,274
Overdrafts	(298)	(455)
	3,425	3,819

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

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

	2022 £m	2021[1] £m
Net cash inflow from continuing operating activities	6,634	6,277
Purchase of property, plant and equipment	(1,143)	(950)
Purchase of intangible assets	(1,115)	(1,704)
Proceeds from sale of property, plant and equipment	146	132
Proceeds from sale of intangible assets	196	641
Net finance costs	(784)	(758)
Dividends from joint ventures and associates	6	9
Contingent consideration paid (reported in investing activities)	(79)	(114)
Contribution from non-controlling interests	8	7
Distributions to non-controlling interests	(521)	(239)
Free cash inflow	3,348	3,301

(1) The 2021 comparative results have been restated on a consistent basis from those previously published to reflect the demerger of the Consumer Healthcare business (see page 238).

Capital expenditure and financial investment

Cash payments for tangible and intangible fixed assets amounted to £2,258 million (2021: £2,654 million) and disposals realised £342 million (2021: £773 million). Cash payments to acquire equity investments amounted to £143 million (2021: £162 million) and sales of equity investments realised £238 million (2021: £202 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.

	2022 £m	2021[1] £m
Free cash inflow	3,348	3,301

(1) The 2021 comparative results have been restated on a consistent basis from those previously published to reflect the demerger of the Consumer Healthcare business (see page 238).

Total cash payments to Shionogi in relation to the ViiV Healthcare contingent consideration liability in the year were £1,100 million (2021: £826 million), of which £1,031 million was recognised in cash flows from operating activities and £69 million was recognised in contingent consideration paid within investing cash flows. These payments are deductible for tax purposes.

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 285 to 295. We may from time to time have additional demands for finance, such as for acquisitions. 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

	2022 £m	2021 £m
Assets		
Non-current assets		
Property, plant and equipment	8,933	9,932
Right of use assets	687	740
Goodwill	7,046	10,552
Other intangible assets	14,318	30,079
Investments in associates and joint ventures	74	88
Other investments	1,467	2,126
Deferred tax assets	5,658	5,218
Derivative financial instruments	–	18
Other non-current assets	1,194	1,676
Total non-current assets	39,377	60,429
Current assets		
Inventories	5,146	5,783
Current tax recoverable	405	486
Trade and other receivables	7,053	7,860
Derivative financial instruments	190	188
Current equity investments	4,087	–
Liquid investments	67	61
Cash and cash equivalents	3,723	4,274
Assets held for sale	98	22
Total current assets	20,769	18,674
Total assets	60,146	79,103
Liabilities		
Current liabilities		
Short-term borrowings	(3,952)	(3,601)
Contingent consideration liabilities	(1,289)	(958)
Trade and other payables	(16,263)	(17,554)
Derivative financial instruments	(183)	(227)
Current tax payable	(471)	(489)
Short-term provisions	(652)	(841)
Total current liabilities	(22,810)	(23,670)
Non-current liabilities		
Long-term borrowings	(17,035)	(20,572)
Corporation tax payable	(127)	(180)
Deferred tax liabilities	(289)	(3,556)
Pensions and other post-employment benefits	(2,579)	(3,113)
Other provisions	(532)	(630)
Derivative financial instruments	–	(1)
Contingent consideration liabilities	(5,779)	(5,118)
Other non-current liabilities	(899)	(921)
Total non-current liabilities	(27,240)	(34,091)
Total liabilities	(50,050)	(57,761)
Net assets	10,096	21,342
Total equity	10,096	21,342

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, equipment and vehicles 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 2022 was £19,451 million, with a net book value of £8,933 million. Of this, land and buildings represented £3,113 million, plant, equipment and vehicles £4,012 million and assets in construction £1,808 million. In 2022, we invested £1,245 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 2022, we had contractual commitments for future capital expenditure of £743 million. We believe that our property and plant facilities are adequate for our current requirements.

Right of use assets

Right of use assets amounted to £687 million at 31 December 2022 compared with £740 million at 31 December 2021. The decrease in the year reflected the impact of depreciation and transfer to assets held for sale/distribution of £192 million and £127 million respectively, disposals and impairments amounting to £75 million, partly offset by additions through business combinations of £53 million and other additions of £233 million.

Goodwill

Goodwill decreased to £7,046 million at 31 December 2022, from £10,552 million primarily as a result of transfer of assets held for sale/distribution of £5,183 million for the Consumer Healthcare demerger partially offset by an increase of £1,127 million for the acquisitions of Sierra Oncology and Affinivax.

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 2022 was £14,318 million (2021: £30,079 million). The decrease primarily reflected transfer to assets held for sale/distribution of £19,957 million, impairment losses, net of reversals and amortisation of £1,519 million, offset by additions, net of disposals, write-offs of £4,047 million and exchange rate gains of £1,628 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 2022 of £74 million (2021: £88 million). See Note 21 to the financial statements, 'Investments in associates and joint ventures' for more details.

Current equity investments

Current equity investments amounted to £4,087 million at 31 December 2022 (2021: £nil). Current equity investments comprise equity investments which the Group holds with the intention to sell and which it may sell in the short term. Where acquired with this intention, they are measured at fair value through the profit and loss (FVTPL). They are initially recorded at fair value plus transaction costs and then remeasured at subsequent reporting dates to fair value. Unrealised gains and losses are recognised in the income statement. The investment of £4,087 million (2021: £nil) represents the shares held in Haleon after the demerger.

Other investments

We held other investments with a carrying value at 31 December 2022 of £1,467 million (2021: £2,126 million). The most significant of these investments held at 31 December 2022 were in Vir Biotechnology and Nimbus Discovery. These investments had a fair value at 31 December 2022 of £180 million (2021: £266 million) and £139 million (2021: £32 million) respectively. 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 £190 million (2021: £188 million) and non-current derivative financial assets held at fair value of £nil (2021: £18 million). The majority of these financial instruments related to foreign exchange contracts both designated and not designated as accounting hedges.

Inventories

Inventories amounted to £5,146 million (2021: £5,783) at 31 December 2022. The decrease was mainly driven by the Consumer Healthcare demerger partially offset by vaccines stock build.

Trade and other receivables

Trade and other receivables amounted to £7,053 million (2021: £7,860 million) at 31 December 2022. The decrease was mainly driven by the Consumer Healthcare demerger and lower pandemic adjuvant sales compared to last year.

Deferred tax assets

Deferred tax assets amounted to £5,658 million (2021: £5,218 million) at 31 December 2022.

Derivative financial instruments: liabilities

We held current and non-current derivative financial liabilities at fair value of £183 million (2021: £228 million). This primarily related to foreign exchange contracts both designated and not designated as accounting hedges.

Trade and other payables

At 31 December 2022, trade and other payables were £16,263 million compared with £17,554 million at 31 December 2021. See Note 29 to the financial statements, 'Trade and other payables'. The decrease was mainly driven by the Consumer Healthcare demerger and profit share collaborations offset by an increase in promotional activity in the regions.

Provisions

We carried deferred tax provisions and other short-term and non-current provisions of £1,473 million at 31 December 2022 (2021: £5,027 million). Other provisions at the year-end included £218 million (2021: £196 million) related to legal and other disputes and £351 million (2021: £652 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 £1,356 million (2021: £1,129 million) on pension arrangements and £994 million (2021: £1,243 million) on unfunded post-employment liabilities. See Note 31 to the financial statements, 'Pensions and other post-employment benefits'.

Other non-current liabilities

Other non-current liabilities amounted to £899 million at 31 December 2022 (2021: £921 million).

Contingent consideration liabilities

Contingent consideration amounted to £7,068 million at 31 December 2022 (2021: £6,076 million), of which £5,890 million (2021: £5,559 million) represented the estimated present value of amounts payable to Shionogi relating to ViiV Healthcare, £501 million (2021: £nil) represented the estimated present value of contingent consideration payable to the former shareholders of Affinivax and £673 million (2021: £479 million) represented the estimated present value of contingent consideration payable to Novartis related to the Vaccines acquisition.

The liability due to Shionogi was £263 million in respect of preferential dividends. An explanation of the accounting for the non-controlling interests in ViiV Healthcare is set out on page 71.

Of the total contingent consideration payable (on a post-tax basis) at 31 December 2022, £940 million (2021: £937 million) is expected to be paid within one year. The consideration payable is expected to be paid over a number of years. As a result, the total estimated liabilities are discounted to their present values, on a post-tax basis using post-tax discount rates.

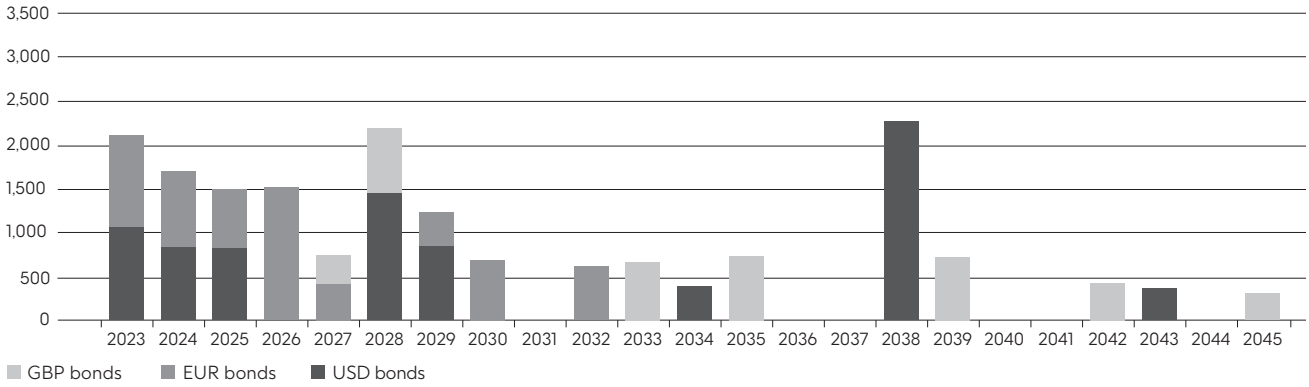
The Shionogi-ViiV Healthcare contingent consideration liability is discounted at 8% and the Novartis Vaccines contingent consideration liability is discounted partly at 7.5% and partly at 8.5%.

Group financial review continued

Financial position and resources continued

Maturity profile of bond debt

£m equivalent



Net debt

	2022 £m	2021 £m
Liquid investments	**67**	61
Cash and cash equivalents	**3,723**	4,274
Short term borrowings	**(3,952)**	(3,601)
Long term borrowings	**(17,035)**	(20,572)
Net debt the end of the year	**(17,197)**	(19,838)

At 31 December 2022, net debt was £17.2 billion, compared with £19.8 billion at 31 December 2021, comprising gross debt of £21.0 billion and cash and liquid investments of £3.8 billion. Net debt reduced by £2.6 billion primarily due to £3.3 billion free cash flow from continuing operations, £0.2 billion disposals of equity investments and £7.2 billion decrease from discontinued operations as result of demerger primarily reflecting £7.1 billion of pre-separation dividends attributable to GSK funded by Consumer Healthcare debt. This was partly offset by purchases of businesses of £3.1 billion, net of cash acquired, reflecting the acquisitions of Sierra Oncology and Affinivax, dividends paid to shareholders of £3.5 billion, net adverse exchange impacts of £1.4 billion from the translation of non-Sterling denominated debt and exchange on other financing items and £0.1 billion purchases of equity investments.

At 31 December 2022, GSK had short-term borrowings (including overdrafts and lease liabilities) repayable within 12 months of £4.0 billion and £1.9 billion repayable in the subsequent year.

At 31 December 2022, GSK's cash and liquid investments were held as follows:

	2022 £m	2021 £m
Bank balances and deposits	**1,324**	2,825
US Treasury and Treasury repo only money market funds	**146**	54
Liquidity funds	**2,253**	1,395
Cash and cash equivalents	**3,723**	4,274
Liquid investments – government securities	**67**	61
	3,790	4,335

Cash and liquid investments of £3.1 billion (2021: £2.9 billion) were held centrally at 31 December 2022.

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

	2022 £m	2021 £m
Liquid investments	**67**	61
Cash and cash equivalents	**3,723**	4,274
Gross debt – fixed	**(19,214)**	(23,167)
– floating	**(1,773)**	(1,006)
Net debt	**(17,197)**	(19,838)

Movements in net debt

	2022 £m	2021 £m
Total net debt at beginning of year	**(19,838)**	(20,780)
Decrease in cash and bank overdrafts	**(7,597)**	(2,504)
Decrease in liquid investments	**(1)**	(18)
Net decrease in long-term loans	**569**	–
Net decrease of short-term loans	**4,053**	2,003
Repayment of lease liabilities	**202**	181
Debt of subsidiary undertaking acquired	**(24)**	–
Exchange adjustments	**(1,531)**	314
Other non-cash movements	**(207)**	(134)
Decrease/(increase) in net debt from continuing operations	**(4,536)**	(158)
Decrease/(increase) in net debt from discontinued operations	**7,177**	1,100
Total net debt at end of year	**(17,197)**	(19,838)

Group financial review continued

Financial position and resources continued

Total equity

At 31 December 2022, total equity had decreased from £21,342 million at 31 December 2021 to £10,096 million.

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

	2022 £m	2021 £m
Total equity at beginning of year	**21,342**	20,808
Total comprehensive income for the year	**14,790**	4,759
Non-cash distribution to non-controlling interests	**(2,960)**	–
Deconsolidation of former subsidiaries	**(3,045)**	–
Dividends to shareholders	**(3,467)**	(3,999)
Ordinary shares issued	**25**	21
Changes in non-controlling interests	**(20)**	–
Non-cash dividends to shareholders	**(15,526)**	–
Hedging gain/loss transferred to non-financial assets	**9**	–
Transaction with non-controlling interest	**–**	10
Share-based incentive plans	**357**	367
Tax on share-based incentive plans	**(8)**	11
Contributions from non-controlling interests	**8**	7
Distributions to non-controlling interests	**(1,409)**	(642)
Total equity at end of year	**10,096**	21,342

Share purchases

At 31 December 2022, GSK held 217.1 million shares as Treasury shares (2021: 284.2 million shares), at a cost of £3,798 million (2021: £4,969 million), which has been deducted from retained earnings.

No ordinary shares were repurchased in the period 1 January 2023 to 9 March 2023 and the company does not expect to make any ordinary share repurchases in the remainder of 2023.

In 2022, 77.1 million Treasury shares were transferred to the Employee Share Ownership Plan (ESOP) Trusts, of which 50.3 million shares were transferred prior to share consolidation. 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 2022, the ESOP Trusts held 59.9 million (2021: 23.3 million) GSK shares against the future exercise of share options and share awards. The carrying value of £353 million (2021: £27 million) has been deducted from other reserves. The market value of these shares was £861 million (2021: £371 million).

Contractual obligations and commitments

Financial commitments are summarised in Note 36 to the financial statements, 'Commitments'.

The following table sets out our contractual obligations and commitments at 31 December 2022 as they fall due for payment.

	Total £m	Under 1 yr £m	1-3 yrs £m	3-5 yrs £m	5 yrs+ £m
Loans	20,086	3,786	3,213	2,259	10,828
Interest on loans	6,322	594	1,101	961	3,666
Finance lease obligations	1,008	167	328	177	336
Future Finance Charges on leases	146	25	41	28	52
Lease contracts that have not yet commenced	396	18	42	68	268
Intangible assets	10,659	317	590	1,616	8,136
Property, plant & equipment	743	612	131	–	–
Investments	138	51	71	13	3
Purchase commitments	161	96	61	4	–
Pensions and post-retirement benefits	345	345	–	–	–
Total	40,004	6,011	5,578	5,126	23,289

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 2022 as a result of a reduction in outstanding loan commitments.

Group financial review continued

Financial position and resources continued

In connection with the demerger of Consumer Healthcare, the 31 December 2020 pension scheme valuations identified cash funding or technical provisions deficits in three GSK UK Pension Schemes. Scottish limited partnerships ("SLPs") were established to provide a funding mechanism for each of GSK's UK defined benefit pension schemes. The SLPs together hold shares representing 7.5% of the total issued share capital of Haleon.

Each pension scheme, through its SLP interest, is entitled to receive a distribution from that SLP in an amount equal to the net proceeds of sales of Haleon shares, and to receive dividend income on Haleon shares, until it has received an aggregate amount equal to an agreed threshold ("Proceeds Threshold"). The Proceeds Thresholds total £1,080 million (as increased by notional interest on the remaining balance from time to time), and payment of this amount would fully fund the cash funding or technical provisions deficits in the three schemes shown by the 31 December 2020 valuations. Once the Proceeds Threshold has been reached the GSK-controlled General Partner of each SLP is entitled to sell the remaining Haleon shares held by the SLP and distribute the proceeds to GSK. As at 31 December 2022, £345 million remains outstanding to the UK Pension Trustees.

Contingent liabilities

Other contingent liabilities are set out in Note 35 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	8	3	–	1
Other contingent liabilities	46	10	–	11	25
Total	58	18	3	11	26

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 32 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 2022, 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 285 to 295 and Note 47 to the financial statements, 'Legal proceedings'.

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 biopharmaceutical 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 2022, the Group corporate tax charge was £707 million (2021[1]: £83 million) on profits before tax of £5,628 million (2021[1]: £3,599 million) representing an effective tax rate of 12.6% (2021[1]: 2.3%). We made cash tax payments of £1,310 million in the year (2021[1]: £972 million). In addition to the taxes we pay on our profits, we pay duties, levies, transactional and employment taxes.

Our Adjusted tax rate for 2022 was 15.5% (2021[1]: 15.9%). The rate has benefited from the closure of open issues with tax authorities in various jurisdictions. 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 for 2023 is expected to be around 15%.

The Group's Total tax rate for 2022 of 12.6% (2021[1]: 2.3%) was lower than the Adjusted tax rate reflecting the different tax effects of various Adjusting items.

The UK Government has confirmed that the Spring Finance Bill 2023 will include legislation introducing a 15% global minimum corporate income tax rate, to have effect from 2024. The detail of the measures and how they are to be accounted for is still being finalised and so it is not possible to accurately quantify the impact for GSK at this stage.

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

(1) The 2021 comparative results have been restated on a consistent basis from those previously published to reflect the demerger of the Consumer Healthcare business (see page 238).

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 12 October 2022. 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 to or from 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 Chief Financial Officer 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 47)
- Contingent liabilities (Note 35)
- Pensions and other post-employment benefits (Note 31)

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 Commercial Operations, 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 Commercial Operations:

- 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 US Commercial Operations is as follows:

	2022		2021		2020	
	£m	Margin %	£m	Margin %	£m	Margin %
Gross turnover	**29,814**	**100**	24,432	100	24,570	100
Market-driven segments	**(8,275)**	**(28)**	(6,875)	(28)	(7,004)	(29)
Government mandated and state programmes	**(6,218)**	**(21)**	(5,134)	(21)	(5,710)	(23)
Cash discounts	**(536)**	**(2)**	(438)	(2)	(453)	(2)
Customer returns	**(255)**	**(1)**	(253)	(1)	(235)	(1)
Prior year adjustments	**780**	**3**	855	4	540	2
Other items	**(768)**	**(2)**	(673)	(3)	(560)	(2)
Total deductions	**(15,272)**	**(51)**	(12,518)	(51)	(13,422)	(55)
Net turnover	**14,542**	**49**	11,914	49	11,148	45

The reconciliation has been revised to include Vaccines as part of US Commercial Operations in all years.

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

Overall sales deduction as a percentage of sales is consistent year over year with sales growth coming primarily from *Trelegy* and Specialty Products including ViiV. Deductions within the year were split approximately as follows: General Medicines 70%, Specialty Medicines 20% and Vaccines 10%.

At 31 December 2022, the total accrual for rebates, discounts, allowances and returns for US Commercial Operations amounted to £5,855 million (2021: £5,044 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 Commercial Operations inventory levels at wholesalers and in other distribution channels at 31 December 2022 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 47 to the financial statements, 'Legal proceedings'.

Strategic report

The Strategic report was approved by the Board of Directors on 9 March 2023

Iain Mackay
Chief Financial Officer
9 March 2023