

Cautionary statement regarding forward-looking statements



This presentation may contain forward-looking statements. Forward-looking statements give the Group's current expectations or forecasts of future events. An investor can identify these statements by the fact that they do not relate strictly to historical or current facts. They use words such as 'anticipate', 'estimate', 'expect', 'intend', 'will', 'project', 'plan', 'believe', 'target' and other words and terms of similar meaning in connection with any discussion of future operating or financial performance. In particular, these include statements relating to future actions, prospective products or product approvals, future performance or results of current and anticipated products, sales efforts, expenses, the outcome of contingencies such as legal proceedings, and financial results.

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A number of adjusted measures are used to report the performance of our business, which are non-IFRS measures. These measures are defined and reconciliations to the nearest IFRS measure are available in our fourth guarter 2019 earnings release and Annual Report on Form 20-F for FY 2018.

All expectations and targets regarding future performance and the dividend should be read together with "Assumptions related to 2019 guidance and 2016-2020 outlook" on pages 61 and 62 of our full year and fourth quarter 2019 earnings release.

About us



We are a science-led global healthcare company with a special purpose: to help people do more, feel better, live longer.

We have **3 global businesses** that research, develop and manufacture innovative pharmaceutical medicines, vaccines and consumer healthcare products.

Our goal is to be one of the world's most innovative, best performing and trusted healthcare companies.

Our values and expectations are at the heart of everything we do and help define our culture - so that together we can deliver extraordinary things for our patients and consumers and make GSK a brilliant place to work.

Our values are **Patient focus**, **Transparency**, **Respect**, **Integrity**.

Our expectations are Courage, Accountability, Development, Teamwork.

3 long-term priorities



Innovation

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

Performance

We aim to achieve industryleading growth by investing effectively in our business, developing our people and delivering flawlessly.

Trust

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

Culture

2019: Significant progress on our long term priorities



Innovation

Performance

Trust

Driving new Innovation approach

Driving transition to 2DRs in HIV

Strengthened commercial performance

Building Specialty capability

Continued progress in Global Health

6 positive data read-outs from pivotal studies

8 submissions and 4 new assets into pivotal studies

Increased Shingrix capacity

New Consumer JV with Pfizer

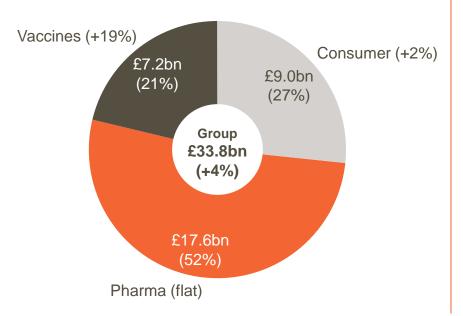
Top ranked in the DJSI for pharma industry

Sales, earnings and cash flow growth in 2019



Group: revenue breakdown 2019

Business Units



Total Group operating margin

20.6%

flat

Total EPS

93.3p

+23%

Free cash flow

£5.1bn

2017: £5.7bn

Adjusted Group operating margin

26.6%

-1.8%pts

Adjusted EPS

123.9p

+1%

2019 dividend

80p

Preparing for 2 new companies



Investment in R&D and future growth drivers

2-year separation	New GSK	Common approach to R&D and capital allocation Capabilities and efficiencies in support functions Optimise supply chain and portfolio. Divestments	
programme	New CH	Build key technology infrastructure and corporate functions	

CH JV integration, synergy delivery and investment in growth drivers

New GSK: a leading biopharma company with R&D focused on science of the immune system, genetics and advanced technologies

New leading Consumer
Healthcare company with
category leading power brands
and innovation based on
science and consumer insights

2020: Focus on execution as we prepare for the future



2020 focus

Innovation

- Execution of launches
- Continue to strengthen pipeline

Performance

- Drive growth and operating performance
- Build Specialty capability
- Integration of Pfizer consumer health
- Prepare for separation

Trust

- Regular updates on innovation
- Global health focused for impact
- Modern employer

- Progress pipeline
- Drive operating performance
- Successful integration
- Prepare for2 new companies

New GSK: a leading biopharma company with R&D focused on science of the immune system, genetics and advanced technologies

New leading Consumer
Healthcare company with
category leading power brands
and science and consumer
insights



Trust

Our Trust priority



Trust

We commit to use our science and technology to address health needs, make our products affordable and available and to be a modern employer. Trust is one of our three long-term priorities and is essential to how we deliver our purpose and strategy.

Society has high expectations presenting both challenges and opportunities, and we must be able to effectively respond to remain commercially successful, uphold our reputation and build trust.

In 2018 we published a new set of commitments describing the actions we will take to help deliver societal value and build trust. Progress on these commitments are presented in our <u>annual report</u>.

Our Trust commitments



Innovation

Performance

Trust

By using our

science and technology

to address health needs

New medical innovations

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

Global health

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

Health security

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

By making our products

affordable and available

Pricina

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

Product reach

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

Healthcare access

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

By being a

modern employer



Engaged people

Achieve and maintain a competitive employee engagement score by 2022

Inclusion and diversity

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

Health, wellbeing and development

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

Being a responsible business

Reliable supply

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

Ethics and values

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

Data and engagement

Use data responsibly and transparently. Improve patient and scientific engagement.

Environment

Reduce our environmental impact by one quarter by 2030

Highlights: Using our science and technology for global health



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

HIV

Progressing clinical development programmes for paediatric formulations of our medicines in partnership with the International Maternal Paediatric Adolescent AIDS Clinical Trials Network and the Paediatric European Network for Treatment of AIDs.

Malaria

Krintafel/Kozenis (tafenoquine), developed in partnership with the Medicines for Malaria Venture, has been approved by the US FDA and the Australian TGA as a radical single-dose cure for P. vivax malaria. We have also submitted regulatory files for tafenoquine in Brazil and India, marking the first wave of submissions in malaria endemic countries. In January 2019, two positive Phase III studies were published in the New England Journal of Medicine.

Our RTS,S vaccine aims to protect children from *P.falciparum* malaria. A pilot vaccine implementation programme coordinated by the WHO has launched in selected areas of Malawi, Ghana and Kenya. At least 360,000 children per year for five years will receive the vaccine.

TB

Interim results of our candidate vaccine in Phase II showed that it reduced the risk of developing pulmonary TB by half in adults with latent TB infection.

Benchmarking and recognition



1st in Access to Medicines Index (6th consecutive time at no.1)

Lead the ATMI Antimicrobial Resistance Benchmark 80% employee engagement score in our employee survey

Named a
Stonewall
Top Global
employer for
LGBT+ inclusion

1st
in Dow Jones
Sustainability
Index
(Pharma sector)

Member of FTSE4Good Index since 2004 1st in Transparency Internationals UK's Corporate Political Engagement Index Accredited by the Science Based Targets Initiative; named a CDP Supplier Engagement Leader

Trust resources

Annual Report 2018 Trust section
ESG Performance Summary 2018
Our Contribution to the SDGs
GSK.com Responsibility section

www.gsk.com/media/5349/annual-report-2018.pdf

www.gsk.com/media/5308/esg-performance-summary-2018.pdf

www.gsk.com/media/5326/our-contribution-to-the-sdgs.pdf

www.gsk.com/en-gb/responsibility/

Pharmaceuticals

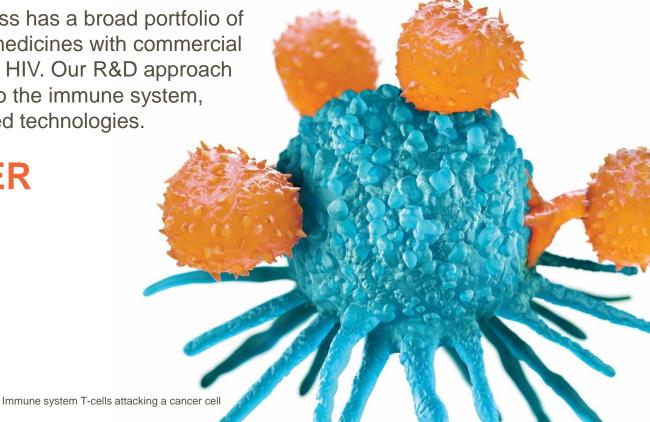
Our Pharmaceuticals business has a broad portfolio of innovative and established medicines with commercial leadership in respiratory and HIV. Our R&D approach focuses on science related to the immune system, use of genetics and advanced technologies.

£17.6bn, flat CER

Sales turnover 2019

Key Products

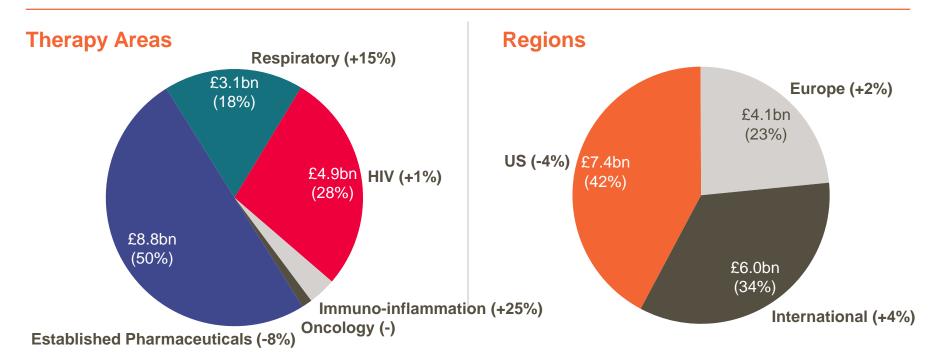
Triumeq/Tivicay	HIV		
Trelegy	COPD		
Nucala	Severe Asthma		
Zejula	Oncology		



Pharmaceuticals: revenue breakdown 2019



Revenues of £17.6bn (+0% CER)



Increasing focus and prioritisation to support future growth



Focus resources on key products	Investing in priority markets	Building our capability in Specialty
Trelegy Nucala HIV Zejula Shingrix Bexsero	US China	New talent with Specialty experience Co-location of development and commercial in Oncology Tesaro transaction Changes to our policy for working with healthcare professionals

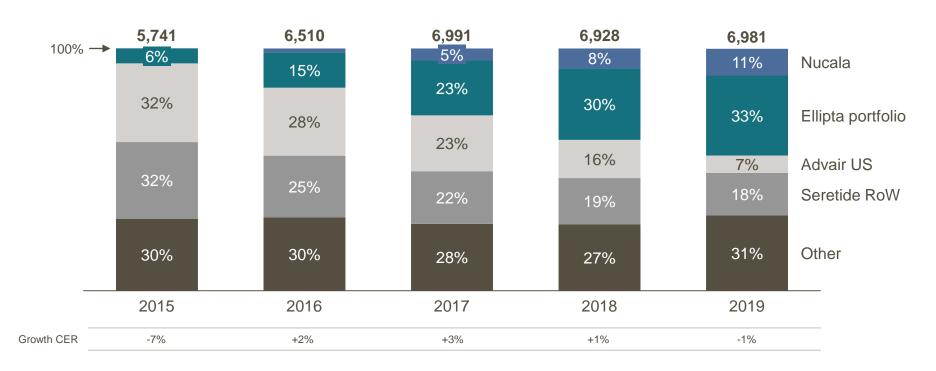


Respiratory

The changing shape of the respiratory portfolio



New portfolio offsetting decline in Advair/Seretide

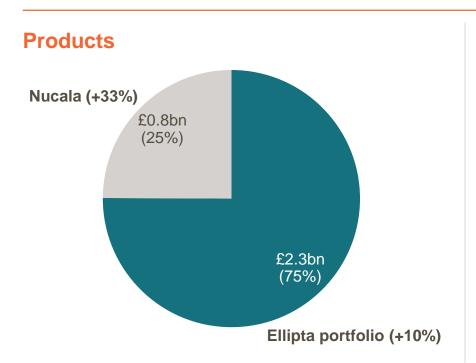


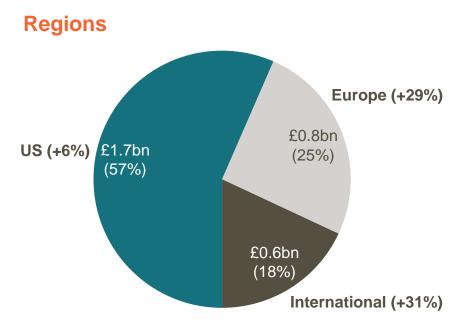
Source: GSK results releases

Respiratory: revenue breakdown 2019



Revenues of £3.1bn (+15% CER)

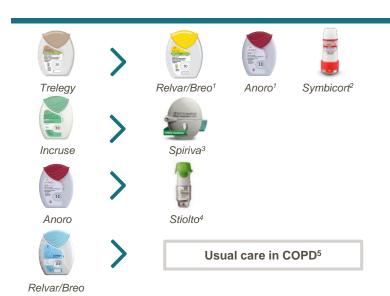




Trelegy: driving continued leadership

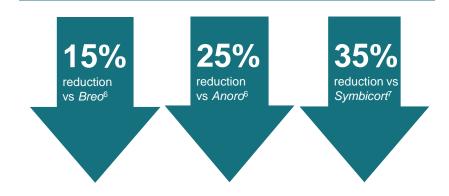


Demonstrated superiority in COPD



1. IMPACT: TRELEGY demonstrated a 15% reduction in moderate/severe exacerbations vs BREO and 25% vs ANORO

Significant exacerbation reduction with TRELEGY in COPD



IMPACT published in NEJM 18th April 2018 Approved in US April 2018 Positive CHMP opinion in EU Sept 2018

^{2.}FULFIL: TRELEGY demonstrated a benefit over SYMBICORT on lung function/SGRQ

^{3.201316:} INCRUSE demonstrated a benefit on lung function over SPIRIVA

^{4.204990:} ANORO demonstrated a benefit on lung function over STIOLTO

^{5.} SALFORD LUNG STUDY: BREO demonstrated a benefit on moderate/severe exacerbations vs. usual care

^{6.}Annual rate of on-treatment moderate and severe exacerbations (IMPACT)
7.Annual rate of on-treatment exacerbations at week 24 (FULFIL)

SYMBICORT is a trademark of AstraZeneca; SPIRIVA and STIOLTO are trademarks of Boehringer Ingelheim



HIV

HIV patient pool continues to increase



~38 million HIV+ globally, estimated **8.1 million** don't know their status¹

1.7 million new infections in 2018¹

24.5 million people living with HIV were accessing antiretroviral therapy in June 2019¹

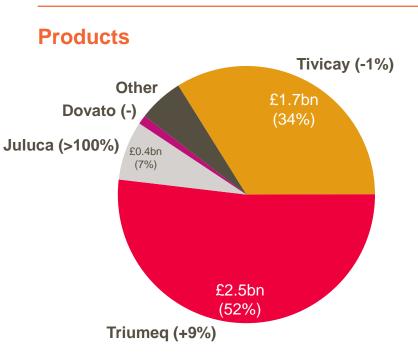
Over £24bn antiretroviral market size

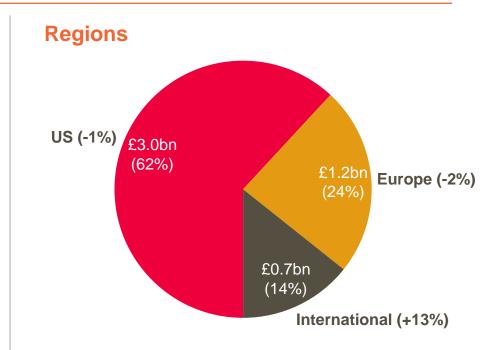
PLHIV will continue to need new treatments throughout their lifetime...

HIV: revenue breakdown 2019



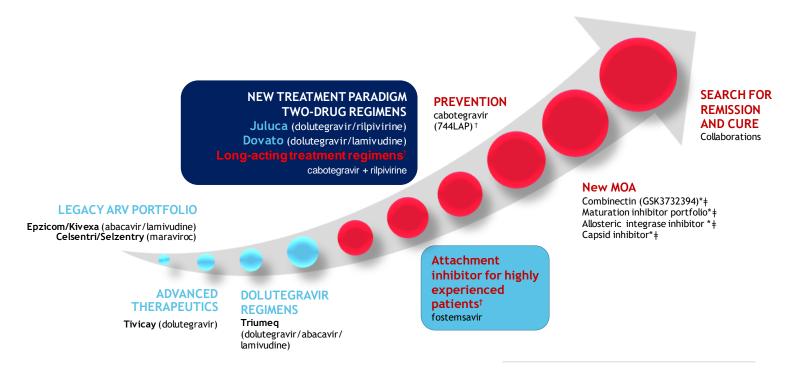
Revenues of £4.9bn (+1% CER)





A competitive and innovative pipeline





Medicines approved for prescription

†Investigational assets not currently approved for prescription

HIV: Leading core agent in HIV treatment



- Dolutegravir is #1 core agent globally
- 500,000 patients worldwide taking a dolutegravir based regimen
- Unmatched trial results; superiority in 5 studies and data in broad populations

vs. efavirenz	vs. raltegravir	vs. darunavir	vs. atazanavir	vs. Iopinavir
Superior (naive)	Superior (experienced)	Superior (naive)	Superior (women/naive)	Superior (experienced)
SINGLE	SAILING	FLAMINGO	Notice there that docume	DAVING Charge for a real NETO cs secreted from the amount

Leading innovation in HIV



Juluca and Dovato uptake driven by new data flow & guideline changes

2DRs now account for 3.4% of TRx and 7.2% of NBRx

GEMINI 96w data and TANGO switch data at IAS received positively

US (DHHS) and European (EACS) guidelines updated to include Dovato for first line use

Positive feedback from physicians and patients

Recent regulatory Submissions

Pediatric: submission filed in US and Europe for 5mg dispersible formulation of dolutegravir for babies & infants aged 4 weeks+

CAB+RPV: first and only once-monthly complete long acting HIV regimen

Working with FDA to determine next steps for approval

Fostemsavir: first in class attachment inhibitor targeted at 2-4%^{1, 2} of patients who cannot use other regimens

FDA breakthrough designation; US approval anticipated 2020

2. Henegar C, Vannappagari V, Viswanathan S, DeKoven M, Clark A, Ackerman P, Llamoso C. Identifying heavily treatment-experienced patients in a large administrative claims database. Presented at the 10th IAS conference on HIV Science (IAS 2019), July 21-24, 2019, Mexico City, Mexico



^{1.} Hsu R, Henegar C, Fusco J, Vannappagari V, Llamoso C, Lackey P, Pierone G, Fusco G. Identifying heavily treatment-experienced patients in the OPERA Cohort. Presented at the 22nd International AIDS Conference (AIDS 2018), July 23-27, 2018, Amsterdam, the Netherlands



Oncology

Building our oncology commercial capability



Improved engagement with HCPs

Updated HCP engagement policies to improve how we help prescribers understand new data and clinical experience with our innovative products

Attracting and retaining the best sales force talent

Competitive sales force incentives for Specialty area in place to recruit, motivate and retain sales teams with the right levels of expertise and experience

Seamless execution across functions and in markets

Aligned efforts to ensure launch readiness for exciting oncology launches and drive value for patients and shareholders

3 potential oncology launches in 2020

Zejula 1L maintenance therapy (PRIMA) presented at FSMO 2019

- Significantly improved PFS in the overall population
- Filed with FDA (RTOR)

Belantamab mafodotin (BCMA ADC) 4L Multiple Myeloma (DREAMM-2) published in The Lancet Oncology

- Study met primary objective and demonstrated clinically meaningful ORR
- Filed with FDA (RTOR) and EMA

Dostarlimab (PD-1) in recurrent endometrial cancer (GARNET) with interim data presented at SGO 2019

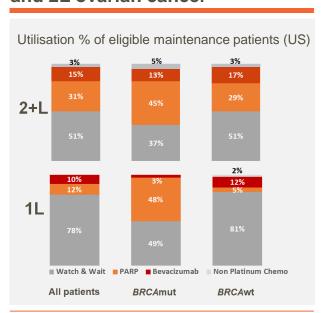
Filed with FDA

Real time oncology review (RTOR)

Opportunity for Zejula as 1LM in patients with ovarian cancer regardless of biomarker status



PARPs underutilised in 1L and 2L ovarian cancer



Avastin combination presents challenges

- Combination of PARP + Avastin increases cost, toxicity and administration challenges in maintenance setting
- Avastin currently used in <20% of 1L maintenance ovarian cancer patients in US; <50% EU and Japan*
- May limit Avastin as option for 2L
- Avastin has not demonstrated overall survival benefit in 1L

Zejula uniquely positioned with PRIMA data

- Demonstrated benefit in all comers population including HRD negative patients
- Pre-planned interim analysis of overall survival numerically favours Zejula over placebo
- Unique PK properties with preclinical evidence suggesting greater tumour penetration*
- Oral, once daily monotherapy with low drug interactions – key in maintenance setting

^{*}Flatiron Health data

^{*}Sun et al, Oncotarget, 2018, Vol. 9, (No. 98), pp: 37080-37096

Flatiron Health EMR data through Jul 31, 2019 FI Eligibility criteria:

Patients who received 4-9 cycles of platinum for 2L+ treatment

^{**}Watch and wait % changes 3-5% with variation in:

duration between last platinum administration date and sample end date

 [#] of administered platinum cycles



Immuno-inflammation

Benlysta: delivering growth with expansion potential



Steady double digit growth



Source: GSK Quarterly Reports, all sales growth rates at CER (Global Net Sales – Quarterly growth vs prior year)

Expansion opportunities

25% CER growth in 2019 driven by demand

- Steady adoption of subcutaneous formulation
- Improved patient adherence through new programme execution
- Paediatric IV approval in US, Japan and Europe

2020 expected updates & data read outs

- BLISS-LN: lupus nephritis positive results seen in Ph3 with submission expected H120
- BASE: long-term safety & mortality
- BLISS-BELIEVE (Benlysta + a single cycle of rituximab): aims to demonstrate sustained disease control and clinical remission through more effective B cell targeting

¹ SLE: Systemic Lupus Erythematosus

Pipeline



Science

X

Technology

X

Culture

Strengthening our R&D pipeline through a focus on science related to the immune system, the use of human genetics, and advanced technologies

2019 saw significant progress in R&D



Science

Strengthened our pipeline

- 3 major approvals
 - Dovato, Dectova, Nucala pre-filled syringe
- 8 submissions
 - Zejula in 1L OC, belantamab mafodotin in 4L+ MM, dostarlimab in dMMR/MSI-H recurrent EC, cabotegravir + rilpivirine in HIV, fostemsavir in HIV, Trelegy in asthma, Zejula in 4L+ HRD+ OC, daprodustat in anaemia (Japan only)
- 6 positive data read-outs from pivotal studies
 - CAPTAIN (Trelegy), PRIMA (Zejula), DREAMM-2 (belantamab mafodotin), GARNET (dostarlimab), HES (Nucala), BLISS-LN (Benlysta)
- 4 new assets advanced in to pivotal Phase 2/3 studies
 - otilimab in RA, gepotidacin in uUTI / GC, bintrafusp alfa in BTC, ICOS in HNSCC

Technology

Realised benefits from our technology approach

- 8 joint programmes initiated with 23andMe across a broad range of disease areas
- Signed major agreements and initiated work with the Laboratory for Genomics Research and Lyell

Culture

Recognised our shifting culture

- Appointed new talent into 24% of key R&D roles with half being external hires
- Introduced annual Transformational Medicine Awards to celebrate successful delivery of our SxTxC approach

Our R&D pipeline

39 medicines and 15 vaccines



Phase 1
3858279* (CCL17 antagonist) OA pain
3745417 (STING agonist) cancer
3186899* (CRK-12 inhibitor) visceral leishmaniasis
3511294* (IL5 LA antagonist) asthma
1795091 (TLR4 agonist) cancer
3810109* (broadly neutralizing antibody) HIV
3537142* (NYESO1 ImmTAC) cancer
3439171* (H-PGDS inhibitor) DMD
3368715* (Type 1 PRMT inhibitor) cancer
2269557 (nemiralisib, Pl3Kd inhibitor) APDS
3174998* (OX40 agonist) cancer
3732394 (combinectin, entry inhibitor) HIV

Phase 1 Expansion/Phase 2
3640254 (maturation inhibitor) HIV
3228836* (HBV ASO) HBV
3772847* (IL33r antagonist) asthma
3377794* (NY-ESO-1 TCR) cancer
2330811 (OSM antagonist) systemic sclerosis
2881078 (SARM) COPD muscle weakness
525762 (molibresib, BET inhibitor) cancer
2330672 (linerixibat, IBATi) cholestatic pruritus in PBC
3326595* (PRMT5 inhibitor) cancer
GR121619* (oxytocin) postpartum haemorrhage
TSR-022* (TIM-3 antagonist) cancer
3036656* (leucyl t-RNA inhibitor) TB
2831781* (LAG3) ulcerative colitis
TSR-033* (LAG3 antagonist) cancer

Pivotal/Registration
Benlysta + Rituxan SLE**
cabotegravir** LA + rilpivirine* LA HIV
daprodustat (HIF-PHI) anemia
fostemsavir (attachment inhibitor) HIV
Nucala COPD/HES/nasal polyps
Trelegy* asthma
belantamab mafodotin* (BCMA ADC) multiple myeloma
Zejula* (PARP inhibitor) ovarian cancer**
dostarlimab* (PD-1 antagonist) endometrial cancer**
bintrafusp alfa* (TGFβ trap/anti-PDL1) BTC**
otilimab* (3196165) RA
gepotidacin* (2140944) uUTI and GC
3359609* (ICOS receptor agonist) HNSCC**1

Vaccincs
Shingrix immuno-compromised* – Registration
Bexsero pediatric (US) - Phase 3
MMR (US) - Phase 3
Rotarix liquid – Registration
Therapeutic COPD* - Phase 2
RSV paediatric – Phase 2
MenABCWY - Phase 2
Menveo liquid - Phase 2
Malaria* (fractional dose) - Phase 2
Shigella* - Phase 2
RSV maternal* - Phase 2
RSV older adults* – Phase 1/2
Therapeutic HBV* – Phase 1/2
C. Difficile – Phase 1
SAM (rabies model) - Phase 1

Note: Only the most advanced indications are shown for each asset

Vaccines

Upcoming milestones that will inform our progress



	2H 2019		1H 2020	2H 2020	1H 2021	2H 2021
Anticipated submission	fostemsavir (attachment inhibitor) HIV	✓	Nucala HES	Nucala NP	Benlysta + Rituxan SLE	bintrafusp alfa BTC
	Trelegy asthma	✓	Benlysta lupus nephritis			
	belantamab mafodotin 4L MM monotherapy (DREAMM-2)	✓				
	dostarlimab dMMR/MSI-H recurrent endometrial cancer (GARNET)	✓				
	Zejula 1L ovarian cancer (PRIMA)	✓				
	daprodustat (HIF-PHI) anemia - JAPAN ONLY	✓				
Pivotal data	belantamab mafodotin 4L MM monotherapy (DREAMM-2)	✓	Nucala NP	Benlysta + Rituxan SLE	bintrafusp alfa BTC	Gepotidacin bacterial infections
	Nucala HES	✓	daprodustat (HIF-PHI) anemia*	✓		dostarlimab combo with CT 1L EC (RUBY)
	Zejula 1L ovarian cancer (PRIMA)	✓				Zejula + dostarlimab 2L+ PROC ovarian cancer (MOONSTONE)
	dostarlimab dMMR/MSI-H and MSS recurrent endometrial cancer (GARNET)	✓				
	Benlysta lupus nephritis (BLISS LN)	✓				
PoC data	2982772 (RIP1 kinase) UC^	ૹ	2881078 (SARM) COPD muscle weakness	2831781 (LAG3) UC*	belantamab mafodotin (BCMA) 1L combo in MI (DREAMM-9)**	TSR-022 NSCLC (AMBER)
	3640254 (maturation inhibitor) HIV	\checkmark	3174998 (OX40) + 1795091 (TLR4) cancer combo therapy*	3377794 (NY-ESO) MM & NSCLC* therapy	3359609 (ICOS) mono & combo therapy lung platform	Key:
	3326595 (PRMT5) cancer monotherapy ²	✓	525762 (BET inh) ER+ breast combo therapy	1795091 (TLR4) + ICOS/ pembro cancer combo therapy*		→ +ve data in-house, decided to progre
	Zejula + bev. 1L ovarian cancer (OVARIO: single arm, safety study)	\checkmark		3036656 (leucyl t-RNA) tuberculosis		√ +ve data in-house, decision pending
	Zejula + dostarlimab + bev. 2L+ platinum resistant ovarian cancer (OPAL) ³			2330672 (linerixibat, IBAT inhibitor) cholestatic pruritus in PBC¹		data in-house, additional data needed
	Benlysta + Rituxan Sjogren's syndrome	⇔		525762 (BET inh) mCRPC combo therapy		-ve data in-house, return to research
	belantamab mafodotin (BCMA) 2L MM combo therapy (DREAMM-6)	✓		3359609 (ICOS) +CTL4 cancer combo therapy		 -ve data in-house, decided to termina
				belantamab mafodotin (BCMA) PD-1 combo in MM (DREAMM-4)		HES: hypereosinophilic syndrome; MM: multiple myelom
				COPD vaccine		NP: Nasal polyposis; RA: rheumatoid arthritis; SLE: systemic lupus erythematosus; UC: ulcerative colitis;

RSV older adults vaccine*

RSV maternal vaccine

atoid arthritis; SLE: systemic lupus erythematosus; UC: ulcerative colitis; NSCLC: non-small cell lung cancer ER+; estrogen receptor +: mCRPC; metastatic castration resistant prostate cancer; MSI-H: Microsatellite Instable- high, dMMR; deficient mismatch repair; PBC- primary biliary cholangitis; ECendometrial cancer; BTC - biliary tract cancer

23andMe and GSK exclusive collaboration



Collaboration offers scale, diversity, sustainability for advancing therapeutic programs

Questionnaire yields unique phenotype information vs other biobanks

Can deploy custom surveys to dive deeper into specific diseases

Allows rapid recruitment of clinical trials based on genotype, phenotype and proximity to study centres

Improved target selection (higher PoS, and safer, more effective medicines)

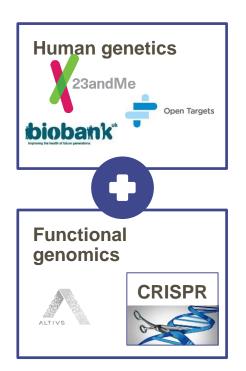
Allows more efficient/effective identification and recruitment of patients for clinical studies

Empowers patients!

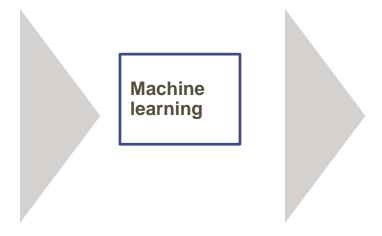
Human genetics and functional genomics



Science and technology together to drive better R&D success



"Artificial Intelligence is the new electricity and is changing industry after industry." Stanford School of Business lecture by Andrew Ng



Machine Learning will enable the fields of science and medicine to evolve from an era of "Big Data" to an era of "Understanding Data"

More high quality targets

Faster development

Better success rates

New R&D approach will support the development of current clinical portfolio



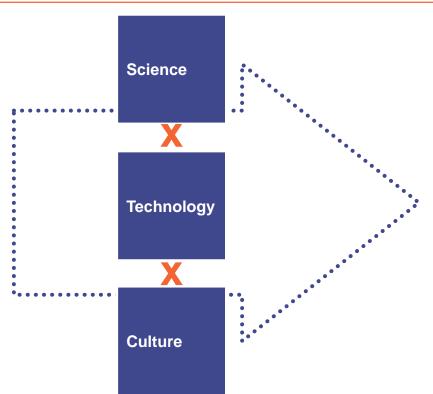
From

Spend spread thinly across too many programmes ("shots on goal" strategy)

Consensus-driven decision making

R&D/Commercial silos

Limited Business Development activity



To

Backing the best assets, and removing those that don't look promising

Culture of accountability where smart risk-taking and courageous decisions are made by individuals and rewarded

Robust governance model with scientific peer review, commercial input and data-driven decisions

Leveraging Business Development to optimise our portfolio

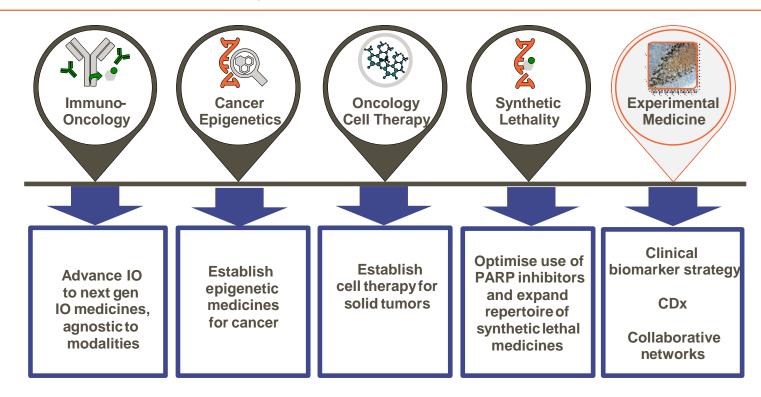


Growing Oncology Pipeline

Oncology R&D: strategy and scientific focus



Maximise patient survival through transformational medicines



Accelerating our oncology pipeline

In October 2018: 8 assets in clinical development

Now: 15 assets in development with 3 potential launches in 2020



Mechanism	Phase 1 (FTIH) Phase 2 (dose expansion) Phase 3 (pivotal)
PARP inhibitor (Zejula, niraparib)*	First line maintenance ovarian, other solid tumors under investigation
Anti-BCMA ADC (belantamab mafodotin, GSK '916) [†]	Multiple myeloma
PD-1 antagonist (dostarlimab)*	dMMR/ MSI-H endometrial cancer, other solid tumors
TGF-beta trap/PD-L1 antagonist (bintrafusp alfa)*	BTC, NSCLC, breast cancer, other solid tumors
ICOS receptor agonist (GSK3359609) [†]	HNSCC, NSCLC, other solid tumors
NY-ESO-1 TCR T cells (GSK3377794) †	Sarcoma, NSCLC, multiple myeloma
BET inhibitor (molibresib, GSK525762)	Breast, prostate, other solid tumors
PRMT5 inhibitor (GSK3326595) [†]	Solid tumors, heme malignancies
TIM-3 antagonist (TSR-022)*	NSCLC, other solid tumors
NY-ESO-1 ImmTAC® (GSK3537142) ‡	Cancer
OX40 agonist (GSK3174998) ^{†^}	Solid tumors
TLR4 agonist (GSK1795091)	Cancer
LAG-3 antagonist (TSR-033)*	Cancer
Type 1 PRMT inhibitor (GSK3368715) [†]	Cancer * Tesaro acquisition
STING agonist (GSK3745417)	† In-license or other partnership with third party † Option based alliance with Immunocore Ltd. ImmTAC is a registered trademark of Immunocore Ltd. * Being developed in a strategic global alliance between GSK and Merck KGaA, Darmstadt, Germany

FTIH = first time in human; NSCLC = non small cell lung cancer; HNSCC = Head and neck squamous cell carcinoma; BTC = biliary tract cancer

^ Re-categorised from phase II to I following refinement of phase definitions

PARP inhibitors: wider application than has been appreciated



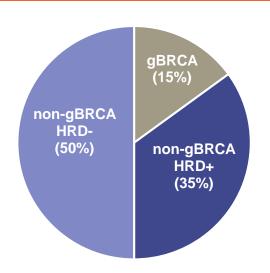
PARP Inhibitors: The First Synthetic Lethal Targeted Therapy

Science. 2017 March 17; 355(6330): 1152–1158. Christopher J. Lord^{1,2,7} and Alan Ashworth^{3,7}

PARP inhibitors have transformed the treatment of ovarian cancer

- Prior to the publication of TESARO's NOVA study,
 PARP inhibitors were thought to only benefit patients with gBRCA
- Evidence is mounting that suggest there is a significant opportunity to help many more patients (HRD positive – and potentially "all comers") – in the first line maintenance (1LM) setting

High grade serous ovarian cancer*



PARP: poly ADP-ribose polymerase; HRD: homologous recombination deficiency

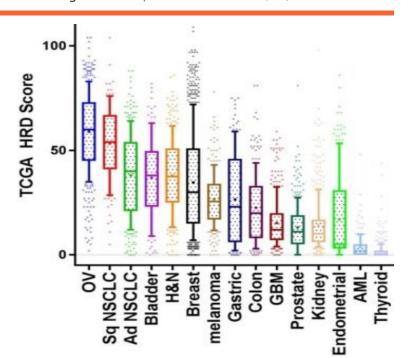
^{*} As per Myriad test – HRD+ percentage may be higher

HRD testing could enable further development opportunities for Zejula



Pan-cancer analysis of genomic scar signatures associated with homologous recombination deficiency suggests novel indications for existing cancer drugs

Marquard et al. Biomarker Research (2015) 3:9



Mono/combo therapy	Indication	Study
Zejula monotherapy	Ovarian cancer 1LM	PRIMA
Zejula plus anti PD-1 mAb	Ovarian cancer 1LM	FIRST
Zejula plus anti PD-1 mAb or Zejula monotherapy	NSCLC, SSCL	JASPER
Zejula plus Avastin	Ovarian cancer 1LM safety study	OVARIO
Zejula plus Avastin	Recurrent ovarian cancer treatment	AVANOVA
Zejula plus Keytruda	Triple negative breast cancer or ovarian cancer	TOPACIO
Zejula monotherapy	Metastatic castration resistant prostate cancer	GALAHAD*
Zejula plus chemo	Ewing's sarcoma	

^{*} Study conducted by partner Janssen: royalties and milestones payable on sales and development milestones

Zejula

Developing the most compelling PARP inhibitor in ovarian cancer



treatment

following 3-4 regimens of open label, single arm study **Approved QUADRA** pivotal 2017 Complete chemotherapy n = 461

Recurrent

platinum resistant

	TOPACIO	POC	recurrent OC and advanced /metastatic TNBC	niraparib + pembrolizumab (MK-3475) n=~120	2016	Complete	Published in JAMA
,	MOONSTONE	pivotal	platinum resistant ovarian cancer	Open label, single arm nira + dostarlimab n=~150	2H 2019	2021	Enrolling

Study start

Read-out

Recurrent

maintenance therapy or treatment

	NOVA	pivotal	platinum sensitive	niraparib vs. placebo following chemo n= 553	2013	Complete	Approved
,	AVANOVA*	POC	platinum sensitive	niraparib vs niraparib + bev n= ~100 (part 1 and part 2 combined)	2015	Complete	Best of ASCO 2019

monotherapy and combination with novel agents

PRIMA	pivotal	maintenance following CR/PR with frontline chemo	niraparib monotherapy n=~620	2016	Complete	Submitted in US Published in NEJM
OVARIO	POC	maintenance following frontline chemo+bev	single arm, open label study of niraparib + bevacizumab n=~100	2018	2020	SGO 2020 presentat
FIRST	pivotal	maintenance in newly diagnosed advanced OC	Combo w/dostarlimab +/- bevacizumab n=~620	2018	2023	Enrolling

SGO 2020 presentation

PRIMA: Comparing PARPi and bevacizumab in 1L ovarian cancer



	PRIMA ¹ niraparib	SOLO-1 ² olaparib	PAOLA-1 ³ bevacizumab +/- olaparib	VELIA⁴ veliparib	GOG-218 ⁵ bevacizumab	ICON7 ⁶ bevacizumab
N	733	391	806	1140	1873	1528
Overall population	0.62		0.59	0.68	0.73	0.87
HR deficient BRCAmut (~20% of patients*)	0.40	0.30	0.31	0.44	0.95	ND
HR deficient BRCAwt (~30% of patients*)	0.50		0.43	0.74 NS		ND
HR proficient BRCAwt (~50% of patients*)	0.68		0.92 NS	0.81 NS	0.71	ND

Only Zejula demonstrated efficacy in all patient HR subgroups in first line

⁽¹⁾ Gonzalez, ESMO 2019; (2) MORE, NEJM 2018; (3) Ray-Coquard ESMO 2019; Coleman ESMO 2019; (5) Burger NEJM 2011; (6) Perren NEJM 2011

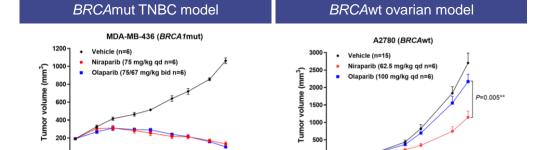
^{*} Patients with known BRCA and HR status

Zejula

A unique PK profile may explain the benefit in HR-proficient patients

Time (days)





Time (days)

www.oncotarget.com

Oncotarget, 2018, Vol. 9, (No. 98), pp: 37080-37096

Research Paper

A comparative pharmacokinetic study of PARP inhibitors demonstrates favorable properties for niraparib efficacy in preclinical tumor models

Kaiming Sun¹, Keith Mikule¹, Zebin Wang¹, Grace Poon¹, Aparajitha Vaidyanathan², Gillian Smith², Zhi-Yi Zhang¹, Jeffrey Hanke¹, Sridhar Ramaswamy¹ and Jing Wang¹

"Our results show that at steady state, tumor exposure to niraparib is 3.3 times greater than plasma exposure in tumor xenograft mouse models.

In comparison, the tumor exposure to olaparib is less than observed in plasma. In addition, niraparib crosses the blood-brain barrier and shows good sustainability in the brain, whereas sustained brain exposure to olaparib is not observed in the same models.

Consistent with its favourable tumor and brain distribution, niraparib achieves more potent tumor growth inhibition than olaparib in BRCAwt models and an intracranial tumor model at maximum tolerated doses."

Sun et al

belantamab mafodotin (GSK'916): First-in-class anti-BCMA ADC agent for treatment of multiple myeloma

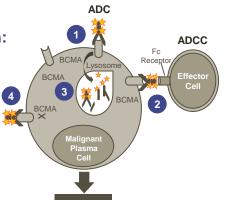


The target	 BCMA plays a key role in plasma cell survival It is found on the surfaces of plasma cells and is expressed on malignant plasma cells Not expressed in healthy tissues
The agent	 GSK'916 is a humanised IgG1 antibody targeting BCMA (B-cell maturation antigen) Linked to the anti-mitotic agent MMAF Afucosylated to enhance ADCC
Key attributes	 New modality in multiple myeloma: first ADC Easy and convenient to administer: 1h infusion q3w No pre-medication required for infusion reactions Pre-medication with steroid eye drops New MoA enabling diverse combination Breakthrough and PRIME designations

- Multiple myeloma, also known as plasma cell myeloma, is a cancer of plasma cells, a type of white blood cell normally responsible for producing antibodies.
- Multiple myeloma is treatable, but generally incurable.
- Globally, multiple myeloma affected 488,000 people and resulted in 101,100 deaths in 2015.
- Without treatment, typical survival is seven months, with current treatments, survival is usually 4–5 years

Four mechanisms of action:

- 1.ADC mechanism
- 2.ADCC mechanism
- 3.BCMA receptor signaling inhibition
- 4.Immunogenic cell death



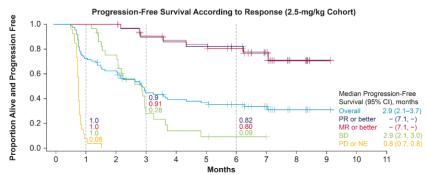
belantamab mafodotin



DREAMM-2 showed a clinically meaningful benefit with both doses

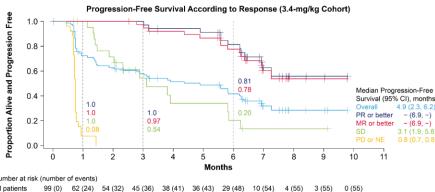
mPFS was 2.9 and 4.9 months in the 2.5-mg/kg and 3.4-mg/kg groups, not reached in patients with MR or better

A. PFS survival by response (belantamab mafodotin 2.5-mg/kg)



Number at risk (number of events) 34 (47) 29 (51) PR or better 30 (0) 25 (3) 23 (4) 22 (5) 19 (5) 13 (6) 4(7) 1(7) MR or better 33 (0) 33 (0) 28 (3) 26 (4) 25 (5) 21 (6) 14 (7) 5 (8) 1 (8) 0 (8) SD 29 (0) 21 (7) 6 (18) 3 (21) PD or NE 2 (24) 0 (26)

B. PFS survival by response (belantamab mafodotin 3.4-mg/kg)



Number at risk	(number	of events)									
All patients	99 (0)	62 (24)	54 (32)	45 (36)	38 (41)	36 (43)	29 (48)	10 (54)	4 (55)	3 (55)	0 (55)
PR or better	34 (0)	34 (0)	34 (0)	34 (0)	31 (2)	30 (3)	25 (6)	9 (11)	3 (12)	2 (12)	0 (12)
MR or better	39 (0)	39 (0)	39 (0)	37 (1)	33 (3)	31 (5)	26 (8)	9 (13)	3 (14)	2 (14)	0 (14)
SD	23 (0)	21 (0)	15 (6)	8 (9)	5 (12)	5 (12)	3 (14)	1 (15)	1 (15)	1 (15)	0 (15)
PD or NE	37 (0)	2 (24)	0 (26)								

belantamab mafodotin

gsk

Lower dose provides similar efficacy with a better safety profile

Number of patients with event (safety population), n (%)*	Ве	antamab mafodo	tin, 2.5 mg/kg (N=	=95)	Belantamab mafodotin, 3.4 mg/kg (N=99)			
Number of patients with event (safety population), if (%)	Grade 1-2	Grade 3	Grade 4	Grade 5	Grade 1-2	Grade 3	Grade 4	Grade 5
Keratopathy or corneal epithelium changes†	41 (43)	26 (27)	0	0	53 (54)	20 (20)	1 (1)	0
Thrombocytopenia [‡]	14 (15)	8 (8)	11 (12)	0	24 (24)	11 (11)	22 (22)	1 (1)
Anemia	4 (4)	19 (20)	0	0	12 (12)	22 (22)	3 (3)	0
Blurred vision§	17 (18)	4 (4)	0	0	28 (28)	2 (2)	0	0
Increased aspartate aminotransferase	17 (18)	2 (2)	0	0	18 (18)	6 (6)	0	0
Fatigue	13 (14)	2 (2)	0	0	21 (21)	5 (5)	0	0
Dry eye**	12 (13)	1 (1)	0	0	23 (23)	0	0	0
Neutropenia ^{††}	4 (4)	5 (5)	4 (4)	0	12 (12)	12 (12)	3 (3)	0

- 71% of patients experienced keratopathy, about a quarter (24%) of whom were asymptomatic
- 27% of patients experienced Grade 3 keratopathy
- 1% of patients discontinued therapy due to keratopathy
- Keratopathy was appropriately diagnosed and managed by the DREAMM-2 investigators in collaboration with ophthalmologists and optometrists

belantamab mafodotin

DREAMM-9 initiated and DREAMM-7 on track to start 1H 2020



Development strategy for use in:

4L/3L monotherapy and combinations

				Study Start	LSUIAUTION
DREAMM-1	pilot	relapsed/ refractory patients	Belantamab mafodotin monotherapy, single arm, n=73	2014	
DREAMM-2	pivotal	daratumumab failures	Belantamab mafodotin monotherapy, single arm, n=223	Jun 2018	2020 RTOR
DREAMM-3	pivotal	failed lenalidomide and proteasome inhibitor	Belantamab mafodotin monotherapy vs. PomDex, n=320	1H 2020	2023
DREAMM-4	pilot	relapsed/ refractory patients	Belantamab mafodotin + PD1 combination, single arm, n=40	Mar 2019	
DREAMM-5	pilot	relapsed/ refractory patients	Belantamab mafodotin + novel combinations platform study, n=514	Oct 2019	

Study start

Ect Journel

BLA accepted, MAA validated Published in Lancet Oncology

2L combination with SOC

DREAMM-6	pilot	failed 1 prior therapy	Belantamab mafodotin+LenDex OR +BorDex, open label, n= 99	Oct 2018	
209418	ISS	relapsed/ refractory patients	Belantamab mafodotin+PomDex, n= 78	Jan 2019	
DREAMM-7	pivotal	failed 1 prior therapy	Belantamab mafodotin+BorDex vs. Dara+BorDex, n= 478	1H 2020	2024
DREAMM-8	pivotal	failed 1 prior therapy	'916+PomDex vs. PomBorDex, n= 450	2H 2020	2023

combination with novel and SOC agents

DREAMM-9	pivotal	transplant ineligible	Belantamab mafodotin+BorLenDex vs. BorLenDex; n=798	Jan 2020	
DREAMM-10	pivotal	transplant ineligible	Belantamab mafodotin+novel agent vs SOC, n=TBC	2021	

Alliance with Merck* is an opportunity to further accelerate our oncology strategy



Current clinical status

Encouraging NSCLC data presented

Phase II underway versus pembrolizumab as 1L in patients with PD-L1+ advanced NSCLC

8 clinical development studies ongoing or expected to start

Complements existing assets

Immuno-modulatory biological mechanism fits with our new R&D approach

Potential for novel combinations with existing pipeline assets (ICOS, TLR4)

Potential to explore combinations with IO assets in the recently acquired TESARO pipeline

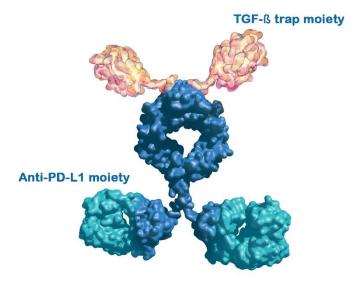
^{*} Merck KGaA, Darmstadt, Germany

bintrafusp alfa (M7824)*: a first-in-class TGF-β / anti-PDL1 therapy



Unique design offers potential for superiority against the competitive landscape

The target	 PD-L1 and TGF-β are key pathways with independent and complementary immunosuppressive functions Blocking TGF-β signalling may sensitize tumours to anti-PD-1/PD-L1 therapies and lead to synergistic and superior anti-tumour activity compared with monotherapies
The agent	 M7824 is a bifunctional fusion protein with dual function designed to simultaneously block the anti-PD-1 and anti-TGFβ pathways Fully humanised protein immunoglobulin G1 (IgG1) mAb against human PD-L1 fused to the extracellular domain of human TGF-β receptor II, which functions as a TGF-β trap



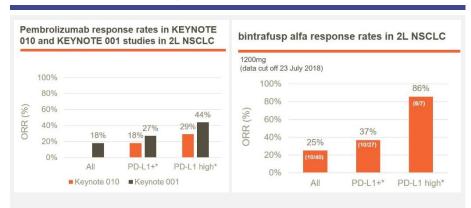
M7824 is an investigational bifunctional immunotherapeutic that combines a TGF-B trap (yellow) with an antibody against PD-L1 (blue) in one fusion protein. Targeting both pathways with M7824 aims to control tumor growth by potentially restoring and enhancing anti-tumor responses.

bintrafusp alfa (M7824)+



Encouraging clinical efficacy, pivotal study started in BTC

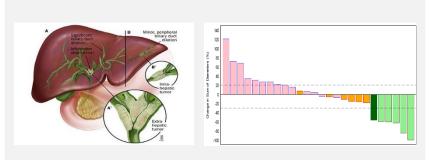
Non small cell lung cancer (NSCLC) 2L



 Durable responses across all PD-L1 expression levels in 2L NSCLC

Efficacy according to independent read, RECIST 1.1

Biliary tract cancer (BTC) 2L



- Overall Response Rate (ORR) of 20%
- Median Overall Survival (mOS) of 12.7 months
- Benchmark
- 2L Chemotherapy: 5-8% ORR and 7.2 months mOS#
- Pembrolizumab: 5.8% ORR and 9.1 months mOS (Keynote-158)^

^{*} PD-L1+ (pembro:22C3 TPS ≥ 1%; M7824: EMD001 ≥ 1%), PD-L1 high (pembro:22C3 TPS ≥ 50%; M7824: EMD 001 ≥ 80%; TPS ≥50% with 22C3 comparable to ≥80% with EMD 001 assessments)

^{*} Alliance with Merck KGaA, Darmstadt, Germany; # Salati et al., ASCO 2019; ^ Ueno et al., ESMO 2018

dostarlimab



On track for approval in 2L endometrial cancer setting in 2020

- Endometrial cancer is the most common gynecological cancer in the US
- GARNET is the largest study of anti-PD-1 monotherapy in patients with advanced/recurrent endometrial cancer
 - ORR of 49% in patients with MSI-H and 20% in patients with MSS tumors, by irRECIST*
 - ORR of 39.6% for pembrolizumab in the pan-tumor MSI-H/dMMR cohort (14 EC patients)**

Development strategy for use in:

2/3L
treatment in patients
with advanced solid
tumors (GARNET)

			Study start	Read-out
dMMR/MSI-H EC	pivotal	monotherapy n=75	2017	2H19
dMMR/MSI-H tumor agnostic	pivotal	monotherapy n=50	2018	2H19
MMRp/MSS EC	pivotal	monotherapy n=100	2017	2H19

Submitted in US

Treatment (RUBY)

Endometrial cancer	pivotal	dMMR/MSI-H and MMRp/MSS patients	combo w chemo n=470	2H 2019	2021

GSK'609 ICOS receptor agonist



Differentiated MOA with encouraging clinical data at ESMO 2019

Target

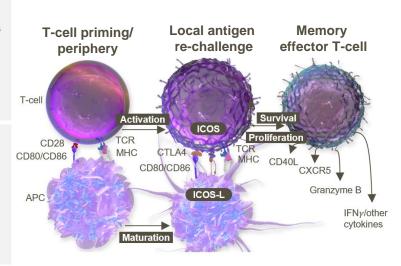
- ICOS, a member of the CD28 family of co-stimulatory receptors, has a
 pivotal role in the proliferation, differentiation, survival, and function of T cells
- Highly upregulated upon T-cell receptor stimulation¹ and is expressed on tumour infiltrating lymphocytes in many tumours²
- Consistent with CTLA-4 and PD-1 blockade, ICOS agonism is anticipated to modulate T-cell dynamics resulting in prolonged control of tumour growth kinetics and survival in patients

Agent

- Humanised IgG4 antibody selected for its potent binding, agonist activity through the human ICOS receptor and low/no T-cell depleting effects via antibody-dependent cellular toxicity
- Anti-tumour activity observed with an ICOS agonist is further enhanced in combination with CTLA-4 and PD-1 blockade in non-clinical models^{3,4} ICOS agonist treatment led to upregulation of PD-1/PDL-1 expression in these models³
- RNA-sequencing data shows strong correlation of ICOS and PD-L1 in solid tumours, further supporting clinical evaluation of this combination⁴

Status

- Clinical activity observed with both monotherapy and PD-1 combination;
 HNSCC data presented at ESMO September 2019
- INDUCE-3 Ph2/3 study in HNSCC combination with pembrolizumab started Dec'19, studies in other tumor types ongoing



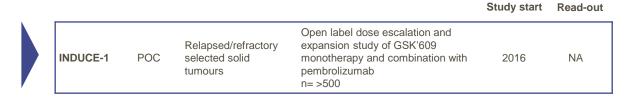
APC, antigen-presenting cell; CXCR5, C-X-C motif chemokine receptor 5; ICOS-L, ICOS ligand; IFN-γ, interferon gamma; MHC, major histocompatibility complex

^{1.}Hutloff A, et al. Nature 1999;397:263–6. 2. Mayes P, et al. Nat Rev Drug Disc 2018;17:509–27. 3. Brett S, et al. ESMO 2018 poster presentation: Abstract 1840P.4. Yadavilli S, et al. AACR 2017 poster presentation: Abstract 1637/15

GSK'609: progressing to advanced trials and novel combinations



Solid tumours



HNSCC

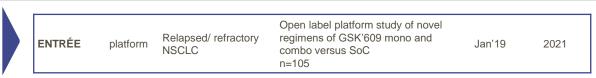
recurrent or metastatic

INDUCE-2 POO	POC	Relapsed/ refractory HNSCC	Open label dose escalation and expansion study of GSK'609 in combination with tremelimumab N=114	Dec'18	2020
INDUCE-3	pivotal	First line PD-1 positive recurrent or metastatic HNSCC	Randomised, double blind, adaptive study of GSK'609 or placebo in combination with pembrolizumab	End 2019	2023

55k patients*

NSCLC

relapsed/ refractory advanced



130k patients*

^{*} Drug-treated patients. Source: Kantar Patient Matrix for US, EU5 and Japan in 2019, September 2019

POC = proof of concept; HNSCC = head and neck squamous cell carcinoma; SoC = standard of care; NSCLC = non small cell lung cancer



Other Pipeline

Progressing our innovative new medicines



Building momentum with impactful programmes across the portfolio

GSK '836 in chronic Hepatitis B

- Programme in-licensed from Ionis Pharmaceuticals in Q3 2019
- Ph2a data presented at AASLD (Nov)¹
- HBsAg reduction seen in HBeAg positive and negative patients with 300mg dose

Ph2b study start targeted by end 2020

GSK '609 ICOS agonist in HNSCC

- Demonstrated activity in both monotherapy and PD-1 combo
- Ph2/3 INDUCE-3 study in HNSCC initiated (combo with pembrolizumab)
- Design allows progression to pivotal if interim analysis positive

Multiple POCs in 2H 2020 and 1H 2021

gepotidacin in uUTIs and gonorrhoea

- uUTI and GC not addressed by new oral antibiotics in 20 years
- ~40% of uUTI patients have antibiotic resistance infections²
- Emerging resistance to 1st line therapy for gonorrhea^{3,4,5}
- Ph3 programme initiated to investigate gepo vs. ceftriaxone + azithromycin (GC) and gepo vs. nitrofurantoin (uUTI)

Ph3 results expected by end 2021

daprodustat in anaemia

- Futility analysis performed Dec 2019 on CV outcome studies, which are continuing without modification
- Filed in Japan for anaemia due to chronic kidney disease
- Topline data from Ph3 cardiovascular outcome study est. 2022

PMDA decision anticipated by end 2020

5. GSK US physician market research, 2019

uUTIs = uncomplicated urinary tract infections; GC = urogenital gonorrhea; HNSCC = head and neck squamous cell carcinoma; POC = proof of concept; PMDA = Pharmaceuticals and Medicines Device Agency

^{1.} Yuen MF et al. Phase 2a, randomized, double-blind, placebo-controlled study of an antisense inhibitor (ISIS 505358) in treatment-naïve chronic hepatitis B (CHB) patients: safety and antiviral efficacy. Poster presented at AASLD, The Liver Meeting, November 8-12, 2019, Boston. 2. World Health Organization STD Fact Sheet 2016: https://www.who.int/en/news-room/fact-sheets/detail/sexually-transmitted-infections-(stis)

^{3.} Workowski KA, Berman SM, Douglas Jr. JM. Emerging antimicrobial resistance in Neisseria gonorrhoeae: urgent need to strengthen prevention strategies. Ann Intern Med. 2008;148(8):606-13

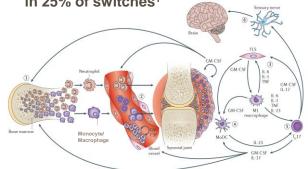
^{4.} Antibiotic Resistance Threats in the United States. US CDC https://www.cdc.gov/drugresistance/biggest-threats.html

GSK'165 (aGM-CSF): potential for a disease modifying effect in rheumatoid arthritis (RA) with a unique impact on pain



The target	 GM-CSF is a pro-inflammatory cytokine that induces differentiation and proliferation of granulocytes and macrophages One of the first cytokines detected in human synovial fluid from inflamed joints Preclinical data suggests a broader range of actions than existing biologics (including a beneficial effect on pain)
The agent	GSK'165 is a fully humanised antibody targeting anti-granulocyte macrophage colony-stimulating factor (aGM-CSF)
Current status	 Phase III started for RA in July 2019 Exploration of additional indications beyond RA

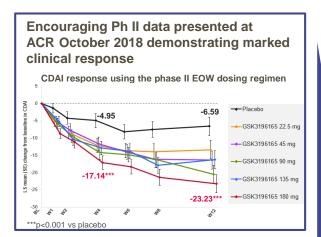
- Unmet need remains in RA despite development of new classes of agent (JAK inhibitors, anti IL6): ~50% of patients do not achieve low disease activity criteria within 12 months of aTNF treatment and ~80% do not achieve Disease Activity Score 28 (DAS28)¹
- Currently 45% of patients report daily pain despite treatment with targeted therapies and pain is the key driver in 25% of switches¹



¹ Targeting GM-CSF in inflammatory diseases. Ian P. Wicks & Andrew W. Roberts. Nature Reviews Rheumatology volume 12, pages 37–48 (2016)

GSK'165 (GM-CSF antagonist): phase III programme in rheumatoid arthritis started in July 2019

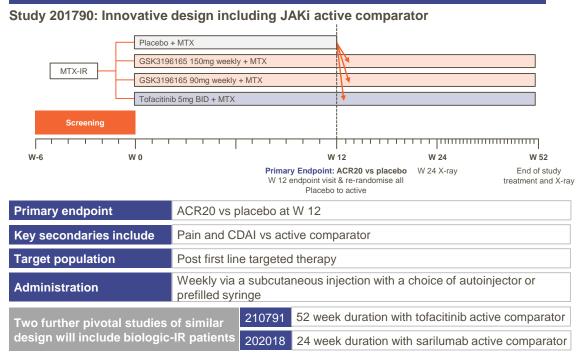




Significant unmet need remains in RA

- Around 50% of patients do not achieve low disease activity criteria within 12 months of aTNF treatment¹
- 45% of patients report daily pain and pain is the key driver in 25% of switches to biological and oral therapies²

Three pivotal studies to support file end 2023



Gepotidacin: a first in class novel oral antibiotic

gsk

Potential to transform treatment landscape for patients with limited therapeutic options

uUTIs: common health problem with need for new options for resistant infections

Over 50% of all women develop at least one UTI in their lifetime and >24% experience recurrent UTIs¹

10.5m office visits for UTI symptoms and ~11m prescriptions annually in the US 2,3

Current treatment options are established generic antibiotics but increasing antimicrobial resistance (AMR) drives need for alternatives to current antibiotics

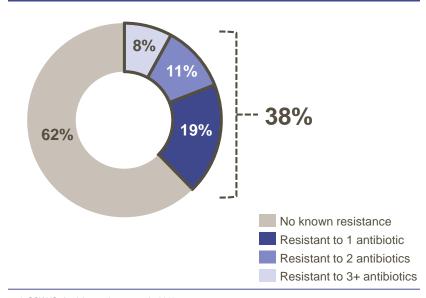
Gepotidacin:

- Novel mechanism of action; Active against most antibiotic resistant bacteria
- Twice daily, oral dosing, short course (5 days uUTI, 1 day GC)
- 650 subjects have received gepotidacin to date
- Majority AEs mild-to-moderate & do not lead to discontinuations

Phase 3 studies initiated for uUTIs and urogenital gonorrhea; results expected by end 2021

uUTIs - uncomplicated Urinary Tract Infections GC - urogenitial gonorrhea

Market research shows ~40% of uUTI patients have infections with antibiotic resistance⁴



4. GSK US physician market research, 2019

^{1.} Foxman,B. Epidemiology of urinary tract infections: incidence, morbidity, and economic costs. *The American Journal of Medicine*. 2002; 113(1):5-13

Flores-Mireles AL, et al. Urinary tract infections: epidemiology, mechanisms of infection and treatment options. Nat Rev Microbiol. 2015;13(5):269–284

^{3.} Foxman, B, et.al.. Urinary tract infection: self-reported incidence and associated costs. Ann Epidemiol. 2000; 10: 509–515.

Vaccines

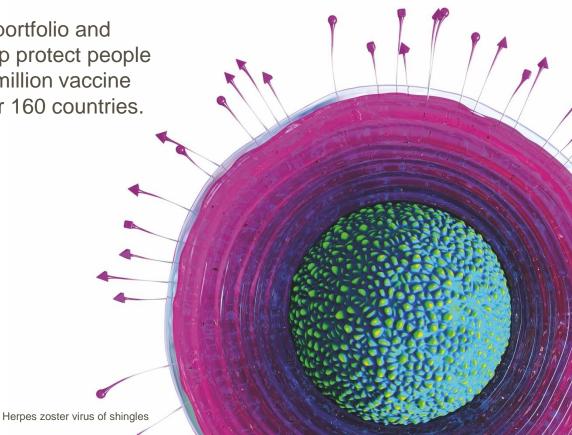
Our Vaccines business has a broad portfolio and innovative pipeline of vaccines to help protect people throughout life. We deliver over two million vaccine doses per day to people living in over 160 countries.

£7.2bn, +19% CER

Sales turnover 2019

Key Products

Shingrix	Shingles
Infanrix/Pediarix	Paediatric
Bexsero, Menveo	Meningitis



Attractive market dynamics



Expanding and durable market

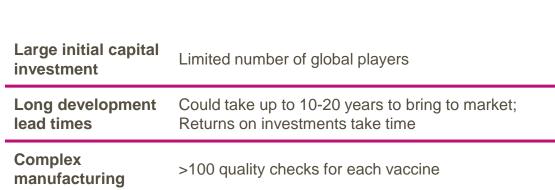
Attractive demographics

Long product lifecycles

Growing and ageing population Increasing vaccination rates

No 'patent cliffs'

Barriers to entry

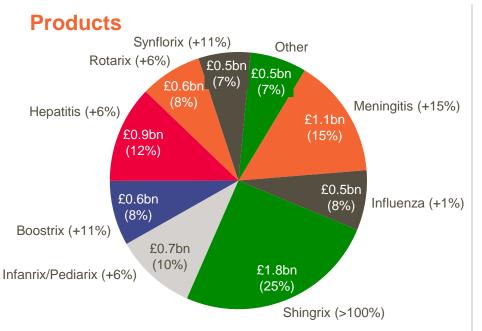


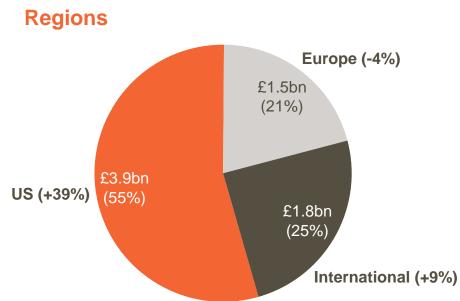
Steady forecast growth with potential for pharma-like operating margins and cash conversion

Vaccines: revenue breakdown 2019



Revenues of £7.2bn (+19% CER)

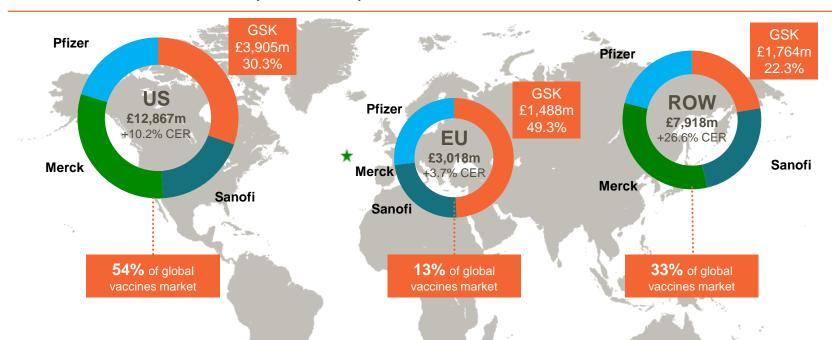




GSK Vaccines is well positioned in US, EU and ROW



2019 Vaccines sales for top four companies

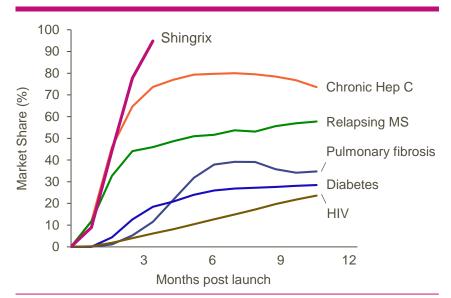


GSK has highest global market share by value of the big 4 vaccines companies with 30.1%

Shingrix: US launch driving market expansion

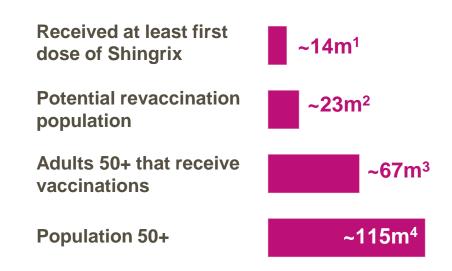


Share uptake superior to recent benchmarked biopharma launches



Source: Internal calculations by GSK using IQVIA database.

Significant US opportunity remains



^{1.} Estimated based on IQVIA TRxs launch through end of Dec 2019.

^{2.} US Census & CDC reported immunisation rate.

^{3.} US Census & IQVIA Patient Data Analysis (Estimated % of adults who have received vaccinations when 50+).

^{4.} US Census.

Bexsero: leading the market in Meningitis B



Invasive Meningococcal B disease

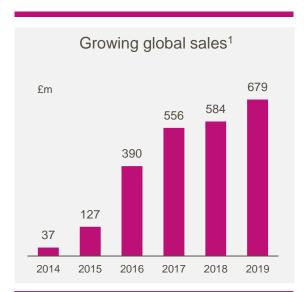
Incidence and serotype distribution varies by region; most common serogroup is Men B

Affects healthy infants, children and teens

Invasive Men B mortality rate: ~10%

Dramatic health impact: rapid disease progression, up to 20% of those who survive may suffer major physical or neurological disability

Sales growth driven by global demand and US share gains



Launched in 35 markets

EU: Strong competitive differentiation with infant indication: incidence in infants >10x that in adolescents (competing product indicated for adolescent use only)

US: 72% market share of fast growing MenB market²; infant indication studies ongoing

^{1. 2014} and 2015 figures represent 12 month pro forma sales (unaudited).

^{2.} US Men B market grew +22% in 2019.

Established vaccines and flu: durable assets provide portfolio backbone



Strategic lifecycle management enables a durable, cash generative portfolio

Hepatitis franchise

- Supply agility created opportunities
- Engerix-B approved in US in 1989

£874m in 2019





DTP franchise¹

- Hexa competition in Europe; expected in US
- Boostrix 65+ age expansion approved in US in 2011

£1,317m in 2019





Flu franchise

- First approval in US in 2005
- Highly seasonal
- GSK: ~46m US doses in 2019/20

£541m in 2019





Rotavirus

- Available in 115 markets
- · 2 dose differentiation
- Pursuing PCV-free² liquid formulation for the US

£558m in 2019



^{1.} Diphtheria, tetanus, pertussis.

^{2.} Porcine circovirus free formulation.

GSK Vaccines pipeline

Shigella *

Malaria (next generation) *



Commercial assets Global Health assets Lifecycle management Registrational Phase 1 / 2 Phase 2 Phase 3 AS01 Therapeutic COPD * Shingrix IC * ^ RSV older adults * AS01 AS01 Bexsero paediatric (US) Therapeutic chronic hepatitis B RSV paediatric Rotarix liquid (PCV free 1) ^ AS01 MMR (US) RSV maternal * Clostridium difficile AS01 SAM (rabies model) **MenABCWY** Menveo liquid

AS01

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

[^] Filed in EU in Q4 2019

^{1.} Porcine circovirus free formulation.

Accelerating our innovative vaccine candidates

Key data anticipated this year for RSV and COPD



Respiratory syncytial virus (RSV) vaccine

- 177,000 hospitalisations and 14,000 deaths in older adults
- 50% of infants are infected before 1 year of age, and virtually everyone gets an RSV infection by 2 years of age
- Targeting protection across all ages with high burden

1) Maternal

- Maternal antibodies to confer protection for first 6 months
- ~4m annual birth cohort*

2) Paediatric

- Immunological priming to confer protection from 4 months to 2 years old
- ~4m annual birth cohort*

3) Older adults

- Adjuvant to confer protection beyond 60 years of age
- ~70m age 60+**

All three candidates have FDA fast track designation and key data in 2020

COPD therapeutic vaccine

- Targeted at reducing acute exacerbations
- 75% of exacerbations are linked to infections¹: 30-45% are associated with two bacteria (haemophilus influenzae and moraxella catarrhalis)²
- Extracted functional antigen from these bacteria and combined with GSK's AS01e adjuvant system
- Ph2 POC study ongoing in adults age 40-80 with COPD

POC data expected H2 2020

^{1.} Sethi & Murphy 2008 and Sethi S & Murphy N Engl J Med 2008

^{2.} Wilkinson et al Thorax 2017.

^{*} US birth cohort: https://www.cdc.gov/nchs/fastats/births.htm.

^{**} US Census: https://www.census.gov/data/tables/2018/demo/age-and-sex/2018-older-population.htm

Vaccines R&D priorities



Priorities

Accelerate key pipeline assets	- COPD - RSV
Strategic lifecycle management	Shingrix immuno-compromisedMeningitis
Focus early pipeline on high potential areas	Therapeutic vaccinesAntimicrobial resistance
Advance disruptive technologies	Adjuvant systemsSAM technology
Leverage partnerships	VBIInnovax and Xiamen University
Evolve R&D culture	Science-ledSmart, accountable risk-taking

Pipeline progress

Start of clinical studies

First trials in humans

- Therapeutic hepatitis B vaccine candidate: H1 2019
- Clostridium difficile vaccine candidate: H2 2019
- SAM technology (rabies model): H2 2019

Key data readouts

- COPD: H2 2020
- RSV older adults: H2 2020*
- RSV maternal: H2 2020
- RSV paediatric: H2 2020

Consumer Healthcare

Our Consumer Healthcare business develops and markets an innovative portfolio of consumer preferred and expert recommended brands in the Oral health, Pain relief, Respiratory, Skin health, Nutrition and Digestive categories.

£9.0bn, +17% CER

Sales turnover 2019

Key brands

Sensodyne	Oral health	
Voltaren	Pain relief	
Centrum	Vitamins	

Novamin, a key technology in Sensodyne Repair and Protect

Integration progressing rapidly



#1 in OTC

 Leadership positions in Pain Relief, Respiratory and VMS¹

#1 position in Therapeutic Oral Health²

Strong geographic footprint

- #1 in US, #2 in China¹
- ~1/3 of sales in EMs³



Integration initiated and progressing on track

Complementary strengths in innovation, digital and retail

Value creation

- £0.5bn cost synergy potential
- Investing in growth

^{1.} GSK analysis based on Nielsen, IRI and Euromonitor data; 2. Nicholas Hall's DB6 Global OTC Database, 2018

^{3.} Based on Q4 2019 reported results of the JV and excluding any impact from planned future divestments

Creation of the world's leader in Consumer Healthcare

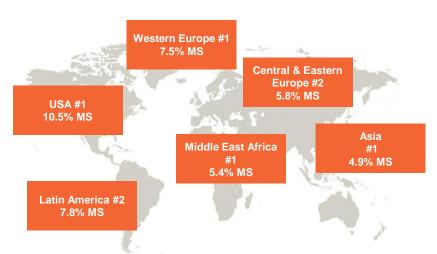


With scale and strong capabilities, powered by category leading brands and science based innovation

Leadership in key categories

OTC leadership in key geographies

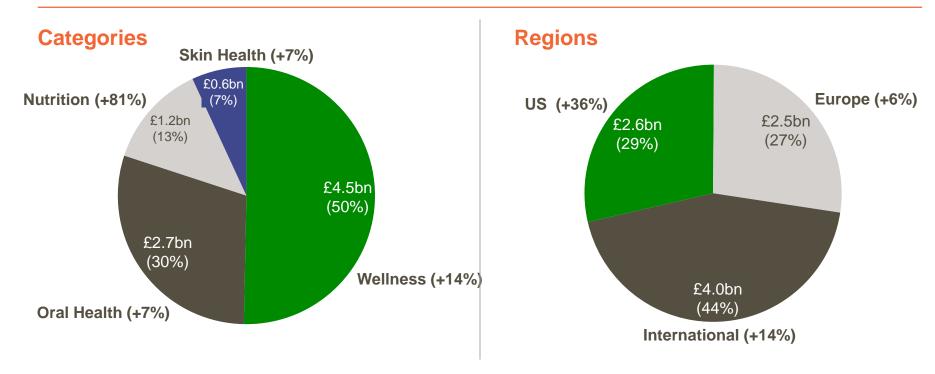




Consumer Healthcare: revenue breakdown 2019



Revenues of £9.0bn (+17% CER, +2% Pro-forma), including 5 months of Pfizer sales

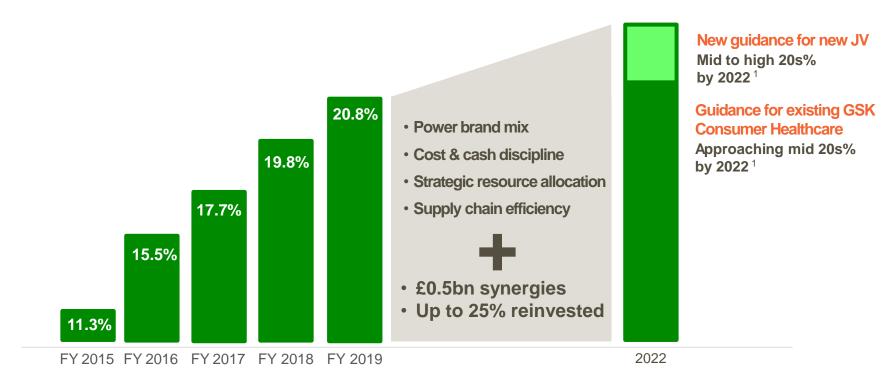


Source: GSK Full year 2019 results release - February 2020

All growths at constant exchange rates (CER). Breakdown percentages are approximate

Deliver an industry leading margin





¹At 2017 constant exchange rates. Expected 20%+ operating margin by 2020 at 2015 constant exchange rates. Historical margins shown for the GSK Consumer Healthcare segment are at respective actual rates

Path to separation



Enhances financial flexibility and investment capacity

Presents a clear pathway forward for GSK

Creates a new leading biopharma company and

New leading Consumer Healthcare company

Each with a balance sheet and capital structure appropriate to its requirements

New consumer healthcare company

Targeting investment grade balance sheet

Leverage of 3.5-4.0x net debt/Adjusted EBITDA at point of separation

Target payout ratio in the range of 30-50% of Adjusted earnings



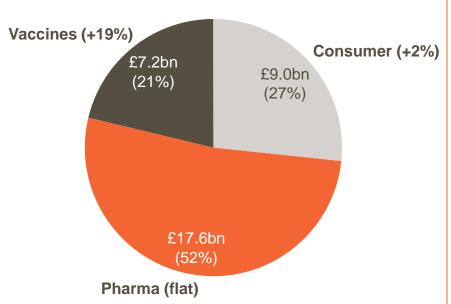
Financials

Group: revenue breakdown 2019

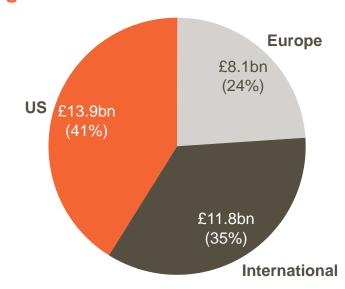
Revenues of £33.8bn (+8% CER)







Regions



Source: GSK Full year 2019 results release - February 2020

2020 outlook



Adjusted EPS/Dividend

Adjusted EPS guidance:

Decline -1% to -4% at CER excluding divestments

Dividend

Expect 80p for 2020

Pharmaceuticals

Turnover

Slight decline excluding divestments

Operating costs

SG&A and R&D

R&D investment to grow at a similar rate to 2019

Continued investment in new launches and building specialty capability

Vaccines

Turnover

Annualising Shingrix Q419 performance with some slight improvements is a reasonable run rate for 2020

Other

Royalties

Around £300m

Net finance expense

Between £850-900m

Effective Tax rate

Around 17%

Consumer Healthcare

Turnover

Revised external category reporting structure to be in place from Q1 2020

Transaction

Nutrition sale to Unilever expected around the end of Q1 2020¹

Note: all outlooks at CER. Full 2020 EPS guidance can be found on page 2 of our Fourth Quarter 2019 press release.

¹ Subject to legal and regulatory approvals
All expectations and targets regarding future performance should be read together with the "Outlook assumptions and cautionary statement" sections of the Fourth Quarter 2019 Results Announcement and the
cautionary statement slide included with this presentation

2020 guidance and considerations for the next two years



2020 2021 2022 Guidance: Adjusted EPS decline -1 to -4 % at CER Shingrix slight improvements to Q4 2019 run rate Shingrix limited opportunity for further growth Pharma revenues slight decline Increasing revenues from new launches Investment in R&D and future growth drivers 2-year separation programme and savings CH JV integration, synergy delivery and investment in growth drivers

All expectations and targets regarding future performance should be read together with the "Outlook assumptions and cautionary statement" sections of the Fourth Quarter 2019 Results Announcement and the cautionary statement slide included with this presentation

Dividend policy



Expect to rebuild dividend cover over time

We will distribute regular dividend payments determined primarily with reference to free cash flow generated after meeting investment requirements

2019

We paid 80p dividend per share

2020

Expect to pay 80p dividend per share

Free cash flow cover

Focus on rebuilding free cash flow cover over time

Target 1.25x to 1.5x FCF cover before returning to dividend growth

Currency



2019 currency sales exposure

US\$	41 %
Euro €	18 %
Japanese ¥	6 %
Other*	35 %

- The other currencies that each represent more than 1% of Group sales are: Australian Dollar, Brazilian Real, Canadian Dollar, Chinese Yuan, Indian Rupee, Russian Rouble.
- In total they accounted for 13% of Group revenues in 2019.

2020 Adjusted EPS ready reckoner

US\$

10 cents movement in average exchange rate for full year impacts Adjusted EPS by approx. +/- 5.5%

Euro €

10 cents movement in average exchange rate for full year impacts Adjusted EPS by approx. +/- 1.5%

Japanese ¥

10 Yen movement in average exchange rate for full year impacts Adjusted EPS by approx. +/- 1.0%

If exchange rates were to hold at the closing rates on 31 January 2020 (\$1.31/£1, €1.19/£1 and Yen 143/£1) for the rest of 2020, the estimated negative impact on 2020 Sterling turnover growth would be around 3% and if exchange gains or losses were recognised at the same level as in 2019, the estimated negative impact on 2020 Sterling Adjusted EPS growth would be around 5%.

Expected costs and savings under Major Restructuring Programmes



	Date	£bn	Cumulative	2019	2020	2021	2022	2023	
	Announced	2019 Average Rates	Actuals to 2018	Actuals		Projected ¹			
Combined		Savings ²	3.9	4.2	4.3				
Integration & Restructuring	2015	Total charges	5.2	0.1	0.1				
Programme ³		Cash payments	3.6	0.3	0.1				
2018 Restructuring Programme	Q2'18	Savings ²		0.2	0.4	0.5			
		Total charges	0.4	0.8	0.4	0.2			
(incl. Tesaro)		Cash payments	0.0	0.2	0.3	0.2	0.1		
		Synergies ²			0.2	0.4	0.5		
Consumer JV	Dec-18	Total charges		0.3	0.5	0.1	0.1		
		Cash payments		0.2	0.4	0.1	0.0		
Separation Preparation	Feb-20	Savings ²			0.1	0.3	0.7	0.8	
		Total charges			0.9	0.9	0.6	0.0	
Programme ⁴		Cash payments			0.5	0.7	0.4	0.0	

¹ All expectations and targets regarding future performance should be read together with the "Outlook assumptions and cautionary statement" sections of the Fourth Quarter 2019 Results Announcement and the cautionary statement slide included with this presentation.

² Savings and synergies shown are cumulative for the programme to date throughout the table

³ The Combined Integration and Restructuring programme is substantially complete, therefore GSK will cease external reporting of total costs and benefits for this programme from 2020 onward.

⁴ Does not include additional one-time costs to prepare Consumer Healthcare for separation, estimated at £600-700m, excluding transaction costs

Preparing for 2 new companies



2-year separation programme

New GSK

Common approach to R&D and capital allocation

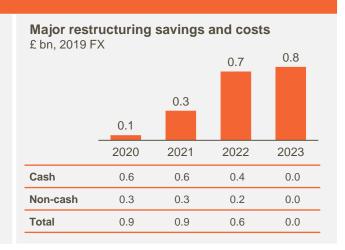
Capabilities and efficiencies in support functions

Leaner organisation, leveraging recent and ongoing technology investments, consistent operating models and location strategy

Optimise supply chain and product portfolio including through non-core divestments

25% manufacturing footprint reduction since 2017 – maintain momentum, competitive network fitting portfolio by 2022

Non-core divestment proceeds to fund cash costs of programme and delivering New GSK



New Consumer Healthcare

Build technology infrastructure and corporate functions required to operate as a standalone companyEstimated one-time charge of £600-700m with the majority incurred prior to separation
No change to Adjusted operating margin outlook of mid-to-high 20s by 2022 for Consumer Healthcare



Latest Financials

2019 Group sales and earnings growth in year of progress



Pharmaceuticals flat CER

Respiratory* +15%

HIV +1%; dolutegravir +2%

Benlysta +25%

Zejula sales of £229m

Vaccines +19% CER

Shingrix sales of £1,810m,+>100%

Meningitis +15%

Consumer Healthcare +17% CER

Pro forma +2%

Oral health +7%

Wellness +14% (pro forma flat)

Group sales growth of +8% (pro forma +4%)

26.6% Group Adjusted operating margin

Total EPS of 93.9p, +23%; Adjusted EPS of 123.9p, +1%

FCF of £5.1 billion

All growth rates and margin changes at CER

The definitions for non-IFRS measures are set out on pages 60 of our FY 2019 earnings release, and reconciliations are set out on pages 21 and 35 *Respiratory refers to the Ellipta portfolio and Nucala

Headline results



	2019	Reported growth %		
	£m	AER	CER	
Turnover*	33,574	10	8	
Total operating profit	6,961	27	23	
Total EPS	93.9p	27	23	
Adjusted operating profit*	8,972	3	-	
Adjusted EPS	123.9p	4	1	
Free cash flow	5,073	(11)	n/a	

^{*} For 2019 on a pro-forma basis, Turnover growth was 4% CER and Adjusted operating profit declined -3% CER

Results reconciliation





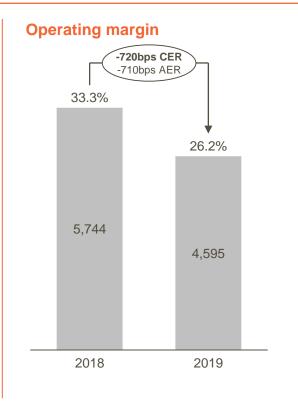
	Total results	Intangible amortisation	Intangible impairment	Major restructuring	Transaction related	Disposals, significant legal and other	Adjusted results
Turnover (£bn)	33.8						33.8
Operating profit (£bn)	7.0	0.8	0.1	1.1	0.3	(0.3)	9.0
EPS (pence)	93.9	12.6	1.3	18.2	1.2	(3.3)	123.9
2018 EPS (pence)	73.7	9.6	2.0	13.1	30.2	(9.2)	119.4

Pharmaceuticals

2019







Sales

- New launches: Trelegy, Nucala, Juluca, Dovato
- + Ventolin AG
- + Continued strong Benlysta performance
- Impact of generic Advair

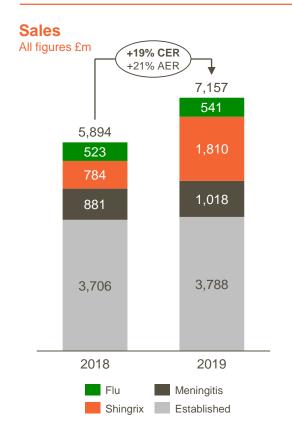
Operating profit

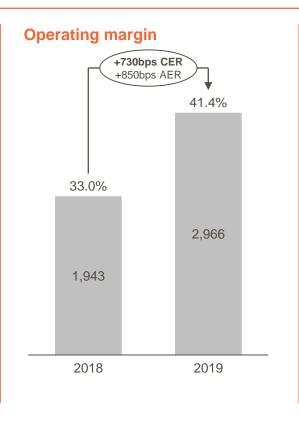
- + Tight control of costs
- Impact of generic Advair
- Investment in R&D and new product support
- Addition of Tesaro cost base

Vaccines

gsk

2019





Sales







Operating profit

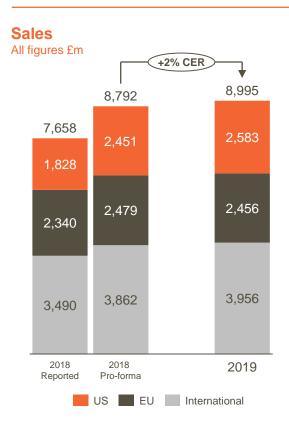
Operating leverage

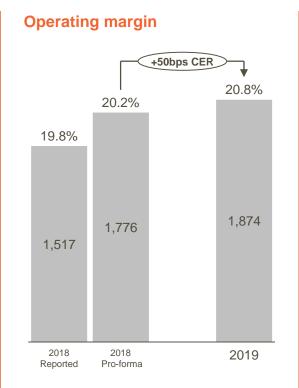


Consumer Healthcare

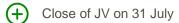
gsk

2019





Sales





Strong growth in International

Divestments & phasing out of contract manufacturing c.1%

Respiratory performance

Operating profit

Manufacturing restructuring benefits

(+) Continued strong cost control

Targeted brand investment

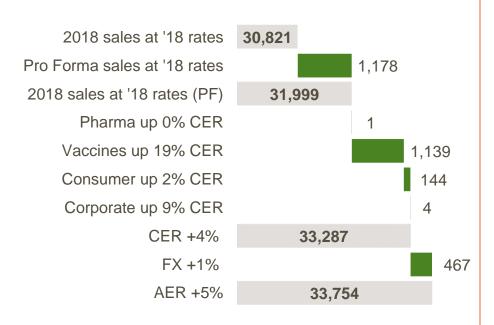
Sales and Adjusted operating margins



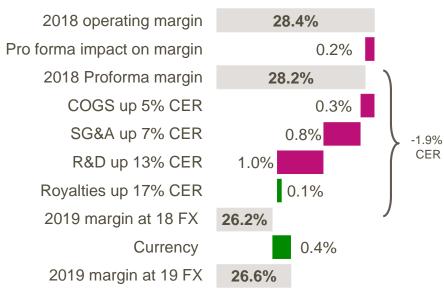
2019

Sales

All figures £m



Adjusted operating margin



Adjusted operating profit to net income



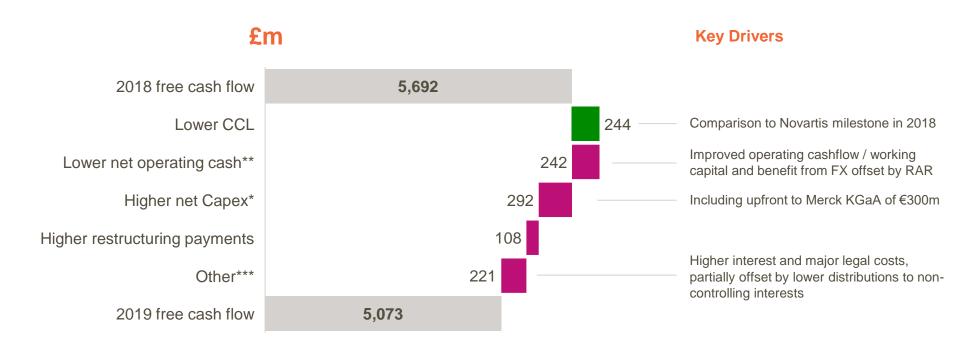
Continued delivery of financial efficiency

	2018	2019	
	£m	£m	2020 Outlook*
Operating profit	8,745	8,972	
Net finance expense	(698)	(810)	···· Between £850-900m
Share of associates	31	74	
Tax	(1,535)	(1,318)	
Tax rate	19.0%	16.0%	···· Around 17%
Non-controlling interests	(674)	(787)	
Net income	5,869	6,131	•

^{*} All expectations and targets regarding future performance should be read together with the "Outlook assumptions and cautionary statement" sections of the Fourth Quarter 2019 Results Announcement and the cautionary statement slide included with this presentation

2019 free cash flow of £5.1bn





CCL: contingent consideration liability

^{*} Net Capex includes purchases less disposals of PP&E and intangibles

^{**} Net operating cash is net cash inflow from operating activities including changes in working capital, excluding restructuring, operating CCL, and significant legal payments

^{***} Other includes significant legal payments, net interest paid, income from associates and JVs and distributions to minorities

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