

GlaxoSmithKline
Q4 2018 Results
Investor & Analyst Call
Wednesday, 6 February 2019

Sarah Elton-Farr (Head of Investor Relations): Good morning and good afternoon. Thank you for joining us for our full-year 2018 results which were issued earlier today. You should have received our press release and can view the presentation on GSK's website. For those not able to view the webcast, slides that accompany today's call are located on the Investor section of the GSK website.

Before we begin, please refer to slide 2 of our presentation for our cautionary statements.

Our speakers today are Chief Executive Officer, Emma Walmsley; Simon Dingemans, Chief Financial Officer, and Dr Hal Barron, Chief Scientific Officer and President of R&D. We have a broader team available for Q&A. We request that you ask only a maximum of two questions so that everyone has a chance to participate.

Our presentation will last for approximately 45 minutes – slightly longer than usual – to give Hal time to update you on our R&D progress. With that, I will hand the call over to Emma.

Emma Walmsley: Thank you, Sarah. Before we take you through our 2018 achievements, as this is the last quarter that Simon will be representing GSK, I would really like to take the opportunity to reiterate my sincere thanks and appreciation to him for all he has done for the company over the last eight years. Our CFO designate, Iain Mackay, is also on the call today, just in listening mode this time. He will be in role in April, so you will hear from him on our Q1 call in May. I am absolutely delighted to welcome him to our team.

In 2018, we have made good progress across the Group, with improvements in sales, the Group operating margin, earnings per share, and cash flow. Group sales growth of 5% in CER terms reflected an increase in sales in all three of our global businesses, with a particularly strong performance in Vaccines. The Pharma business continues to shift its portfolio shape with excellent new launch growth and, although Consumer had a slower quarter, we remain confident and excited about the outlook for this business.

Group operating margins this year were up 50 basis points on a CER basis. On a Total basis, earnings per share more than doubled to 73.7 pence and Adjusted earnings per share were up 12% CER.

Our free cash flow position continues to improve and we are particularly pleased with the underlying improvement in our cash flow. For the year, free cash flow was almost £5.7 billion, up 63% in actual terms versus last year. Today, we declared a dividend in respect of the fourth quarter of 23 pence, resulting in a total dividend for 2018 of 80 pence.

When I became CEO of GSK in 2017, I laid out my three long-term priorities for the company: innovation, performance and trust – all to be powered by a necessary change in culture. In 2018, we made significant progress on accelerating these priorities and improved our operating performance and reshaped the Group's portfolio, including development of the pipeline. We put in place new leadership, who are already driving shifts in our culture. We put a clear focus on launch execution and have had considerable success, notably with *Shingrix*, but also with *Trelegy* in Respiratory, and the first of our two-drug regimens in HIV.

Our clear priority is to improve Pharma performance and pipeline. Luke Miels, President of Commercial Pharma, has been restructuring, to focus our commercial operations alongside a reduced manufacturing footprint. Last July Hal, our Chief Scientific Officer, laid out our new R&D approach, with a focus on science related to the immune system, the use of genetics and advanced technologies. He will update you more on our good progress since then later.

We have also made significant progress in reshaping the portfolio. Our first focus was R&D programme prioritisation and here we have terminated or divested around 80 programmes since 2017, including seven within the last few months, to invest more behind the potential medicines we see bringing greater value to patients and stronger growth for GSK. Of particular note is the expansion in oncology, from eight drugs in the clinic in July last year, to now 16, with three pivotal study read-outs by year end. We have stepped up Business Development, be it in our partnership with 23andMe, the recently-closed transaction with TESARO or the global alliance we announced just yesterday with Merck KGaA, Darmstadt, Germany.

We have made non-core divestments such as the announced divestment of Horlicks to Unilever. We have successfully bought out the Novartis stake in Consumer Healthcare and, at the end of the year, we made our most transformational announcement to date with a plan to create a new joint venture with Pfizer.

***Shingrix*: driving market growth**

Let me look briefly now at the new product launches. We have seen a very strong start to *Shingrix* in 2018 with sales of £784 million in its first full year. We have now administered more than nine million doses globally since launch and, as we said last quarter,

we are working hard to build capacity and meet long-term global demand and we have made good progress on this.

Respiratory: continued strong growth from new products

Moving to Respiratory, *Trelegy* has achieved sales of £156 million in its first full year. Labels in both the US and Europe have been updated with data from the landmark IMPACT study showing benefit over dual therapies, and the international roll-out continues.

We expect the recently-approved generic *Advair* to have minimal impact on this highly differentiated product: the first approved, once-daily single inhaler triple therapy for COPD and we look forward, too, to the CAPTAIN study for *Trelegy* in asthma, which is expected to report in the spring. We continue to see strong performance also from our injectable asthma therapy *Nucala* despite the introduction of two new biologics during 2018. With additional investment, new patient growth in the US has improved and, in other key markets where competition has also launched including Germany and Japan, *Nucala* continues to lead both the total market and in new patients.

In 2019 we do expect the competition to intensify and near-term growth will be lower but we believe the market opportunity is still significant with less than 25% of suitable patients receiving therapy today, and we are excited about the opportunity to provide the convenience of home administration and have filed for US and EU approval of an autoinjector.

HIV: performance strong across DTG portfolio and momentum building for the 2DRs

2019 is another important year for our HIV business and two drug regimens. In 2018 the dolutegravir portfolio grew at 16%, benefitting from the launch of *Juluca* with its first full year of sales of £133 million, demonstrating an encouraging indication of uptake for our two drug regimens. We are maintaining our US market share at 27% in a competitive marketplace.

We anticipate US approval for our dolutegravir and lamivudine combination in Q2.

We are also progressing our long-acting injectable two-drug regimen, cabotegravir and rilpivirine, and will be presenting data from the pivotal ATLAS and FLAIR studies at a conference shortly. Regulatory filings are planned for later this year as well as for our therapy for heavily pre-treated patients, fostemsavir.

These two-drug regimens will help drive our long-term growth, while bringing more treatment options to patients to help them manage their HIV with less impact on their lives.

Focus on delivering business priorities

In summary, we have seen good progress in 2018 in operational performance, in reshaping the portfolio and in strengthening the pipeline, and we shall build on this progress in 2019.

In Innovation, we shall focus on strengthening the pipeline further, particularly our growing portfolio of assets in Oncology and, of course, we shall stay very focused on the execution of our recent and upcoming launches.

In Performance, we shall continue to drive growth in operating performance across the group and we shall work hard to plan for the integration with Pfizer's Consumer business, which we expect to close in the second half of the year.

On Trust, we want GSK to continue to lead with a broader contribution to society. Our first priority here is to innovate and we shall give you regular and transparent updates on our pipeline progress, so you will hear again from Hal at Q2.

For Trust building, we also remain very committed to our Global Health agenda, focused for impact on infectious diseases in the developing world. Because everything and anything we achieve comes from the talent, energy and engagement of our people, we aim to be a modern employer to attract and retain the very best.

So, after a year of progress in 2018, we are ambitious again this year. We believe we have the right teams in place to make it happen and we have laid out a clear pathway over the next few years to the creation of two exceptional businesses. We shall have a new, focused global Pharma and Vaccines company and we shall create a new, world-leading Consumer Healthcare company. With that, I shall hand you over to Simon.

2018 results and 2019 guidance

Simon Dingemans: Thank you, Emma. I am delighted to be presenting to you such a strong set of results, my last as CFO after 32 quarters. I am sure you will have saved some particularly challenging questions to round everything off, so I'm looking forward to answering those later on.

Overall, the Group's results for the year are ahead of the top end of our guidance and demonstrate continued operational execution of our key strategic objectives with strong performances in all three businesses. Our earnings release provides an extensive amount of information, so I will focus on major points, our expectations for 2019 and important comparators to note for your models. As usual, my comments today will be on a constant

currency basis except where I specify otherwise and I will cover both Total and Adjusted results.

Headline results

Continued sales growth and investment in the future

Starting with the headline results, Group sales up 5% to £30.8 billion, Total EPS more than doubled to 73.7 pence and Adjusted EPS were up 12% to 119.4 pence.

Total operating profit was £5.5 billion, up 43% and showed strong progression on 2017. Higher charges for the revaluation of acquisition related liabilities, principally the ViiV CCL were more than offset by a stronger operating performance, lower restructuring costs, lower asset impairment charges and a favourable comparison with the charges taken in 2017 related to US tax reform of £0.7 billion.

Adjusted operating profit grew at 6% with operating margin up 50 basis points, driven by margin growth in Vaccines and Consumer Healthcare. Pharmaceuticals operating profit was flat with operating margin impacted by continued investment in our new products and a weaker gross margin in the face of ongoing pricing pressures.

Free cash flow delivery was significantly stronger at £5.7 billion, up £2.2 billion, reflecting continued focus on cash conversion throughout the Group with particular progress this year on working capital management.

We have delivered on the dividend expectations we laid out with 80p declared for 2018 and we also expect 80p for 2019.

Net debt ended the year at £21.6 billion, the increase from last year primarily driven by the £9.3 billion buy-in of Novartis's Consumer stake and an adverse FX translation impact of £0.8 billion, partly offset by the improvement in free cash flow that was significantly ahead of the dividend.

On currency, a slightly stronger sterling compared with 2017, particularly against the US dollar, resulted in a headwind of 3% on sales and 5% to Adjusted EPS.

Results reconciliation

The next slide summarises the reconciliation of our Total to Adjusted results for the year and the rest of my comments will be on our Adjusted results.

Sales growth

Growth at CER across all three businesses

Turning to the top line, sales were up 5% driven by momentum in all three businesses.

Pharmaceuticals

Sales within the Pharma business were up 2%, driven by HIV which grew 11% for the year as well as the new Respiratory products.

Within HIV our dolutegravir portfolio continued to grow strongly, up 16%. Q4 saw good growth in International, offset by a slower quarter in the US which was adversely impacted by year-on-year stocking patterns which roughly halved the US reported growth rate of 3%. We continue to expect HIV will be a meaningful growth driver, including in 2019, as we build on the successful launch of *Juluca* and expand our two-drug regimens.

Respiratory sales grew 1% with growth from the *Ellipta* portfolio, particularly *Trelegy* and *Nucala*, more than offsetting lower sales of *Seretide/Advair*.

US *Advair* sales in 2018 were £1.1 billion, a decline of 30% and with the recent approval of a generic we have factored into our guidance a significant decline in *Advair* in 2019. In the short term, you should also expect particular volatility across Q1 and Q2 as the market adjusts inventory levels and responds to the supply available.

Relvar/Breo sales were up 10% for the year, driven by momentum in Europe and International which offset a slight decline in the US. Given the expected impact on the ICS/LABA class of generic *Advair*, we expect *Breo* will see a sharper decline in the US in 2019, resulting in a slight global decline for *Relvar/Breo* despite continued good growth expectations outside of the US.

We continue to focus on driving value and cash generation in our established Pharmaceuticals portfolio which declined by 4% for the year at the better end of our expectations. Q4 benefitted from around £80 million of additional sales resulting from post-divestment contract manufacturing sales and the first instalment of a newly won *Relenza* tender.

From Q1 2019 we will report the older respiratory products, including *Advair/Seretide*, within established Pharmaceuticals, and we will give you restatement information ahead of Q1 so that you can update your models.

With the approval of a generic competitor to *Advair*, we expect the pharmaceutical business, overall, to see a slight sales decline in 2019, before returning to growth in 2020,

driven by our new products. This includes the expected top-line contribution from *Zejula* now that we have closed the TESARO acquisition.

Zejula sales for 2018 were \$230 million, impacted by some adverse mix and some de-stocking in Q4, but overall share at the end of the year was very much as we expected. Our focus in 2019 will be on building the penetration of the class, but the PRIMA readout later this year will be key in expanding the market and our share.

Vaccines

Moving to Vaccines, sales were up 16%, driven primarily by *Shingrix*, a strong performance in hepatitis and good flu vaccines sales, as well as market and share growth for *Bexsero*, offset by some declines in *Menveo* and a number of other established vaccines.

Shingrix sales were slightly ahead of our 2018 guidance as we made further progress in accelerating our production plans. More than nine million doses have been administered since launch a little over a year ago, and we continue to target high-teens millions of doses over the next two or three years.

Importantly, we now have in place the detailed capacity plans necessary to deliver the meaningful increase in doses this target implies.

Those plans include a significant step-up in doses for 2019 so that we can maintain the momentum that was established through the second half of last year behind this important vaccine, and ensure patients can complete their two-dose course.

Flu sales up 10% as we increased share, delivering 43 million doses in the US. Across the year we saw some pricing pressure, which we expect to continue into 2019 with increasing competition in this category.

The Meningitis franchise overall was more mixed. *Bexsero* was up 9% with demand and share gains in the US, but more widely, momentum was dragged by the completion of cohort catch-up vaccination programmes in Europe, and *Bexsero* growth was also largely offset by *Menveo*, which was impacted by supply constraints and unfavourable CDC stock-pile movements. We expect a return to stronger growth for the Meningitis portfolio in 2019.

The momentum in the Vaccines business continues to give us confidence in the mid-to-high single digit outlook for sales compound annual growth out to 2020.

Consumer

Turning to Consumer, sales grew 2% for the year, despite a drag of around one percentage point from the combined impact of the divestment of non-strategic brands and the final quarter's impact of GST in India.

Oral Health and Wellness continued to deliver broadly-based growth and the Consumer business gained share overall across the full year.

Reported growth was impacted, though, by a weaker performance in Europe, particularly in the second half, when we saw a much tougher competitive environment. We have responded, but these plans will take through Q1 to make a full impact.

In 2019 we expect reported growth also to be impacted by the loss of around £100 million of revenue from the smaller divestments completed at the end of last year, and the phasing out of low margin contract manufacturing as we restructure the Consumer Supply Chain.

Given this drag, we now expect 2019 reported revenue growth for Consumer in the low single digits, assuming we keep the India Nutrition sales for the full year.

We remain confident in the prospects for the business and are on track with our margin objectives after another strong improvement in 2018.

Adjusted operating margin

Turning to operating profit, our Adjusted margin of 28.4% was flat at actual rates, up 50 basis points at constant currency.

COGS as a percentage of sales was 40 basis points higher at constant currency, primarily due to the continued adverse Respiratory pricing pressures we are seeing within Pharma, as well as the decline in *Advair*, and some input cost increases and some specific fourth quarter mix issues. These more than offset significant improvements in Vaccines and Consumer Healthcare.

SG&A increased by 4% in the year as we invested in our recent launches in Vaccines, Respiratory and HIV, partly offsetting this with tight control of non-promotional spending across all three businesses.

R&D costs were down 2%, reflecting the comparison with the charge for the PRV in 2017, as well as savings from recent portfolio prioritisation decisions. Investment in Oncology accelerated in the second half, and we continue to expect overall R&D spending to pick up significantly in 2019.

With the TESARO acquisition now closed, in consolidating the costs fully, you should expect about half of the operating costs to be for R&D, and the rest for Commercial, Medical and other SG&A.

Royalties were £299 million for the year, down 17%, primarily reflecting the patent expiry of *Cialis*, and I would expect 2019 royalties to be at broadly similar levels to 2018.

Operating Profit to Net Income

Moving to the bottom half of the P&L, net financing costs for the year were £698 million, reflecting higher debt following the acquisition from Novartis of their stake in the Consumer joint venture. This was slightly better than original expectations, benefiting from strong execution on our funding strategy. For 2019, as we finance TESARO but continue to optimise our funding mix, we expect net financing costs of £900-950 million. This includes the expected impact of IFRS16 and we shall give you more detail on that before the first quarter results.

On tax the Adjusted rate was at the lower end of our expectations at 19% for the year and we expect the 2019 rate also to be around 19%.

The charge for NClIs was £674 million down by £119 million from 2017, as a result of the Novartis buy-in. We shall update you on the impact on minority interests of the Pfizer JV once we have more specificity on the timing of closing. Keep in mind, overall, that we expect the deal to be broadly neutral to Adjusted EPS in 2019 and accretive to Adjusted EPS in the first full year post-closing.

Improved cash generation to £5.7 billion

Turning to cash flow, with a focus on driving greater cash discipline the Group made further significant progress this year, resulting in generating £5.7 billion of free cash flow for 2018. The increase of £2.2 billion was particularly driven by progress on working capital despite the growth in the business, especially in inventory control and stronger collections. Reductions in capex, lower legal costs, higher proceeds from intangible divestments also contributed. There were some phasing benefits but only in the order of £200-300 million.

The focus on cash conversion will continue into 2019 but, as in previous years, you should expect cash flows to be weighted to the second half. 2019 cash flows will see a step-down as the *Advair* generic flows through and we pay out the rebate payments on pre-generic sales of *Advair*. This will likely take a few quarters to unwind.

Given the improvements in cash conversion and free cash flow generation across the business over the last couple of years, we remain comfortable that the balance sheet can support our future investment requirements.

2019 guidance and 2020 outlook expectations

In 2019 we now expect Adjusted EPS to decline in the range of -5 to -9% at CER. This guidance reflects the expected impact of the recently announced transactions, as well as the approval of a substitutable generic competitor to *Advair*.

On top of the constant exchange rate performance, if exchange rates remain at 31 January closing rates for the rest of the year, we would expect a positive impact of sales growth of less than 1% and around a 1% positive impact to Adjusted EPS growth.

When we announced the acquisition of TESARO, we said that we still expected to deliver on our 2020 outlooks. Nothing has changed our post-TESARO view and we continue to expect to deliver a percentage CAGR and Adjusted EPS over the five-year period to 2020 at 2015 exchange rates at the bottom end of the range we had previously indicated of mid to high single digits.

To conclude, a strong year of operational performance in 2018 with good progress from our new products and better operating margins. I am particularly pleased with the improved free cash flow delivery after a significant focus on this across the company. We are well prepared for generic *Advair*, the business is showing good momentum and, with the important strategic moves we have made recently now in place, we are confident in the outlook for GSK. With that, I'll hand you to Hal.

R&D Update

Dr Hal Barron (Chief Scientific Officer): Thank you, Simon.

Significant progress delivered since July 2018

At Q2 I set out our new R&D approach based on Science x Technology x Culture. We made a commitment at that time to be much more transparent with you about the decisions we are taking and the progress we are making through regular updates. This is the first of those updates and I am very pleased with the advances we have made to the portfolio in the last six months.

I believe our pipeline is now more focused on our most promising assets, allowing us to accelerate them or terminate those which have less potential.

Eight assets have made encouraging progress, which I shall describe in a moment.

Overall, we have significantly strengthened our Oncology portfolio. Since Q2 we have added three new internally-generated assets to the portfolio and through business development we added five: four from the TESARO acquisition and one from the strategic

alliance with Merck jointly to develop and commercialise M7824, resulting in a doubling of the size of our Oncology clinical stage portfolio from eight to 16.

On Culture, I have made a number of key leadership appointments, most recently with Chris Corsico joining us from Boehringer Ingelheim to head up our newly-created Development organisation, as well as introducing a new, more robust governance model, which as of 1 October is up and running and I believe going very well.

In addition, we are in the process of redesigning the Discovery Performance Units (DPUs) and we shall establish a much smaller number of research units aligned with our focus on Immunology and genetically-validated targets. This is all helping us to create a culture of smart decision-making, single point of accountability and, importantly, focus.

Given the limited amount of time that I have today, I shall focus on our pipeline and defer talking about the progress we have made on technology until the next Q2 update but I could come back to this in the Q&A if you have any questions.

Broad portfolio with a growing focus on immunology

At Q2 I showed you this slide about portfolio. At the time, we had 43 potential medicines in the clinic, 27 of which were immuno-modulators.

I would now like to talk you through the progress we have made in the last six months.

Disciplined decision-making has accelerated progression of key assets

We have been focused on accelerating and strengthening our pipeline through disciplined decision-making and taking smart risks. At Q2 I signalled that there are some programmes I was optimistic about and others in which I had less confidence. Based on data (particularly interim analyses), we have been rigorous in terminating investments in the less promising candidates and have now stopped seven programmes since Q2.

These terminations have freed up resources to re-invest elsewhere in the pipeline, where we see more potential for developing transformational medicines.

As I said, eight assets have made encouraging progress and I would like to go over them now. I would just like to mention that four of the assets which are highlighted here with blue boxes I have slides in subsequent minutes which I will go into more detail on.

First, tafenoquine was approved and its two positive Phase 3 studies, DETECTIVE and GATHER, were recently published in *The New England Journal of Medicine*.

Dolutegravir plus lamivudine, our second two-drug regimen for HIV patients was subsequently filed for approval and we expect to receive that in the first half of 2019.

With regard to cabotegravir plus rilpivirine, our long-acting injectable therapy for HIV patients, we have announced positive headline data for both the FLAIR and ATLAS studies and expect to present this data as well in the first half of 2019.

We also made one of the few major advances in TB vaccine development in nearly 100 years. A preliminary read out from our ongoing Phase 2 trial was published in September in *The New England Journal of Medicine* showing the vaccine demonstrated a 54% reduction in the risk that TB infected adults would develop active disease.

I am pleased to report that our antibody to GMCSF is progressing well and we are moving into Phase 3. I will expand on this, as I mentioned, a little bit later.

Our BCMA programme has advanced significantly and at the Q2 call that we had six months ago, we mentioned that we had initiated the pivotal study. I am pleased to report that we have actually have completed [recruitment for] that study ahead of schedule.

We continue to be excited about our ICOS agonist. We have encouraging data in-house in combination with Keytruda and expect to share this at a conference probably in the second half of this year. We have also started two new clinical studies, one in combination with CTLA4 in solid tumours as well as a platform study in lung cancer.

Lastly, but equally important, is NY-ESO cell therapy. Cell therapies are an important part of our strategy and we are making good progress accelerating our first programme in solid tumours. We hope to start our pivotal study for NY-ESO in synovial sarcoma next year, moving up our anticipated launch date by almost a year. We are also evaluating activity in other tumour types, including non-small cell lung cancer with a more sensitive assay, RT-PCR assay, as well as in multiple myeloma patients where we anticipate treating our first patients early this year.

I also talked at Q2 about how we would leverage business development to optimise our portfolio and as you know we have made a lot of progress here. The TESARO acquisition has added four new clinical immuno-modulatory medicines to our portfolio and significantly strengthened our position in oncology.

Also yesterday we announced a strategic alliance with Merck to jointly develop the TGF- β trap/anti-PD-L1 bifunctional protein called M7824 for various tumour types.

In addition, since Q2 we have also had four internal molecules advance into Phase 1, three of which are in oncology.

Pipeline is advancing well

So in summary, here is the portfolio as it currently stands. You can see we have increased the number of new molecular entities in development to 46 from 43 and now 33 of which target the immune system and more importantly we believe that the quality of the portfolio is much improved.

Increased oncology focus via BD and governance

This is a view of our oncology portfolio which is clearly much more robust with twice the number of assets in the clinic than we had back in July.

We now also have a number of molecules with diverse mechanisms of action providing an opportunity for many innovative combination studies and importantly we are expecting to see three pivotal read outs this year, potentially resulting in new approvals in 2020. Those are the anti-BCMA ADC for fourth-line multiple myeloma, TSR-042, the anti-PD-1 in endometrial cancer and the PRIMA study for *Zejula* in the front-line maintenance setting for patients with ovarian cancer.

M7824: a first-in-class TGF- β / anti-PDL1 therapy

I am going to take a few minutes now to talk about the strategic alliance we announced yesterday with Merck to co-develop their first in class bifunctional fusion protein.

Despite recent advances with check point inhibition, many patients still do not respond to the anti-PD-1/anti-PD-L1 class of therapeutics. TGF- β is believed to create a suppressive tumour micro-environment and has been implicated as a resistance mechanism to the treatment of PD-L1 or PD-1 blockade.

M7824 is the first in class bifunctional fusion protein designed to simultaneously block the PD-L1 and the TGF- β pathways. It is a fully humanised IgG1 monoclonal antibody against human PD-L1 fused to the extracellular domain of the human TGF- β receptor II which functions as a cytokine trap against TGF- β 1-3

Preclinical data have demonstrated superior efficacy of this molecule versus PD-L1 monotherapy as well as benefit with chemotherapy and particularly with radiation therapy in multiple *in vivo* murine tumour models.

New alliance with Merck is an opportunity to further accelerate our oncology strategy

M7824 has been tested in 14 Phase 1b signal-seeking studies across more than 700 patients and has shown clinical activity across multiple hard-to-treat cancers, including non-small cell lung cancer, HPV-associated cancers, biliary tract cancer and gastric cancer.

Together with Merck we will explore the potential of this novel asset alone, and in various combinations, with eight immuno-oncology clinical development studies ongoing or expected to commence in 2019. Importantly, we have seen encouraging clinical data in second-line non-small cell lung cancer patients and based on this a randomised, controlled Phase 2 trial was recently initiated to investigate M7824 compared with pembrolizumab as a first-line treatment, specifically in patients with high PDL-1 expression, where the data to date is most compelling.

Not only does this strengthen our immune-oncology portfolio but I am excited by the potential synergy with our existing assets, including our ICOS agonist, the TRR4 molecule, and many of the recently acquired molecules from TESARO. We believe that the M7824's unique design, supported by alliance between two very complementary companies, will further accelerate our oncology strategy. I am truly excited by the potential impact this first-in-class immunotherapy could have on the lives of many cancer patients.

PARP Inhibitors

Moving to TESARO, the TESARO acquisition which we announced back in December and completed a few weeks ago is really a significant step forward for both our oncology pipeline and our commercial capabilities. I have personally been working very closely with Mary Lynne Hedley, the President and CEO of TESARO, and have met with her team and I am even more convinced than ever that this is a great company with great science, great people and a great culture.

While TESARO brings more than just one asset, I wanted to spend some time reiterating the opportunity that we see for *Zejula*, which was the first PARP inhibitor to achieve a broad label for non-BRCA ovarian cancer patients. PARP inhibitors have really transformed the course of disease for women with ovarian cancer. As we dig deeper into the science, I remain convinced that the PARP class is under-appreciated and our commitment to functional genomics and other technologies will enable us to use *Zejula* to help patients beyond those who have the BRCA mutation – particularly those patients who have a defect in the genetic repair mechanisms, called homologous recombination or so-called HRD-positive patients. This might represent – as you can see on the right side of this slide – as many as 50% of our ovarian cancer patients.

NOVA study

The reason why we are so optimistic about patients with the so-called wild type or normal BRCA is shown here. TESARO's NOVA study explored three types of patients in a stratified manner: patients with the gBRCA mutation; those patients who were wild-type for gBRCA, that is, they had the normal gBRCA gene but who had evidence of homologous

recombination deficiencies as measured by the Myriad test, the so-called HRD-positive patients, and the third group, who were BRCA wild-type and who did not test positive for having HRD. As you can see in these results here, the benefit in the wild type but HRD-positive patients was almost as impressive as the benefit in those patients with the gBRCA mutation.

These data give us optimism for seeing a benefit of *Zejula* in patients who do not have the BRCA mutation but who are HRD-positive in the frontline setting. The PRIMA study, which is expected to read out at the end of this year, will definitively answer this question for us and could result in *Zejula* being approved as the first monotherapy beyond the women who simply have the BRCA mutation.

GSK'916

Turning to GSK'916, or BCMA-ADC, this is a great example of how we are putting into action what we committed to at the Q2 call. When I spoke to you in July, we had just started the fourth line pivotal study, DREAMM-2. Remarkably, we were able to fully enrol the study within about three months, ahead of plan, and we expect to get the data in the second half of this year to support a file by the end of 2019. Very importantly, we now also have seen updated PFS data from the DREAMM-1 fourth line monotherapy study. We had initially estimated a PFS of 7.9 months and presented that data at ASH in 2017. Now, with further follow-up, our updated PFS has increased to 12 months. We expect this data to be published in a leading journal very soon. Of course, this is based on a very small number of patients but, nonetheless, it is very encouraging information.

Also since our last update, we initiated DREAMM-6, which is a combination Phase 1/2 study, that will enable the second line pivotal study, DREAMM-7, to start this year. Altogether now, we have more than tripled the number of patients treated since July, reaching almost 300 patients by the end of this past January.

In addition, by taking this more focused approach to development, and prioritising our investments and resources behind BCMA, this year we will start four pivotal studies: DREAMM-3, 7, 8 and 9, in the fourth line, second line and frontline settings. We know multiple myeloma is a competitive space but it is also an area with significant unmet need remaining and where speed to market really matters to patients who are in need of new therapies. We continue to expect to be the first BCMA-targeting agent to reach the market through our accelerated development plan.

GSK'165

Let me move on to GSK'165, a human monoclonal antibody antagonist to GM-CSF, a pro-inflammatory cytokine that is increasingly recognised to play a role in the mediation of pain in a number of diseases, including rheumatoid arthritis. There remains significant unmet need for patients with rheumatoid arthritis to obtain better responses and, particularly, better control of their pain. We have seen encouraging results with '165 in RA, showing clinical responses – particularly in improving pain. These were presented at the ACR last year and we hosted a call at that time and included an external expert for his thoughts.

Following meetings with regulators, we have nearly finalised an innovative Phase 3 programme that we expect we can start in the second half of this year – to support, hopefully, a filing in 2023. The clinical programme includes patients who have failed methotrexate and targeted therapies, and compares GSK'165 against both the JAK inhibitor as well as an anti-IL6. We believe that this study design, with the primary endpoint chosen as ACR-20 at 12 weeks compared to placebo, and the optimised dosing regimen, will result in a successful programme and potentially an even further increase in efficacy.

R&D priorities for 2019

In summary, while there is still much more to be done, we have made a lot of progress over the past six months.

Having completed the acquisition of TESARO in January, we will continue to invest behind *Zejula*. We look forward to getting the PRIMA data in the frontline maintenance setting at the end of 2019.

We will also be looking at how we can optimise TSR-042, the PD-1 inhibitor we acquired from TESARO, which we expect to get pivotal data on in patients with endometrial cancer to support a filing in the second half of this year. I look forward to discussing and focusing on this important asset at our next update.

We will aggressively develop our BCMA ADC, as well as our other Oncology pipeline molecules, including the TGF-beta trap with our newest collaborator, Merck.

In 2019, we will continue to focus on optimising the pipeline by investing in other promising areas of medicine, including the anticipated approval for dolutegravir plus lamivudine in HIV, and filings for our long-acting HIV therapy and fostemsavir for highly treatment-experienced patients.

We will continue to focus on technologies that will enable the pipeline to deliver transformative medicines, and, of course, we will continue to drive the culture change that is necessary to improve our R&D productivity.

We are going to be generating a lot of data this year. There is a full list of all of that data in the appendix, but on the right-hand side of this slide you can see the key read-outs that I think you should focus on.

Thank you for your attention, and I look forward to updating you again at our Q2 results and answering any questions you might have in the Q&A.

With that, I will hand back to Emma.

Focus on delivering business priorities

Emma Walmsley: Thank you very much, Hal.

In summary, 2018 has been a year of significant progress in terms of operational performance, reshaping of the portfolio and development of the pipeline.

In 2019, we will be building on this with continued execution of our priorities of Innovation, Performance and Trust, with an on-going focus on the pipeline, to provide a clear pathway to the creation of two exceptional businesses, across GSK worldwide, we are all very committed to this tremendous opportunity to create substantial value for shareholders, patients and consumers.

With that, operator, the team is ready to take questions now.

Question and Answer Session

Richard Parkes (Deutsche Bank): Hi, thanks for taking my questions. The first is for Hal on the M7824 deal. Obviously, since the disappointment with IDO it feels like the industry has moved away from or is trying to move away from making big decisions based on signals in single-arm trials with the next generation IO agents. Obviously, with M7824 it looks like Glaxo is not necessarily following that trend, given that that's being advanced into pivotal studies. I just wondered if you could help us understand - you have obviously seen a lot more data, what makes you confident to do that, or is this just a calculated risk?

The second question is on the outlook for HIV. When I look at NBRx volumes in the US they look like they have declined on an absolute basis by 20 to 30% since the launch of *Biktarvy*. Obviously, the drug is only just launching now in Europe, and I wondered if you could help us understand whether we should expect more or less impact to the European new-patient share as *Biktarvy* launches? Thank you.

Emma Walmsley: Thanks very much, Richard. We will come to Hal first, and then to David, and just to say, aside from the scientific commentary that Hal will add, just a reminder that the construction of this deal is very heavily stage-gated for GSK and will be based on data, but, Hal, perhaps you would like to comment on the question first.

Hal Barron: Yes, thank you, Richard. Let me walk you through why we are pretty convinced this is a smart risk to take.

When you look at what advances have been made in cancer therapeutics by inhibiting PD-1 and PDL-1, it has really been very transformational, but it is important to remember that the vast majority – actually, about 75% of the patients – either don't benefit or will relapse after therapy, and so there is a clear need to find new agents, either given in combination with, or that can compete with these agents to provide patients with greater options.

When you look at this asset it is very unique. It not only combines the IgG1 backbone of a PDL-1 inhibitor, but has this other component that allows it to be, basically, a receptor trap to bind the three isoforms of the TGF- β ligands, and the pre-clinical data is pretty compelling here in terms of TGF- β playing a role in tumour progression, and particularly PD-1, PDL-1 resistance at the tumour level, because of the suppressive effects that TGF- β has been seeing in the tumour micro-environment.

Therefore, you think there is a very unique first-in-class novel mechanism agent, which was very, very interesting.

Now, you combine that with a very unique situation, which is they had for us to review almost 700 patients treated in various Phase 1 settings for signal-seeking, and, in fact, in that finding four different diseases that I mentioned earlier, where there is clear evidence of activity.

Based on that pre-clinical biology and the data generated in those four diseases, and, particularly, the data generated in the second-line lung setting where the response rates really did appear to be superior to those historically seen with PD-1 inhibition in similar settings. You are right that we do not have randomised control trials, but those data were exciting enough to initiate the Phase 2 randomised control trial against pembro, and, as Emma said, the deal is structured in a way that gives us confidence that this was a smart risk to take. Hopefully, for patients this will end up being the superior therapy.

Emma Walmsley: Thanks very much, Hal. David, some specific questions about the dynamics of NBRx. I would like to repeat that we expect our ViiV HIV business to continue to be a key growth driver for GSK, primarily because of the bet we are making on

two drug regimens and we are very excited about the approvals and further data we hope will come through this year. David, over to you.

David Redfern: Thanks, Richard. As Emma and Simon said, we do expect ViiV to be a meaningful growth driver in 2019 and going forward, although the dynamics of that growth will vary a little across the world.

In the US the *Tivicay* and *Triumeq* business is basically flat over the last few months. We are getting some penetration with *Tivicay*, particularly into new patients, but there is some switching of both products, so overall, we are broadly flat at around 35,000-36,000 scrips per week and our share is around 27% of the core and STR market and NBRx is also pretty flat.

Going forward in the US, the growth will come from ongoing momentum with *Juluca* and we have seen a pretty decent pick-up with *Juluca* in the last quarter, in part driven, I believe, by quite a favourable reaction to the two-year SWORD data that were presented, so *Juluca* is beginning to build quite strong momentum. Also, importantly, the launch, once we get approval of dolutegravir/lamivudine, which we see as the key growth driver going forward.

Away from the US, in the European and International businesses we expect the growth to be more broad-based across the whole dolutegravir portfolio, really building on the momentum we have seen this year. In the European business, dolutegravir was up 17% and growing very nicely, and the International business was up 35% with very strong performances in places like Brazil, Japan and so forth.

Also remember that in 2018, we had a reasonable drag predominantly from the ongoing genericisation of Kivexa/Epzicom of about £150 million, which will be less going forward.

Tim Anderson (Wolfe Research): If I could go back to M7824, I have a couple of questions. When do you expect you will have the first registrational data with that compound? I assume that the Phase 2 study you referenced as randomised is not registrational. Also, can you talk about dose-limiting toxicities with the compound?

My second question is on dolutegravir. In March I believe we are supposed to get the updated results from the Tsepamo study looking at the possible side-effect of neural tube defects. I wonder if you can give us any update on what you think that may show and if there is anything new to share on that?

Emma Walmsley: David, briefly on neural tube updates and we'll go back to Hal.

David Redfern: As you say, Tim, that study is being run on to try to get to the bottom of this issue and we obviously need to wait and see when those data come out. It is a study not run by us but by the NIH. All I can say is that, as time has gone on, we have seen no new cases of neural tube defects with more babies being born, so it looks to be less and less of a meaningful signal, but we need to see the definitive data when they come out.

Hal Barron: We are not really giving timelines on when we shall have data that can be submitted for registration. That said, let me be clear the registrational studies in oncology can sometimes take different forms and, depending on the efficacy observed, there are always opportunities to think through novel strategies.

Luke Miels: I would just add, Tim, if you take a step back and look at the scale of the opportunity, pembro reported £7 billion, Opdivo was close to £7 billion I believe - in the high 6s. Therefore, as far as a relatively modest down payment, this gives us an opportunity potentially to disrupt this market.

Hal Barron: I didn't have a chance to speak to the dose-limiting tox part of the question. As far as the profile from an immuno-oncology perspective, we do not see any new immune-related side-effects. There are the skin findings with acanthosis - some skin disorders that we believe are very manageable - but overall, we do not see that as being a limiting factor in the development programme.

Emmanuel Papadakis (Barclays): I have one on *Shingrix*. Simon, you were kind enough to provide a little more clarity on I think quote, "a significant capacity expansion in 2019". You previously alluded to some uncertainty as to the pace of step up to that mid high teens target and I think you also now specified it will be high teens. If you could perhaps give us a little bit of further clarity on what kind of volume expansion we should expect in 2019, that should be of course very well received.

Also, the commitment for margins - it looks like you are already at that mid-thirties target, any thoughts on that?

And then maybe just a quick one on Respiratory, you previously alluded to potential spill over, so to speak of *Advair* generic pricing impact in the broader space, particularly for *Breo*. Could you just let us know what is embedded in your current guidance in terms of broader pricing risk for the *Ellipta* franchise? Many thanks.

Emma Walmsley: Yes, I'll come to Simon in a minute, but I'll just make a few comments on guidance. There is no new update to the Vaccines margins and obviously the guidance range at the moment is about the impact of an *Advair* generic across ICS/LABA which we have always flagged, and we still need to know the pricing and the supply rate there, but Simon can make some more comments on those.

And just to add on *Shingrix* capacity build, first of all we are obviously absolutely delighted with the launch trajectory of this vaccine and see it as being a meaningful contributor to growth for hopefully years ahead as we pursue not only fully serving the markets we are in but also eventually geographic expansion.

We were also very pleased to mobilise very effectively across our supply chain both in Europe and the US to increase supply through the second half of last year and so confirming high teens millions of doses over the next two to three years. You will have heard Simon mention, so I shall reiterate, we are looking to continue the momentum that we were able to establish in the second half, but we are not going to guide specifically for the number for 2019. Obviously, we will update you more as the year goes on.

Simon, do you want to add anything?

Simon Dingemans: Yes, on the Respiratory side my remarks focussed on *Breo* because the ICS/LABA category is where we see the main pressure points and I know you have asked us a number of times on the impact on some of the other products. Clearly there is a broader pricing dynamic that the Respiratory sector is dealing with, but I think the particular *Advair* knock-on will be largely restricted to ICS/LABAs.

Graham Parry (Bank of America): Hi, thanks for taking my questions and firstly I'll say farewell to Simon and thanks for working with you and also welcome to Iain.

The first question is on guidance, so could you just help us to understand the assumptions baked into guidance for the rate of *Advair* generic decline. I think consensus is running at about 60% at the moment. Is that broadly in line with your internal planning guidance?

And also, the timing of the Pfizer Consumer deal is assumed in the guidance; I think you said second half 2019, are you assuming a full second half of that deal being in action and some dilution from it?

And then secondly, if you could help us to understand your views on the HHS rebate Safe Harbor rule proposal that came out last week, GSK's potential exposure to this and

what comments GSK would be submitting back to the administration either individually or via PhRMA. Thanks.

Emma Walmsley: Thanks very much. I will come to Simon in a moment on the guidance questions and assumptions. I mean, broadly speaking in terms of what was said about Safe Harbor, we support the administration's approach which is about bringing more transparency to the pricing value chain and continue to encourage thereby responsible pricing and most importantly passing on of the discounts that manufacturers provide to patients so that out of pocket can be impacted. Obviously, we are digesting what has come through and we are looking to collaborate as ever with the administration on participating in next steps, but we are broadly supportive.

Simon do you want to comment on the guidance question?

Simon Dingemans: Yes, clearly at this point there is a pretty wide range of outcomes, but if you look at the various analogues, then you would expect to see most of the decline to the end point we previously indicated during the course of 2019, given we're sitting at the beginning of February. I think as we have also said before, unlike a conventional tablet-type generic which would normally lose about 80% in the first year, you would probably expect less than that, but it depends very heavily on what supply they have and we don't know that yet and we won't know really until they start to signal.

But I will just remind you we said back in 2015 we would expect to end 2020 with £200 million to £300 million sales of *Advair* and if you assume most of it goes in 2019, hopefully that gives you a reasonable range.

Around Consumer, I think you should assume later in the second half rather than earlier in the second half and that's why we are expecting a broadly neutral impact in 2019 as we gear up to the first full year of 2020, where you'll see the impact from the synergies beginning to kick in. So, we don't know precisely yet, there is quite a complex regulatory process to go through, but it will be towards the end of the year.

Emma Walmsley: We will update you more as we go. Thanks, Simon. The next question, please.

Keyur Parekh (Goldman Sachs): Good afternoon, two questions please. First on HIV, Emma, I think you said you continued seeing it being long-term growth driver for the company. More specifically, as you have thought about 2019 guidance, does it incorporate any HIV growth for 2019 and, if so, can you give us a flavour for what you expect that growth to be.

Secondly, for Hal, on the ICOS compound, your appendix slide shows that you have got the data for the Pembro combination in-house for the combination therapy. Can you give us a flavour for what the data is? I am surprised, if it is positive, why it hasn't been moved to Phase 3 as yet. When do we actually see the data from that?

Emma Walmsley: Thanks. We will come to Hal in a second. Just to reiterate, we think that HIV is a growth driver for the company and you have seen a lot of activity from us in terms of two-drug regimens, and a lot more to happen this year. That is where we expect the growth to come from – also to reiterate David's comments. We do expect to see growth in 2019 – obviously, that will be at a slower rate because business is bigger, and it has become a lot more competitive near-term, but we are looking forward to that DTG/3TC – we hope – approval, and building that portfolio of two-drug regimens, looking forward. Hal?

Hal Barron: Thanks. As you heard me say, I think we have encouraging clinical data and we will be presenting that at a meeting likely to be in the second half of this year. We continue to enrol patients in the study at a nice clip and we will be learning more about which indications we think are most appropriate to pursue and how to combine it with pembro and, potentially, other agents, to optimise the impact it has on patients.

Emma Walmsley: Thank you. Next question, please.

James Gordon (JP Morgan): Thanks for taking the question, which is about TGF- β . The question is where is the company – or where is Hal – most excited about the prospects of the product? Is it in patients where PD-1 therapies really work well, and this is going to work even better – so a synergy angle – and in that case you are bullish about the head-to-head with Keytruda in PD-L1 high patients. Or is the excitement about using it in a broader population, where PD-1 monotherapy is less successful, and this could sensitise. Is that why despite the landmark study, you are not yet committed to paying that, because you are seeing lots of risks around showing that you are better in high PD-L1 patients and the opportunity is really about going broader but not necessarily being better?

Emma Walmsley: Thanks, James. Hal, would you like to go straight in?

Hal Barron: Thanks, James. With these kinds of molecules, you really have to let the data tell you how to develop it. The data to date suggest that the response rates in the second line lung cancer setting were better than historically seen with Pembro, particularly in PD-L1 high. The design of the programme therefore is, as you say, the latter

example, where we are looking to go head-to-head in the PD-L1 high. It is important to remember that the molecule has the PD-L1 backbone and so it can work like a PD-1 inhibitor but, at the same time, because PD-L1 is expressed on tumour cells, this actually enables the combined trap PD-L1 construct to be targeted to the cancer cell. When the cells become resistant through TGF- β , we think that this will prevent that by inhibiting the TGF- β locally. We will work where, potentially, PD-1 and PD-L1 work, but be more effective by both having the TGF- β there as well as preventing the resistance.

Of course, that is all preclinical and hypotheses, but that is what the data to date would suggest – that we can actually work where PD-L1 or PD-1 inhibitors work, but better, because of avoiding the resistance mechanism that appears to emerge. Perhaps, as we get more data, we will find that it can expand even further beyond that, and that may be what we see in some of the other indications where the activity seems to be in places where PD-1 inhibition, or PD-L1 inhibition, hasn't previously been very robust. It is possible that both opportunities are pursued, but the lung cancer opportunity is one as I have described.

Emma Walmsley: Thank you. Next question, please.

Mark Purcell (Morgan Stanley): Thank you very much for taking my questions. On HIV, there is a great deal of focus on NBRx, but that is a market that is only about 7% of total prescriptions. I would be interested in any comments you can give in terms of how to make that population more dynamic by expanding the amount of switching that is going on in the market place with your dual strategy, where you could ultimately get much more significant market share gains going forward. That is the first question.

Secondly, on the '165 asset, GM-CSF – when you spoke last, Hal, you discussed some uncertainty around the dosing of that asset, and how optimally to dose that. It sounds as though there has been some resolution, or that there will be work over the next few months, to resolve those questions. I would be very interested to understand how you are dosing it in pivotals and the discussions you have had with regulators around dose, and whether you can give us some clarity there.

Then, very quickly, on the Merck relationship on TGF- β , I am just wondering how broad that can become, going forward, given that the ATM, ATR assets would fit very nicely with your PARP strategy, and moving ultimately into earlier stages of cancer. Thank you very much.

Emma Walmsley: Thank you very much, Mark. We will let Hal pick up your two-and-three-quarter questions, but first over to David, with the slight caveat from me that there is only so much we are going to declare on our competitive approach to driving switch. David?

David Redfern: Thanks, Mark. As we have said many times, we see the major part of our growth coming from two-drug regimens and, in particular, hopefully starting this year, dolutegravir/lamivudine, which is an opportunity in naïve patients and it is where the GEMINI data were studied but also in switch patients.

Let me make a few comments on that. I don't need to go through the 48-week GEMINI data, you have seen those. Following the presentation at IAS, we had a pretty strong reaction from HCPs in the US and around the world. In general, it exceeded their expectations and particularly in two areas, the fact that the efficacy was maintained and so strong at the higher viral loads has definitely been important. The fact that we saw no resistance at all at 48 weeks has also resonated. There is a pretty active debate going on with HCPs thinking about exactly for which patients they should prescribe it.

There is an important point here which is that the 48 weeks is just the start of the dolutegravir/lamivudine story. We run the GEMINI studies through two years and then three years and we have seen from the *Juluca* update after SWORD 100 that two-year data are important, so those data in the middle of the year will be important. We are also investing now very heavily in switch studies, as Emma showed on the slide the TANGO study, the SALSA study and in a whole range of further studies around overall patient quality of life, and a whole lot of technicalities around DNA archiving and getting to the bottom of resistance. There is a lot going on there and, while this is a conservative market and it will take time to build this story, we are ever more confident in the potential of two drug regimens, particularly dolutegravir/lamivudine.

Emma Walmsley: Thanks, David. Hal?

Hal Barron: Thank you, Mark, for two thoughtful questions. First, we are not going to disclose discussions we have had with regulators but, in the spirit of transparency, I want to show you what the design is likely to evolve to and that we have made a commitment to move to Phase 3.

As you rightly point out, we highlighted two or three aspects of the Phase 2 programme that we thought could be optimised. The first was to make sure that our primary endpoint in the study is ACR20 and that is done in the setting compared to placebo, so that is the new design. It is hard to see as it is a little smaller on the slide but that is the primary endpoint.

On the left side, we have the 180mg every other week dose that was used in the Phase 2 study that appeared between weeks 12 and 24 to be suboptimal. What we were hoping to do was design a study that would use something close to that but on a weekly basis rather than an every other week basis. As you can see in the design, we have 150mg weekly being given beyond the 12 weeks, which will give us an increased exposure and a higher dose in that period of time when we saw in the Phase 2 a kind of flattening off or perhaps even a diminution of the treatment effect in that time period. That is the increased exposure we alluded to, were hoping to get and have designed into it. I hope that answers your question about why we are optimistic about the design and the dose.

We have had virtually no discussions with Merck regarding their DDR programmes - the ATM and ATR as you mentioned - but we find the opportunity to look at medicines that could be synergistic with PARPs in a very interesting way. There are many that are emerging and stay tuned to see how we are going to approach that for the future.

Kerry Holford (Exane BNP Paribas): I have two questions. First, on COGS you talk about the increased price pressure in Respiratory and now in established Vaccines. Is the latter one a new issue from the end of this year? Can you talk more about the increased import costs that you highlight: I am trying to understand whether that weaker growth margin in Q4 is something that we should expect to continue into 2019 and beyond?

Secondly, on M&A and in-licensing, we have seen a flurry of recent deals, so I want to understand your flexibility and your appetite to do more from here? In the context of some cash constraints here, what is your appetite to do more potential divestments of non-core Pharma asset disposals? We have seen you be quite active in Consumer, so I wonder whether there is more you could do on the Pharma side?

Emma Walmsley: I'll take the second question and then I'll ask Simon to comment on the growth margin and COGS dynamics. As you will have noticed, we were reasonably busy through the last quarter in terms of our business development and our No.1 focus is to make sure we deliver the value from those deals, be it on the Consumer side or indeed the Pharma side.

That said, I was extremely clear in July 2017 that our number one priority is the strengthening of the pipeline. I am pleased with the progress, but BD will continue to be a key part of that, and the Merck alliance that we announced yesterday is exactly the kind of thing that we want to continue to do, whether it be on assets or technology platforms and then it will be cases of us looking for creative business development.

There will probably also be examples of us looking to out-licence things in the portfolio as well, a bit to your secondary comment which is will we continue to review the portfolio and making sure we're allocating our capital as intelligently as we possibly can. And yes, we will, but our number one priority is to extract the value from the various deals that we've done.

With that, Simon?

Simon Dingemans: Yes, Kerry, on COGS, as we have talked about for some time, we are seeing some pressure at the gross margin given the pricing environment particularly in the Pharma business and we are now seeing some more of that in the established and older part of the Vaccines portfolio which have a higher degree of exposure to some of the tender business and GAVI-type contracts. That was a bit more visible in the back half of last year, but those trends will continue. It's one of the reasons why we are putting a lot of focus and effort into restructuring the supply chain to deliver some efficiencies to offset those pressures.

I think Q4 specifically you shouldn't read straight into 2019 because it had a number of specifics in there, particularly the Relenza tender and then some one-off sales of products that we have already sold, so we are contract manufacturing for third parties which is a pretty low margin business but we delivered quite a heavy load of around that total of £80 million that I referred to, so it was a particular factor in why there was such a sharp step up in Q4.

Emma Walmsley: Thanks, Simon. I think we have one last question, I really hope it's the last question for Simon! With that please, over to the last question.

Stephen McGarry (HSBC): Hi, thanks for taking the question. Apologies, Simon, it's not a financial one, it's on the pipeline!

Simon Dingemans: You're not upsetting me at all!

Stephen McGarry: Just on M7824 in the head-to-head in non-small cell lung cancer versus Keytruda, what outcome would encourage you to develop that drug more broadly? Does it have to be better than Keytruda or is non-inferior/equivalent enough?

And then following on from that if you look at elsewhere in the industry, you have Keytruda being trialled in over 900 studies, Opdivo there was 900 studies and they consumed the majority of R&D at those companies. Although it would be a great problem to have if M7824 was superior to Keytruda, how big could a clinical programme in the R&D spend become at that point in time? Thanks.

Emma Walmsley: Thanks very much, Stephen. I'll hand that on to Hal. I think the main point to underline is your good problem to have point. One of the things that Hal has brought in with tremendous discipline, he referred to it when he talked about new governance, is really looking at the efficiency frontier across our R&D spend and the assets that we want to bet on, where we can get the biggest kind of returns, and so we are particularly disciplined about that.

You will also remember that Simon said in his outlook for 2019 that we do expect a meaningful uptick in our R&D spend, whether that be the continuing bet on our internal assets that we have accelerated like BCMA or indeed backing the TESARO teams and assets, too. But the key is to make sure we are also dropping off and cancelling things that we don't think come high enough up that efficiency curve.

Hal laid out his 'what's in, what's out, what's accelerating, what's adding' chart today and that's something that we will each six months make sure we update you on to see what the progress is.

Hal, do you want to come back on the M7824 question?

Hal Barron: Yes, thanks Stephen. I think I'll turn it over to Simon!
[Laughter]

Simon Dingemans: It would be a short answer!

Hal Barron: Let me try to tackle the first one and then reflect on the second one. The study is designed as a superiority trial, just to be clear, in Phase 2. Maybe your point is if we don't achieve superiority, would there be an opportunity to move forward with something that had similar effects.

I would say two things. First, one thing you have to be careful about in these Phase 2 studies is they are usually powered and the primary endpoints are usually on response rate which doesn't always track to PFS and OS and we've seen that with IO agents in the past for a number of reasons, so I think that one has to both consider the effect on response rates but also look at the data as it relates to PFS and OS although it will be very under-powered.

But I want to point out that the philosophy, the sort of vision for our immuno-oncology group is to really develop transformational medicines, so our focus is going to be on having benefit beyond Keytruda. It's a wonderful drug, it's done transformative things for patients and we think we can do better, and this is one of what we believe are many smart bets we're taking to see if we can have superior therapies for patients with lung cancers and others.

How big is big and how big to go? Really it's all dependant on the data and I really think that we have a number of programmes where you could ask the same question: should the data read out in a very profound and positive way they could result in lots of opportunities for us to do development and patients to benefit, but these are, as was mentioned, high risk, high reward, and that's why we are doing a number of these. We think it's a smart bet and I really hope this is the problem we have to face, so more as we can unravel data soon.

Emma Walmsley: Thanks very much, Hal. With that, I will reiterate my last public thanks to Simon.

Thank you all for joining, and we look forward to updating you through the year, a year that we hope will build on the good momentum of 2018, be very focused on delivering operational performance, planning for the delivery of value against our various deals, and, particularly, a highly effective integration under Brian's leadership of the Pfizer joint venture, and most of all, updating you on our progress on R&D. Thank you very much.

[Concluded]