BRYAN, GARNIER & CO

INDEPENDENT RESEARCH UPDATE

27th January 2016

GlaxoSmithKline

A balanced story with most risks now behind us

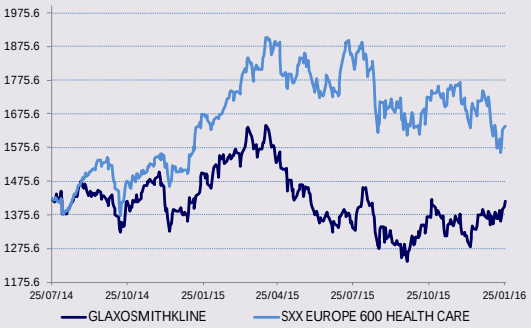
Healthcare

Fair Value 1635p vs. 1540p (price 1,416p)

BUY
vs. NEUTRAL

Bloomberg	GSK LN
Reuters	GSK.L
12-month High / Low (p)	1,642 / 1,238
Market capitalisation (GBPm)	68,932
Enterprise Value (BG estimates GBPm)	75,699
Avg. 6m daily volume ('000 shares)	8,290
Free Float	100%
3y EPS CAGR	-1.4%
Gearing (12/14)	265%
Dividend yield (12/15e)	5.65%

YE December	12/14	12/15e	12/16e	12/17e
Revenue (GBPm)	23,006	23,503	24,773	25,570
EBIT (GBPm)	6,594	5,872	6,535	7,043
Basic EPS (p)	57.31	241.72	65.97	73.46
Diluted EPS (p)	95.33	76.03	86.10	91.28
EV/Sales	3.56x	3.22x	3.05x	2.94x
EV/EBITDA	9.9x	10.0x	9.2x	8.6x
EV/EBIT	12.4x	12.9x	11.6x	10.7x
P/E	14.8x	18.6x	16.4x	15.5x
ROCE	25.0	33.1	35.7	37.1



GSK has been our least-preferred large cap pharma stock for a while but the company is very close to a turning point in our view and we now see it as a safe play and also as a self-help story with more than decent growth over the [2015-2020] timeframe, with core EPS CAGR of 9.2%.

- 2014 and 2015 were a nightmare for GSK shareholders, characterised by a severe drop in respiratory sales, poor commercial success on new drug launches, a scandal in China and a positive-but-dilutive agreement with Novartis. As a consequence, core EPS have fallen by almost 30% in two years and the stock price by 5%, i.e. underperformance of more than 30% compared to the Stoxx Europe Healthcare index.

- This period should now be behind us and we believe that the risks are under control while opportunities to grow are multiplying. In 2016, GSK has already committed itself to double-digit core EPS growth, based on a top-line turnaround, cost savings and synergies from the Novartis transaction. A return to revenue growth is obviously good news and in this note we emphasize the key role of three products: Nucala, Triumeq and Shingrix. Together with Breo which is now waking up, they should be the key growth drivers for GSK through to 2020 (we are essentially ignoring sirukumab at this stage).

- Moving from top-line to earnings growth, we have noted the significant royalties and minority interest paid to partners Innoviva, Shionogi and Novartis. Although these payments reduce the margin impact on the turnaround, Nucala and ViiV will support margin expansion together with cost savings and synergies in vaccines and CHC.

- All in all, while having almost cancelled any upside from the pipeline (no contribution beyond Shingrix and sirukumab), we are left with core EPS CAGR of 9.2%. between 2015 and 2020. This is amongst the best in the industry and the beauty is that it is starting now, not in one or two years' time. Lastly, the stock is supported by a comfortable dividend yield. Although the upside to our FV is not enormous, we think GSK is worth a BUY now

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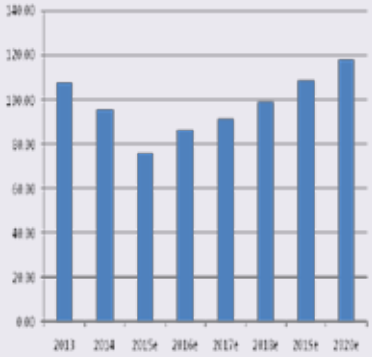
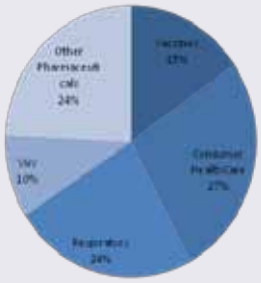




Company description

GSK was created in 2000 with the merger of UK-based Glaxo-Wellcome and Smithkline Beecham. Since then, it has faced several patent expiries and legal issues and the last couple of years were troubled ones with fraud case in China, big phase III fails and Advair sharp decrease. However, it also stricked a transforming asset swap with Novartis. This could be the base for a new start, as Pharmaceuticals is also stabilising.

Income Statement (GBPm)	**2012**	**2013**	**2014**	**2015e**	**2016e**	**2017e**	2018e	2019e
Revenues	26,010	26,279	23,006	23,503	24,773	25,570	26,298	26,862
Change (%)	*-5.0%*	*1.0%*	*-12.5%*	*2.2%*	*5.4%*	*3.2%*	*2.8%*	*2.1%*
EBITDA	9,608	9,489	8,294	7,572	8,235	8,743	9,097	7,945
EBIT	7,908	7,789	6,594	5,872	6,535	7,043	7,397	7,945
Change (%)	*-10.2%*	*-1.5%*	*-15.3%*	*-10.9%*	*11.3%*	*7.8%*	*5.0%*	*7.4%*
Financial results	(685)	(588)	(307)	(650)	(618)	(567)	(441)	(349)
Pre-Tax profits	7,253	7,244	6,317	5,232	5,923	6,482	6,962	7,602
Exceptionals	(557)	(517)	0.0	0.0	0.0	0.0	0.0	0.0
Tax	1,770	1,688	1,238	1,046	1,185	1,296	1,392	1,520
Profits from associates	29.0	43.0	30.0	10.0	6.0	6.0	6.0	6.0
Minority interests	235	250	222	525	588	625	785	817
Net profit	5,248	5,306	2,756	11,680	3,180	3,541	4,060	4,537
Restated net profit	5,248	5,306	4,584	3,674	4,150	4,555	4,775	5,252
Change (%)	*-9.7%*	*1.1%*	*-8.5%*	*-24.6%*	*13.4%*	*9.9%*	*4.9%*	*10.0%*
Cash flow Statement (GBPm)								
Operating cash flows	6,048	8,273	5,532	7,444	7,190	7,613	8,515	8,698
Change in working capital	397	46.0	(91.0)	581	(109)	(185)	272	(159)
Capex, net	(983)	(1,142)	(1,188)	(1,500)	(1,500)	(1,500)	(1,500)	(1,500)
Financial investments, net	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dividends	(3,814)	(3,680)	(3,843)	(3,839)	(3,839)	(3,839)	(3,839)	(4,223)
Other	NM	NM	NM	NM	NM	NM	NM	NM
Net debt	13,924	12,489	13,075	6,767	6,601	6,124	4,840	3,886
Free Cash flow	3,755	5,901	2,672	4,397	4,005	4,316	5,122	5,177
Balance Sheet (GBPm)								
Shareholders' funds	6,747	7,812	4,936	4,283	5,183	6,529	8,261	10,119
+Provisions	4,810	3,437	4,178	4,178	4,178	4,178	4,178	4,178
+Net debt	13,924	12,489	13,075	6,767	6,601	6,124	4,840	3,886
=Invested Capital	25,481	23,738	22,189	15,229	15,962	16,831	17,279	18,183
Fixed assets	27,783	26,859	25,973	19,594	19,960	20,326	20,692	21,058
+ Working Capital	(114)	(298)	66.0	(515)	(407)	(222)	(494)	(335)
+ Other	(2,188)	(2,823)	(3,850)	(3,850)	(3,592)	(3,273)	(2,920)	(2,540)
=Capital employed	25,481	23,738	22,189	15,229	15,962	16,831	17,279	18,183
Total Balance sheet	6,747	7,812	4,936	4,283	5,183	6,529	8,261	10,119
Financial Ratios								
Operating margin	30.40	29.64	28.66	24.99	26.38	27.54	28.13	29.58
Tax rate	24.40	23.30	19.61	20.00	20.00	20.00	20.00	20.00
Net margin	20.18	20.19	19.92	15.63	16.75	17.81	18.16	19.55
ROE (after tax)	75.83	82.86	81.41	100	128	121	104	94.03
ROCE (after tax)	25.79	27.08	25.05	33.10	35.66	37.06	38.70	40.20
Gearing	206	160	265	158	127	93.78	58.59	38.40
Pay out ratio	75.43	72.33	140	33.10	121	109	104	101
Number of shares, diluted	4,855	4,831	4,799	4,799	4,799	4,799	4,799	4,799
Data per Share (p)								
EPS	99.43	108	57.31	242	65.97	73.46	84.23	94.12
Restated EPS	108	110	101	76.30	86.49	95.04	99.72	110
Core EPS	106	108	95.33	76.03	86.10	91.28	99.07	109
Change (%)	*-8.1%*	*1.2%*	*-11.3%*	*-20.2%*	*13.2%*	*6.0%*	*8.5%*	*10.0%*
Goodwill	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BV	120	145	88.84	64.30	70.79	85.83	106	127
Operating cash flows	125	171	115	155	150	159	177	181
FCF	77.35	122	55.68	91.64	83.47	89.95	107	108
Net dividend	75.00	78.00	80.00	80.00	80.00	80.00	88.00	95.00

Source: Company Data; Bryan, Garnier & Co ests.

Table of contents

1. The Respi franchise should stabilise

1.1. High price paid to transition

2013: the year closes with GSK reaching GBP7,289m in sales in the Respiratory franchise, including an all-time high for its flagship drug Advair, up 4% to GBP5,274m. This is respectively 28% and 20% of GSK's total sales for the group. At the time, with Breo and Anoro coming soon, nobody believes it is a level the group will not be able to sustain, even less so that Advair generics have little success in Europe and look further delayed in the US. But Advair is going to collapse anyway.

In 2014, Advair was down by 25% in the US and by 15% globally under a combination of different factors, the two most significant ones being, in our opinion, a schizophrenic situation for GSK in that the company was encouraged to bet on future assets and to switch resources from Advair to Breo and Anoro but also the competition successfully winning some contracts with PBM (including AstraZeneca with Symbicort). But actually it also took longer than expected to gain traction with new drugs while Advair saw a rapid decline, resulting in a major deterioration for the whole franchise and also, of course, in a meaningful profitability contraction.

Same ingredients, same results in 2015 with a double-digit decline in the US for Advair and even a worse situation over and above Advair and the US as Flovent also started to witness a sharp decline whereas Ventolin had a tougher comparison base. As for Advair, GSK explained in Q3 that the 18% decline was the reflection of an 8% volume contraction and of a 10% negative price and mix impact. Even in the emerging markets, GSK reported increased generic competition and price reductions in several countries.

Advair now only 13% of GSK

At the end of 2015, we are expecting GSK to report sales for its Respiratory franchise and for Advair of GBP5.6bn and GBP3.5bn respectively. This would be 23% less than two years ago for the franchise, 33% for Advair and 39% for US Advair. Their weight and influence over the group have considerably dwindled with 20% and 13% at the end of the year respectively.

While GSK is progressively desensitising itself from Advair, Respiratory will remain its biggest franchise but, as consistently argued by its CEO, in a more balanced way across a variety of drugs. So, from where we stand today, what really matters is assessing how committed we are to this journey and whether it is still legitimate.

First generic Advair in the US in 2017?

On the negative side, it is obvious that although Advair sales have seen a significant contraction in the last two years, there are still no generics in the US and this remains a big challenge for GSK to deal with. It has long been an evanescent topic because generic competition did not look ready to intervene. Things have recently changed, however, since Mylan confirmed during a conference that it filed an ANDA for fluticasone propionate 100, 250 and 500 mcg/salmeterol 50 mcg with the FDA in December 2015. We contacted the company that was supposed to be leading the race here, i.e. Novartis/Sandoz, but there is still no comment about a filing date for their own version developed with Oriel's device. The outstanding question remains whether Mylan's version is running for AB rating or not because obviously the consequences would be very different depending on whether it is substitutable or not for the original branded Advair. That said, it is now reasonable to assume that competition in the US will emerge at some point during 2017. Together with Breo's forced switch in GSK's marketing strategy, it is fair to assume that Advair will decline by two-thirds by 2019.

1.2. Back to growth in 2016?

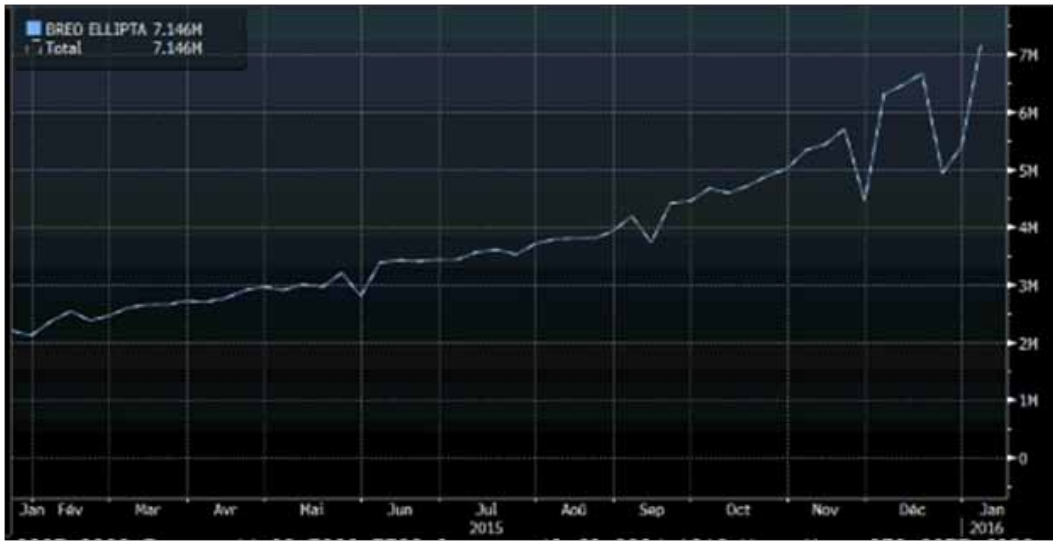
CEO Andrew Witty recently reiterated that he expects the Respiratory franchise to return to growth in 2016 which, ex-currency impacts, might prove a tad optimistic albeit not completely out of reach.

1.2.1. Not with the usual suspects

Breo now in a position to offset more than half of Advair losses

Starting with Advair, it is fair to expect a continuing decline in prescriptions and reported sales but this is unlikely to be at the same pace as in the previous two years as GSK was successful in securing more preferred status for its drug in formularies like CVS Caremark that excluded Symbicort for 2016. Breo is also enjoying superior coverage from payers which is expected to translate into higher NRx share. As illustrated in the chart below (Fig.1), prescriptions have increased more than three-fold compared to the same point one year ago. Everything else being equal (duration, dose, price etc.), this could translate into circa GBP200m of sales for Breo in the US in 2016, i.e. more than twice the 2015 level, and over GBP400m in total. The increase in Breo sales is likely to offset more than half the loss in Advair sales (vs. only 15% in 2015).

Fig. 1: Prescription trends for Breo in the US (NRx – dollars)



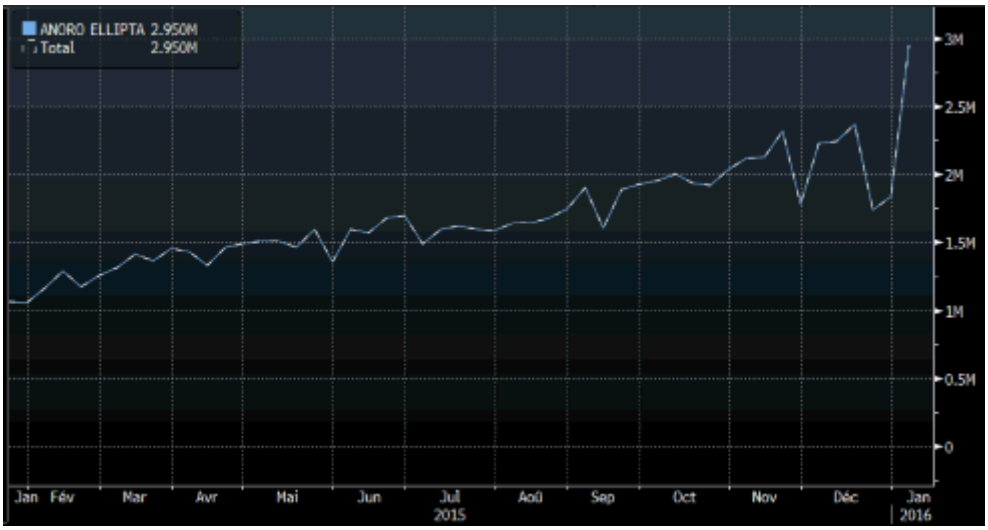
Source: Bloomberg

Anoro should benefit from an expanding class

For Anoro, the NRx trend as illustrated on Fig.2 may look as strong as Breo's but actually the scale is much less wide and it would be premature to predict a take-off for the LABA/LAMA concept in the US. However, there are signs of a start of something and what is going to be interesting for Anoro is how the entire class responds to an increased marketing push from the different players. Novartis got Ultibron approved by the FDA in late 2015 and is currently assessing its options regarding a US launch (or partnership), B.I. got Stiolto approved and launched it in mid-2015, ditto for Duaklir from AstraZeneca, which is also and maybe above all preparing for PT003's approval and launch by mid-2016. With this significantly increased share of voice, the LABA/LAMA class is expected to expand markedly in 2016 and beyond, with GSK taking a leading share of this segment. If this doesn't happen, then it is fair to believe that triple combinations, already well advanced in phase III, will become the next-rewarded generation of combinations for asthma and COPD.

We have significantly reduced our expectations for Anoro over the past year but we maintain a USD1-1.1bn peak sales estimate for 2021. For the sake of comparison, we also assume USD1bn at peak for PT003 (AZN) while we anticipate more for Ultibro as it should already have achieved USD260m in 2015. Depending on the strategy in the US, we may need to adjust this number.

Fig. 2: Prescription trends for Anoro in the US (NRx – dollars)

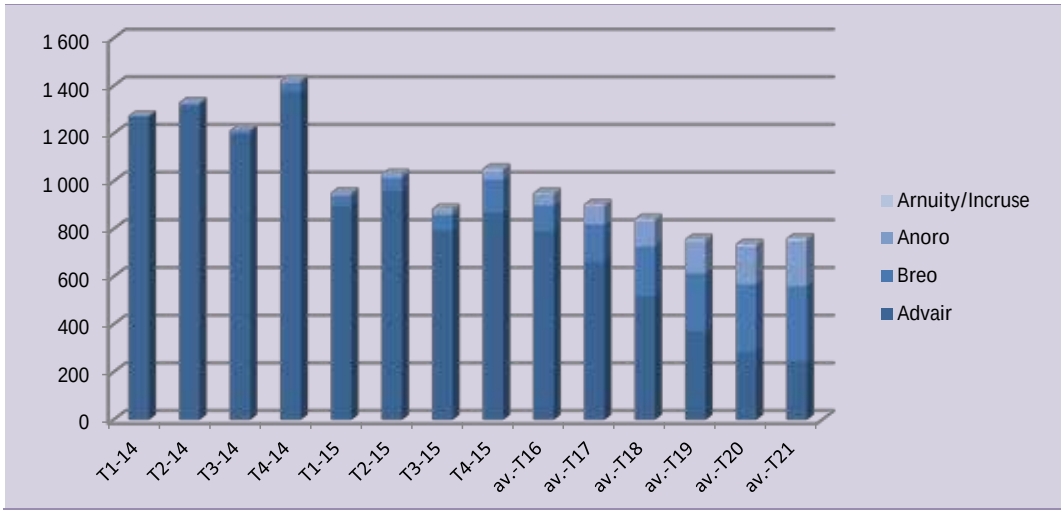


Source: Company Data; Bryan, Garnier & Co ests.

1.2.2. But Nucala is the missing piece

With all the above-mentioned elements, the Respiratory franchise is unlikely to return to growth as early as in 2016 as illustrated by the next chart (Fig.3). However, comparing an average quarter of 2016 to 2015, the situation should stabilise.

Fig. 3: Quarterly expectations for key existing Respiratory drugs

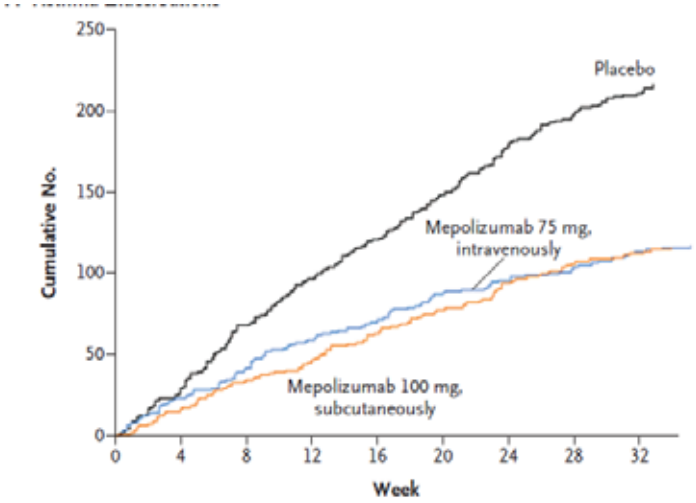


Source: Company Data; Bryan, Garnier & Co ests.

Nucala will boost growth and underpin margins

And the missing piece to transform a flat/stable chart into one boasting growth is certainly Nucala (mepolizumab). Nucala is GSK's anti-IL5, approved by the FDA at the very end of 2015 and launched shortly thereafter. The high list price of USD32,500 per year led to some controversy with the ICER (Institute for Clinical and Economic Review). This is above the highest dose of Xolair and more than twice the price of the lowest doses of Xolair. However, we do not know the level of the net price after discounts but would be surprised if this meaningful innovation failed on pricing issues. Remember that AdCom voted 14-0 in favour of its approval.

Fig. 4: Asthma exacerbations – Nucala vs placebo in phase III trial



Source: Mepolizumab treatment in patients with severe eosinophilic asthma – NEJM, 371;13 – September 2014

The results from the phase III study MENSA were published in the *New England Journal of Medicine* (NEJM) in September 2014 and a showed 53% reduction in exacerbations vs placebo and by 61% (vs 32% for the PBO group) for severe exacerbations requiring hospitalisation with the subcutaneous formulation. Quality of life was significantly improved and concomitant corticosteroid use reduced. The drug is administered every four weeks by sc injections.

The target market is not easy to quantify because the precise number of patients amongst the 10-20% of severe asthmatics not responding to conventional inhaled therapies and potentially qualifying as high eosinophilic is difficult to assess. With reference to the pricing issues, it is fair to assume that the drug will be reserved to the on-label population with strict respect of the target population, i.e. severe asthma with high eosinophil counts. Note that surveys have demonstrated that these patients had a much higher rate of asthma attacks and the evidence in favour of a link between eosinophil asthma and morbidity looks strong (NHANES 2001-2011).

Marketing-wise, anti-IL5s have a more comprehensive case to present to the healthcare authorities compared to Xolair, including a far more targeted population that can easily be detected with a simple blood count. Remember how difficult it was to get Xolair approved in some countries because it was not possible to say who would benefit from the treatment.

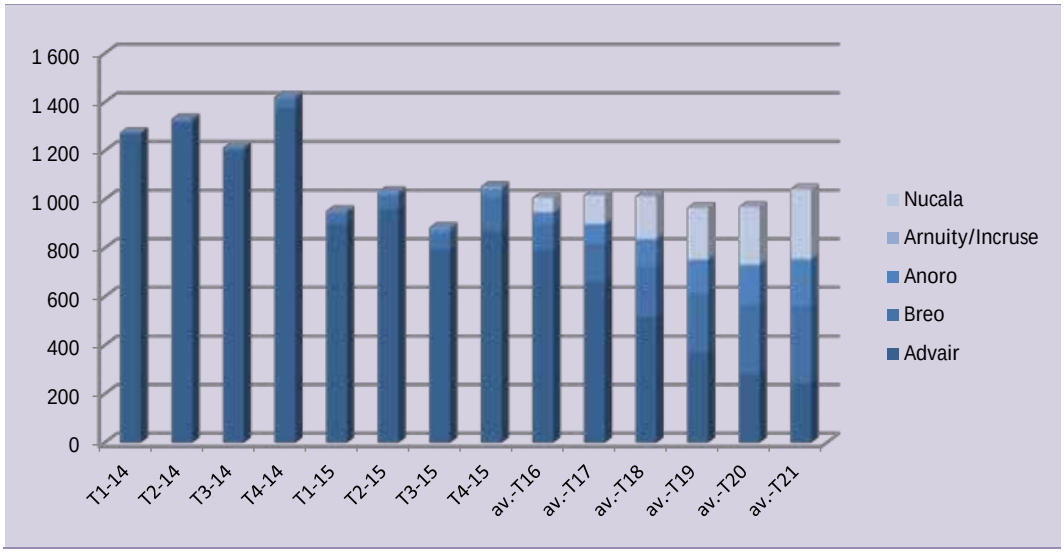
In the end, when the 10-20% of uncontrolled severe asthmatics is considered, it currently "only" transforms into an end market value of USD1.8bn i.e. the value of Xolair. As efficacy looks stronger with Nucala in a more targeted population, we assume that penetration may be higher. Safety might be superior too if we compare prescribing information because Xolair carries a black box warning for potentially life-threatening anaphylaxis cases. There has been some controversy about cv safety with Xolair too and consequently we would rate the level of confidence in the drug as average.

GSK is at least 12-months ahead of the competition

That said, Nucala is not an isolated drug and a whole wave of new drugs are coming in sequence over the next few years. The good news for GSK is that Nucala is first and leads the pack by more than 12 months. In the same class and with the same convenient route of administration, the second should be AstraZeneca's benralizumab whose filing is expected in H2 2016 with a potential voucher being used. IL-13 and IL-4 antibodies may also compete more or less for the same market segment.

Because competition is going to be fierce, we have decided to adopt a very cautious approach towards sales estimates for Nucala. We have USD1.6bn for the drug in 2021, bearing in mind the fact that, by then, other indications in addition to asthma could be added like COPD or HES. In atopic dermatitis and nasal polyposis, Regeneron / Sanofi's dupilumab looks well advanced with strong data and could be difficult to beat.

Fig. 5: Quarterly expectations for key existing Respiratory drugs + Nucala



Source: Company Data; Bryan, Garnier & Co ests.

As illustrated above, although Nucala only offers a route towards stabilisation rather than growth, it is participating in the objective of balancing GSK's Respiratory franchise across a larger number of references. At least Respiratory is no longer an issue. Moreover, in 2016, the first phase III data from the FULFIL programme (triple combination) will be released with a potential first filing, in Europe, at the very end of the year. This is not yet factored into our estimates.

Our last word on Respiratory and Nucala is regarding profitability because it is fair to say that Advair was and still is a very profitable drug, all the more so that it is no longer promoted in most regions. And so balancing the portfolio across new references naturally has a cost. This is even more the case

here, however, in that Breo and Anoro have been developed in partnership with a company called Theravance which is entitled to royalties on the sales of the two drugs.

This has become a little bit complex in recent years so let's try to make it simple. The originator formerly known as Theravance has since been spun off into two different companies: one derived from the original company and now called Theravance BioPharma, which can be seen as a specialty pharma company with a proprietary drug and a pipeline that includes a partnership with GSK on "closed triple" and MABA'081; the second company, now called Innoviva, is simply a structure that receives the economic interest on sales of existing and future drugs developed in partnership between GSK and the former Theravance.

Fig.6 below that summarizes the GSK payments to the two companies and on which product.

Fig. 6: Summarized financial agreements with Theravance and Innoviva

Projects	**Theravance BioPharma**	**Innoviva**
Breo/Relvar		15% royalties up to USD3bn annual net sales 5% royalties above USD3bn annual net sales
Anoro		Tiered royalties on annual net sales ranging from 6.5% up to 10%
Closed Triple	85% economic interest out/of: 6.5-10% royalties on annual net sales	15% economic interest
MABA '081	85% economic interest out/of: 10-20% royalties up to USD3.5bn annual net sales 7.5% royalties above USD3.5bn Milestones ranging from USD125m up to USD250m if MABA-based drugs are approved	15% economic interest

Source: Company Data; Bryan, Garnier & Co ests.

None of the pipeline assets is factored into our sales estimates

For the time being, our forecasts include neither a "closed triple" nor MABA'081, so there is no need to worry about royalties and milestones. However, Anoro and even more importantly Breo, will represent meaningful royalty outflows for GSK. Based on our sales estimates for the two drugs, this could be circa GBP200m in 2020 for instance, booked in COGS. From this perspective too, it is handy to have the highly-profitable Nucala to help offset the impact of these increasing royalties to be paid to Theravance BioPharma and Innoviva.

Moving from the P&L to total value, it is worth noting that GSK is also a shareholder in both companies, with stakes of 22% in Theravance BioPharma and 27% in Innoviva (October 2015).

2. ViiV expected to be very influential

2.1. An impressive turnaround

Looking back a few years to the beginning of the decade, GSK's HIV business looked like an old cash cow that was progressively declining. Gilead had made a very strong inroad into this market segment and GSK had not been able to keep innovating and as a consequence was perceived as a player that would lose market share, not only under the influence of competition but also because some of its key drugs were about to face generics.

To try to limit the erosion in its sales, GSK decided to partner with Pfizer to form ViiV Healthcare (85% GSK/15% Pfizer). This was back in 2009 and the main purpose of this link-up for GSK was to gain access to Pfizer's Selzentry (maraviroc), a CCR5 co-receptor antagonist that could have appeared at some point as an interesting option in combination to treat CCR5-tropic HIV-1 but which actually resulted in disappointing reported revenues because safety was poor (severe liver toxicity) and the alternatives proved superior. The drug started to decline in 2014 and is no longer a growth engine.

Later, a JV between GSK and Shionogi formed in 2002 to work on integrase inhibitors was transferred to ViiV and, in 2012, the two companies decided to form a new collaboration agreement. Under this new alliance, Shionogi would become a 10% shareholder in ViiV and receive royalties on dolutegravir-based products ranging from 15% to 19%. This was the most structurally-transforming decision taken by GSK for its HIV business. As a consequence, GSK now holds a 76% stake in ViiV Healthcare.

Dolutegravir now part of recommended triple combo

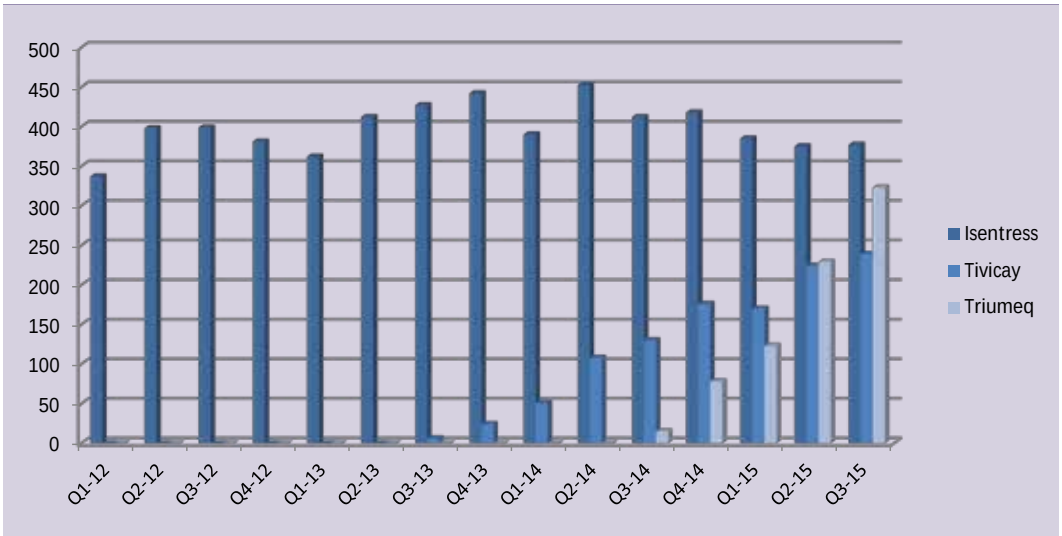
This enlarged definition of ViiV Healthcare has been crucial in that dolutegravir is becoming a key drug in the field of HIV treatment. Antiretroviral therapy recommended for adults infected with HIV now increasingly includes two NRTIs like abacavir/lamivudine or tenofovir/emtricitabine together with a third single or booster drug that could be an NNRTI (efavirenz), a boosted PI (atazanavir) or an integrase strand transfer inhibitor. Clearly, dolutegravir is now part of two highly recommended triple combinations called DTG/ABC/3TC (abacavir/ lamivudine) and DTG/TDF/FTC (tenofovir/emtricitabine) that are gaining share in the market. Of course, the first of the two has been further boosted in terms of prescription and use since a fixed-dose combination was launched under the brand name Triumeq which combines 50 mg of dolutegravir with 600 mg of abacavir and 300 mg of lamivudine, even though it is limited to patients who are HLA-B*5701 negative.

In clinical studies, dolutegravir demonstrated both rapid and durable action with a very convenient dosing scheme. Compared to first-in-class drug raltegravir from Merck, the drug is superior on all fronts and has started delivering superior numbers, even more so if Triumeq is included in the overall picture. Note that Merck launched a fixed-dose combination of raltegravir with lamivudine called Dutrebis in 2015 but it is a dual combination and not a triple combination like Triumeq.

GSK now class leader ahead of Merck

As illustrated in Fig.7, ViiV Healthcare has now taken a clear leadership position in the INSTI class. In just two quarters, from Q1 to Q3 2015, the dolutegravir-based family moved from similar to Isentress (Merck) to 50% bigger. Over the first 9 months of 2015, combined sales of Tivicay and Triumeq were USD1.3bn and the two should be very close to sales of USD2bn for the FY 2015.

Fig. 7: ViiV is now a clear leader in the INSTI class (USDm)

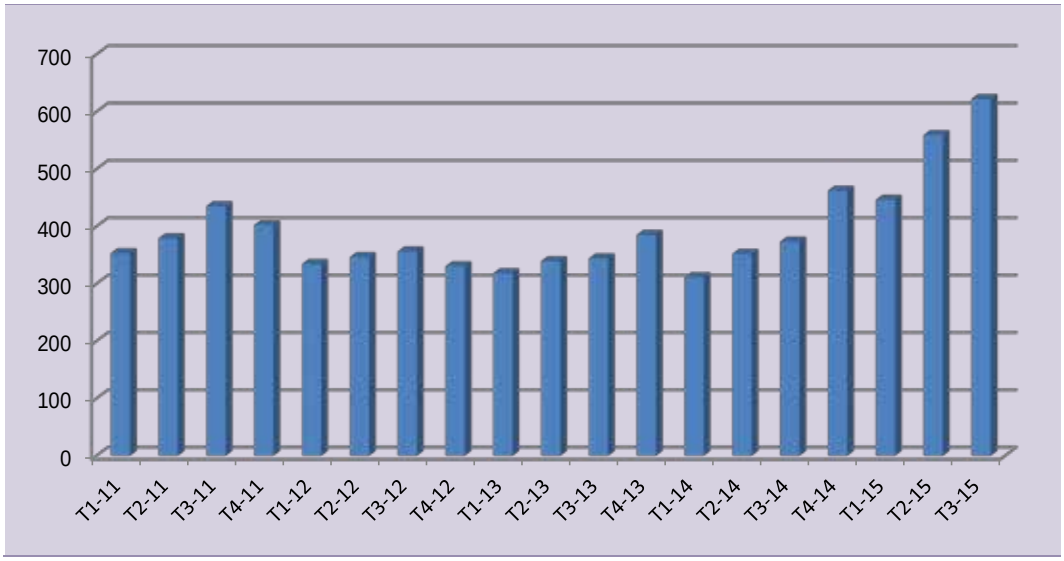


Source: Company Data; Bryan, Garnier & Co ests.

GBP3bn peak sales

The influence of Tivicay/Triumeq on the whole of ViiV Healthcare is simply massive as it can be seen in Fig.8. From Q3 2014 to Q3 2015, the weight of the two drugs soared from 21% to 59% of total ViiV revenues. We think it can grow by approaching 80% through to 2018 when sales will have more than doubled compared to 2015. In our view, the two drugs combined can reach GBP3bn in sales.

Fig. 8: Dolutegravir has had an enormous influence on ViiV Healthcare (GBPm)



Source: Company Data

2.2. How much more can we expect from ViiV?

As mentioned above, we think there is still a long way to go for dolutegravir-based drugs and considering their weight in the whole company, they should drive ViiV's sales CAGR to 16% over the 2015-2018 period.

Interestingly, GSK also provides an operating profit split by segment and ViiV Healthcare is, of course, one of them. Although we have to proceed cautiously as accounting does not always reflect the underlying truth, in this case – because ViiV Healthcare is a joint-venture shared between GSK, Pfizer and Shionogi – we believe that that numbers are relatively accurate, except that the royalties paid to Shionogi are not included but treated using the "acquisition accounting" method and thus have no P&L impact. However, cash-wise, it is worth restating to establish the right cash profitability.

Fig. 9: ViiV Healthcare: elements to assess profitability

	Q2-13	Q3-13	Q4-13	Q1-14	Q2-14	Q3-14	Q4-14	Q1-15	Q2-15	Q3-15
ViiV op. profit	229	228	223	204	225	246	302	318	413	466
ViiV op. margin	67,6%	66,3%	57,9%	65,6%	63,9%	66,0%	65,4%	71,3%	73,9%	74,9%

Source: Company Data

Royalties to Shionogi hit cash-flows, not P&L

In the third-quarter press release, GSK stated that cash payments relating to the ViiV Healthcare contingent consideration were GBP53m in the quarter (and GBP85m for the first 9 months of 2015). This is about 10% of product sales, which is close to the level that it is reasonable to expect as a post-tax rate paid to Shionogi going forward.

Whatever the approach, it is clear that ViiV Healthcare is having a positive influence on GSK's global profitability. Hence the far-higher growth at ViiV relative to the rest of the group will have a positive mix effect on margins. That said, management noted in a recent call that it would be reasonable to see ViiV's margins stabilising rather than further progressing, despite continuing growth in dolutegravir-based product sales. This is probably a reflection of the rebounding R&D spend required to sustain a leadership position in the field over the years and also to lower profitability in new territories where the drugs are launched compared with the US market. Two examples to illustrate the statement about R&D expenses on the upside:

- At the R&D event last November in New-York, GSK presented its ambitions in the field of infectious diseases, of which one good example is cabotegravir, a long-acting antiretroviral that is being extensively developed in both HIV treatment but also in HIV prevention, thus requiring much longer and bigger clinical studies.

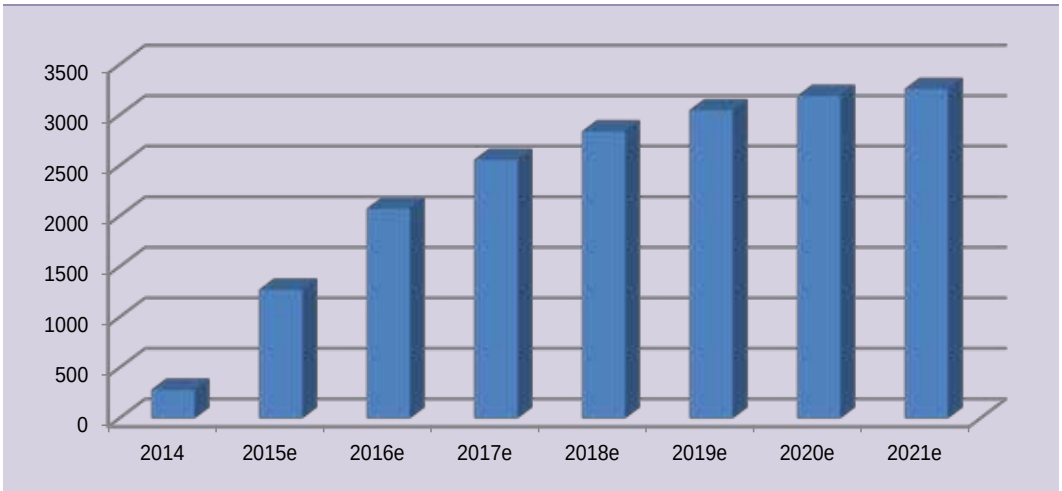
- In December 2015, GSK and ViiV Healthcare announced that they had reached an agreement with Bristol Myers Squibb (BMS) to acquire late-stage R&D assets and also an earlier-stage portfolio. Focusing on the late-stage part of the deal, this is worth USD317m upfront, up to USD518m in development and commercial milestones plus tiered royalties on sales to get an attachment inhibitor called fostemsavir that is currently in phase III, has received BTD and is expected to be filed with the FDA in 2018. A maturation inhibitor is also included in this section of the deal and is currently in phase IIb.

There is one last argument to add to the above two, which is that Epzicom will lost its patent over the coming 18 months in the US and Europe. This is the second largest ViiV drug and so this will also limit margin expansion.

ViiV will have a positive EBIT margin impact

Should ViiV Healthcare's operating margin as reported by GSK remain in the 70%-75% territory achieved in the first 9 months of 2015, applied to total sales which are set to soar from GBP2.3bn in 2015 to GBP3.6bn in 2018, the incremental operating profitability could be GBP950m i.e. a 16% increase over GSK's expected core EBIT in 2015. In other words, ViiV Healthcare could contribute 1.8% of GSK's total annual sales growth by 2018 but 5.1% of core EBIT. Everything else being equal, its influence on the group's core EBIT margin could be a 250bp positive (this is before considering non-P&L cash payments to Shionogi).

Fig. 10: Estimated combined sales of Tivicay and Triumeq



Source: Bryan, Garnier & Co ests

3. Asset swap with Novartis makes GSK a "self-help" story for 2016-17

3.1. Harmful in 2015

Short-term hit

Clearly we can't call the asset swap with Novartis the best-ever deal for GSK because it proved a difficult one to swallow for the group in 2015. Actually, there is probably a short-term and a long-term read-out of the transaction for both companies.

The first impact of consolidation/deconsolidation of the assets acquired/sold by the two companies was very positive for Novartis which divested a loss-making Vaccines business and poorly-profitable CHC business (in a separate deal with Lilly, it did the same with the Animal Health business) but acquired a highly-profitable Oncology portfolio although somewhat affected by high inventories. It was similarly negative for GSK in that the company booked a first set of numbers reflecting not only a poor history in both cases (vaccines and CHC) but also disruption due to the change of control and the initial integration costs (GBP2bn in total) while losing a highly-profitable and rapidly-expanding oncology franchise.

Longer-term, this is probably positive for the two groups because, from a strategic standpoint, there is no doubt that the relevant activities were facing size issues. Novartis was too small to be profitable in vaccines, would have had to invest in CHC to recover from manufacturing disruptions and was looking for opportunities in oncology to manage the "Gleevec cliff". For its part, GSK was happy with the three existing pillars but was considering options to strengthen each of them if possible in a complementary way. And there is no doubt that meningitis was exactly what GSK Vaccines needed as a highly-synergistic segment for its paediatric business. Similarly, in a market like CHC where size clearly matters (Bayer confirmed this when buying Merck as did Sanofi recently when transacting with B.I.), becoming bigger while acquiring new highly-respected brands like Voltaren or Excedrin makes sense.

At the time the oncology business was deconsolidated, it was delivering about 40% of operating profitability. On an annual basis, this is about GBP500m. Simultaneously, the low-profitability businesses acquired had a positive impact on revenues but a negative impact on earnings and margins. At the time of the announcement, we had calculated a GBP1.3bn positive impact on revenues but a negative GBP120m impact on EBIT and GBP450m on net profit (36.5% minority interest in the combined CHC business returned to Novartis).

In the end, of the expected 370bp drop in the core EBIT margin and the 410bp drop in the core net income margin in 2015, more than half will result from this transaction.

3.2. But now this is behind us

Since the market understood that things would not be as brilliant as they were supposed to be when listening the very first conference call held by the management, numbers have started to be adjusted downwards.

Although synergies are expected to be delivered mostly from 2017 onwards, half of the total was promised for year three. It is thus reasonable to anticipate some progress in 2016 margin-wise for the two businesses, everything else being equal. It is fair to say that both activities are sensitive to the level of the flu season in the US and, from that perspective, 2015/2016 looks like a mild season.

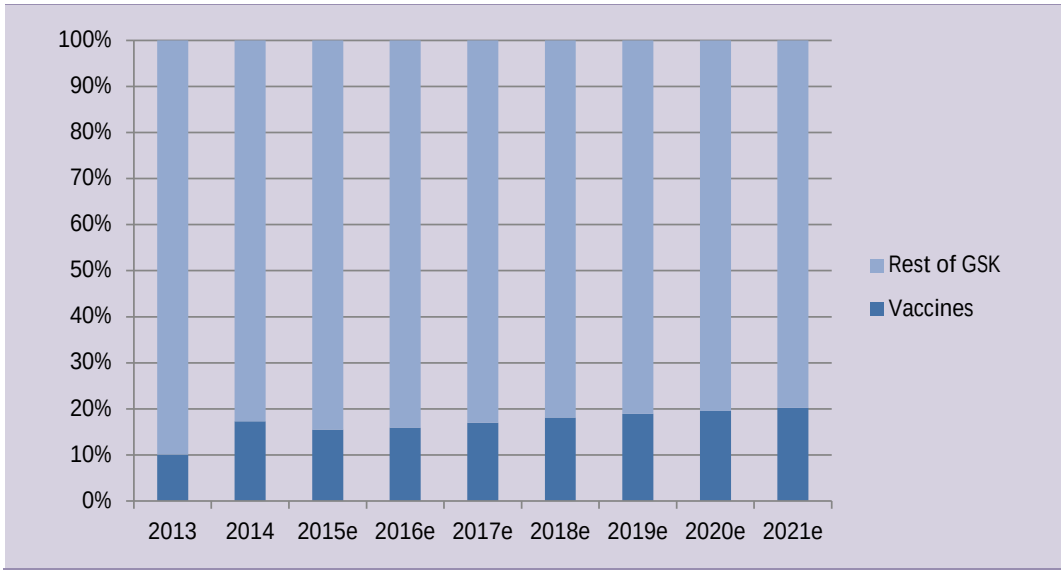
That said, the integration is said to be going well. CHC delivered decent growth in Q2 and Q3 and the former Novartis vaccines have made inroads in key markets, increasing market access and reimbursement coverage. Outbreaks of MenB in some regions in North America and Europe also helped to increase awareness about the risks and acted in favour of Bexsero. In the UK for instance, the MenB vaccine has been part of the routine immunisation schedule for babies since September 2015.

Former Novartis vaccines are delivering quite nicely

All in all, we had expected the former Novartis vaccines combined to contribute about GBP370m to GSK's top-line in 2015 but the final figure could be closer to GBP400m as Menveo and Bexsero have developed well in Europe. Our estimates are that they could double in size by 2021 to more than USD1bn.

In terms of cost savings and synergies, GSK said that the three-part transaction could deliver GBP1bn by year five. Twenty per cent of the total comes from divested oncology which makes no sense since it has gone whereas another 20% will be reinvested. Although, unlike ViiV Healthcare, a mix effect in favour of vaccines and CHC is detrimental to margins, GBP500-600m of net savings reported at the core EBIT level represents about 10% growth for this line relative to 2015 (2% growth per annum).

Fig. 11: Vaccines could represent 20% of GSK's total sales by 2021



Source: Company Data; Bryan, Garnier & Co ests.

Since we are talking about Vaccines, it is worth mentioning that the development of this activity within GSK is unlikely to be simply the result of the integration of the former Novartis business. As the current clear market leader since this acquisition, GSK should benefit from the underlying expansion in the vaccines market, notably in emerging markets where the significant cohort of new babies is very positive for GSK's paediatric vaccines. Moreover, in the short-term, Sanofi Pasteur's issues with a normal delivery of Pentacel in the US should benefit GSK.

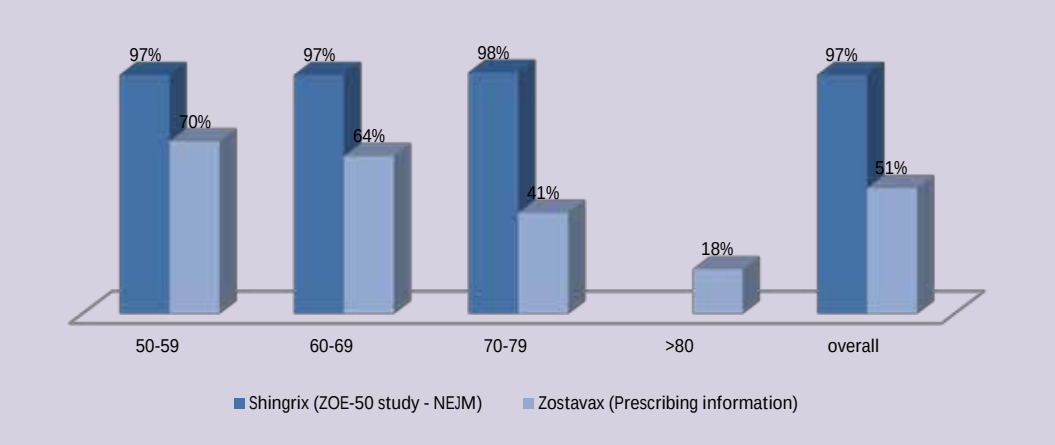
New zoster vaccine to play a major role

More than anything else, what will help GSK grow its Vaccines division is the upcoming new zoster vaccine that is ending its phase III development and is expected to be filed in H2 2016 in the US, Europe and Japan. This will be the first competitor to Merck's zoster vaccine Zostavax whose annual sales, despite some clear limitations (see below), amounted to USD868m in 2014 (incl. SP-MSD).

GSK's zoster vaccine actually looks very superior to Zostavax on all fronts as illustrated by the recently-published clinical data, with only one disadvantage which is the requirement of two doses 2-to-6 months apart vs only one dose for Zostavax. It would have been a major hurdle with a paediatric vaccine considering the already-very-crowded calendar of vaccinations but, for adults and elderlies, we do not see this as meaningful.

The first advantage for Shingrix over Zostavax is its efficacy against herpes zoster which has been reported as an overall 97.2% after a mean follow-up of 3.2 years (NEJM – 28 May 2015) and very consistent across the various age groups (from 96.6% to 97.9%). This is a very significant advantage relative to Merck's vaccine because the prescribing information for Zostavax mentions an efficacy ranging from 70% (in the 50-59 year-old group) down to only 41% (in the 70-79 year-old group). The older the patient, the lower the efficacy of the vaccine since it delivered an efficacy below the 20% threshold for patients aged 80 and older (see Fig.11). This goes against the appetite and structure of the target market since the incidence of shingles increases with age and the consequences also worsen with age.

Fig. 12: Comparative efficacy of Shingrix and Zostavax



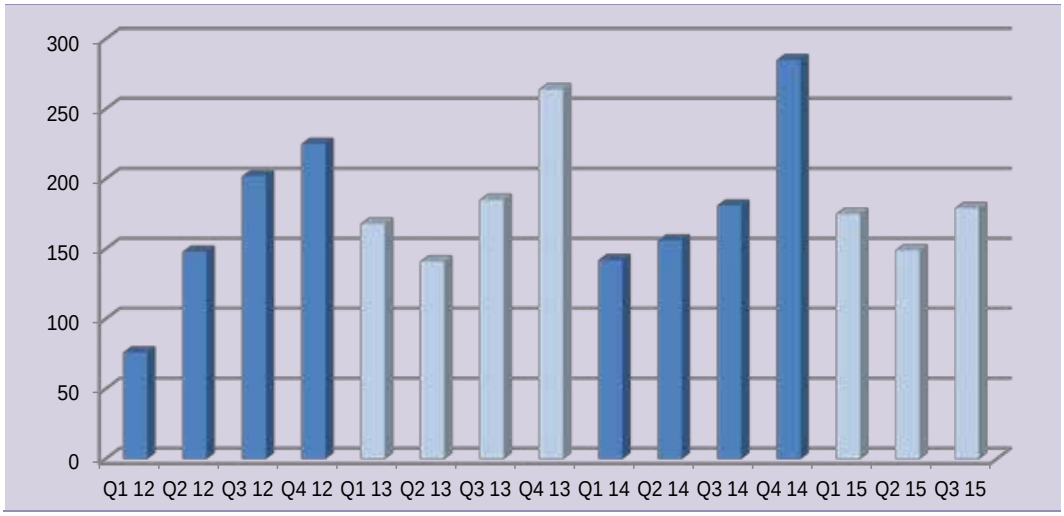
Source: NEJM, PI Zostavax, Company Data; Bryan, Garnier & Co ests.

Another advantage of Shingrix over Zostavax is potentially the duration of action of the protection against shingles. The efficacy shown on Fig.11 with Zostavax falls below 40% in year 3 and even below 40% in year 6. Similar data are not available with Shingrix because the vaccine is younger and exposure to it is not as long but efficacy remains between 95% and 100% up until year 4.

Sustainability of efficacy obviously is key and a poor duration of action a clear limitation to the penetration of a vaccine. Together with a limited efficacy in elderly patients, this may explain why coverage of the US penetration remains low. The last available data from the CDC dated 2013 is that 24% of US patients are likely to receive Zostavax (up from 20% in 2012). In the US, every year, a high portion of elderly people receive a vaccination for flu, unlike in Europe where it is less common. So there is no philosophical barrier to giving a vaccine to 70+ year old people in the US.

We might mention another advantage that Shingrix potentially has relative to Zostavax which is its efficacy against post herpetic neuralgia, a complication of herpes zoster characterised by persistent nerve pain occurring at the sites of previous attacks of shingles. There are medications against PHN but, should a vaccine also prevent PHN, its relevance would be even greater. And here again, the results show an efficacy of 88-91% across the various age groups for Shingrix vs 55-60% for Zostavax.

Fig. 13: Sales trend for Zostavax (excluding SP-MSD)



Source: Company Data

Despite all the limitations summarized above, added to which the fact that Zostavax is contraindicated in immunocompromised people, Zostavax should approach USD1bn in sales in 2015. Over 60% of sales are in the US. In Europe, where it is sold through the SP-MSD joint-venture with Sanofi, Zostavax was the fastest-growing vaccine in 2014 with USD103m in sales.

We now see Shingrix reaching USD1.5bn at peak

The superior profile of Shingrix across all geographies looks like a major opportunity for GSK. This should be reflected in hard numbers with time as GSK is conducting additional trials to fine-tune the positioning of its vaccine and to try to obtain a broader scope than Zostavax, including for instance immune-compromised people but also maybe Zostavax-vaccinated patients (re-vaccination). Another reason why Shingrix's potential should be delivered over the course of several years is that production capacity will increase with time, up to 25 to 30 million doses in 2020.

Fig. 14: Sales estimates for Shingrix

USDm	2016e	2017e	2018e	2019e	2020e	2021e
US sales (old)	0	200	450	500	550	650
US sales (new)	0	150	450	650	800	1,000
Europe sales (old)	0	80	100	120	150	250
Europe sales (new)	0	20	100	150	180	220
ROW sales (old)	0	0	0	20	50	80
ROW sales (new)	0	20	40	60	80	130
Total sales (old)	**0**	**280**	**550**	**640**	**750**	**980**
Total sales (new)	**0**	**190**	**590**	**860**	**1,060**	**1,350**

Source: Bryan, Garnier & Co ests.

In the end, we have added close to USD400m in sales for Shingrix in 2021.

4. Valuation and conclusion

4.1. Strategy and management

Before moving to the core part of this section, i.e. financials and valuation, we would like to say a few words on two fairly hot topics that are closely related. After the poor performance of the last couple of years, there is a growing dissatisfaction amongst investors about the way the current Executive Committee is managing the group, starting with criticism about CEO Andrew Witty. Some are clearly asking for a replacement. The second topic consists of a rethink about the scope of activities which would be right for a group like GSK going forward with some investors asking for a spin-off of the various businesses into four separate companies, i.e. Pharmaceuticals, Vaccines, ViiV and CHC.

Management has not been always been clear about the strategy

About management, we would say that the strategy has not always been clear, starting with the definition of the core businesses in which the group plans to build expertise. Shortly after the Stiefel acquisition, GSK installed dermatology as a strategic pillar but, just few years down the line, it stopped being a priority. Then came oncology, where GSK was proud to have won significant drug approvals but then opted to sell this business to Novartis. In 2012, during an R&D day, GSK presented a more focused structuring of R&D but then created new B.U.s (dermatology, ophthalmology, rare diseases) which continue to struggle to move compounds in late-stage development. Did GSK deliver on this? Not really in our view and not only because R&D failed to do a great job (darapladib and MAGE-A3 failures in phase III trials were big hits anyway). The number of approvals obtained is significant but many of the approved drugs have not made the transition to sizeable products. Most have failed to reach their sales targets like Tanzeum, Anoro or Benlysta. Needless to mention the bribery scandal in China that has had very negative consequences on GSK's business in that country and its performance in emerging markets in general. Ultimately, there is a feeling that the top management has not accepted enough responsibility for these failures. Significant changes at the very top of the company would have been difficult in 2015 as GSK was integrating the acquired Novartis activities but, by early 2017, we see some moves taking place.

Moving to the scope of that activities GSK is likely to move forward with, it is a more difficult question that will depend on the Board's view, independently of the pressure from some shareholders. Recently CEO Andrew Witty answered that question by saying that it was premature to think about a spin-off but that he could conceivably imagine GSK's CHC business acting on a stand-alone basis as soon as the integration is complete, i.e. by 2018. As we speak, this joint-venture is still 36.5% owned by Novartis although the latter has a so-called "JV Put Option" that may be exercised at any time during the period beginning three years after completion and ending 20 years following completion. It can be exercised in a maximum of four tranches, representing a minimum of 7.5% of the capital apiece.

We are sceptical about a CHC spin-off

Depending on whether Novartis exercises the put option or not, it will be the sole decision of GSK or both companies' decision to potentially list this company separately. Although it is conceivable and could doubtless fly on its own, unless R&D suddenly becomes massively productive and reliable in terms of the delivery of new products, in which case CHC could become dilutive to margins and growth, we do not see GSK's Board favouring the split of activities. The clean-up of CHC over the last few years has focused this business on big brands in key markets and also moved it away from highly and purely consumer-oriented products like sports drink Lucozade, sold to Suntory in 2014. Note that we value the 36.5% stake that Novartis owns in the JV at USD12bn by discounting over the 3-year period until 2018 a ratio of 3.5x the expected sales.

4.2. Financials

With the sole exception of Shringrix, which has delivered almost all the expected phase III results, all the elements outlined in this short note on GSK are, in our view, supportive of a "self-help" investment case in that it is now a question of execution and delivery but on existing matters, i.e. approved and launched drugs or acquired businesses. Nothing really depends on R&D, regulatory decisions, reimbursement cases, etc.

One of the fastest growing large cap pharma companies

What looks interesting for 2016, ahead of the guidance season for big pharma, is that as of today we could see GSK – together with Bayer – as the only company able to deliver double-digit core EPS growth. Be it Crestor, Lantus or Gleevec, other players will lose significant products to generics which should limit their ability to deliver earnings growth in 2016. GSK has already committed itself to double-digit core EPS growth in 2016, so the possibility of any surprises from the management when announcing FY 2015 results and guidance for 2016 is limited in our view.

There are a number of swing factors for GSK in 2016, starting with the as-yet-unclear ramp-up of Nucala, the erosion rate for Advair net of Breo progress, the level of growth that ViiV will enjoy or how much former Novartis assets will deliver on an annual basis. However, unless if everything turns negative, we do not see where a miss to the double-digit growth target would come from, in that about GBP700m of the cost savings should be delivered in 2016 from historical programmes and that no big drug will drop except Avodart (less than GBP500m in sales in the US and Europe combined in 2015). Management reiterated the objectives at the JPM conference in January while already having a good idea of how PBM plans would cover its big respiratory drugs on one hand and also how the integration of vaccines and CHC from Novartis was going.

Currencies should play positively in 2016

Before we move to a longer-term view, we would stress that currencies could also play in favour of GSK in 2016, unlike in 2015 when the impact was negative on core EPS by 5 to 6 points. As of today, the main difference comes from the Euro whose rate against the GBP has moved from a 10% negative to a 4% positive and also from the Japanese Yen (from 6% negative to 9% positive). This impact would be massive were some "emerging currencies" not once more in negative territory.

Fig. 15: Currency impacts

Main currencies	Q1 2015	Q2 2015	Q3 2015	Estim. 2016
USD/GBP	+9%	+10%	+9%	+6%
EUR/GBP	-10%	-11%	-8%	+4%
JPY/GBP	-6%	-7%	-6%	+8%
Basket emerging/GBP	-6%	-8%	-7%	-6%
Total Sales impact	**-1%**	**-1%**	**-2%**	
Total core EPS impact	**-2%**	**-9%**	**-5%**	

Source: Company Data; Bryan, Garnier & Co ests.

That said, considering the mix in currencies, it is not easy to measure the impact on core EPS (see Fig.14 and changes between Q1 and Q2 2015 that look minimal but result in 2% and 9% core EPS reductions respectively). For 2016, we would not rule out a mid-single digit positive impact that we have yet to fully factor in: our current estimate of core EPS for 2016 stands at GBP86.2 which is 13.4% above our latest estimate for 2015 (i.e. GBP76.0, down by 20.2% over 2014).

Fig. 16: Sequence of expected core EPS over [2015-2018]

	2015	2016	2017	2018
Core EPS CS	76.5p	85.1p	90.9p	95.4p
Core EPS BG	76.0p	86.1p	91.3p	99.1p
Difference	-0.5p	+1.0p	+0.4p	+3.7p

Source: Bryan, Garnier & Co ests.

4.3. Elements of valuation

4.3.1. Changes to the numbers

Starting with revenues, we have made various changes to some products but it is fair to say that only two have ultimately had a meaningful impact to the consolidated numbers and they have been described in this report: the first is Triumeq because the most recent guidelines are recommending its use and because this is a unique triple combination that should continue to gain share in the class; the second is Shingrix that confirms its high differentiation vs the existing zoster vaccine and we feel confident that GSK's vaccine will exceed Zostavax by a clear margin. Note also that we have factored anti-Il-6 sirukumab into our estimates starting in 2017 but, as a third player in the class, we have decided to be cautious i.e. to use a PoS of 60% and to limit its market share (2022 sales of GBP200m).

The reminder of the increase in our top-line numbers mainly comes from currencies. The impact should be positive by close to 3pp on sales.

Moving down the P&L, we have also paid more attention than before to the various in and out impacts from partnerships, which include:

- Royalties paid to Innoviva on Breo and Anoro, booked in "cost of goods sold";
- A 21.7% interest in ViiV Healthcare returned as minority interests to Pfizer and Shionogi;
- A 36.5% interest in the JV CHC returned as minority interests to Novartis;
- Note in the P&L but restated from the operating cash-flows are the royalties paid to Shionogi (we assume average rate is 18% of dolutegravir-based drugs)

4.3.2. Main hypothesis for valuation

The discount rate used for the DCF and EVA methodologies for GSK derives from the risk-free rate of 2% and equity risk premium of 6.4% that are currently used within the research department of Bryan Garnier, together with a beta of 0.8 (big pharma). The cost of net financial debt of slightly below GBP7bn is assumed to be around 4% on average and the tax rate retained is 20%. Once all this is factored in, the WACC stands at 6.76%.

As for the average growth rate to infinity, we have assumed an average growth rate of 2% for Pharmaceuticals, 1.5% for CHC and 3% for Vaccines. Once we apply the various weights of each business (based on revenues in 2015), the compounded average growth rate is 2.02%.

4.3.3. The DCF points to a valuation of GBP1,600 per share

Fig. 17: Sequence of DCF

GBPm	2016	2017	2018	2019	2020	2021	2022
EBIT	6 535	7 043	7 397	7 945	8 403	8 857	9 076
Tax	1 409	1 479	1 589	1 681	1 681	1 771	1 815
Minority interests (ViiV)	462	491	501	518	527	527	527
Cash payments to Shionogi	-258	-318	-353	-380	-397	-406	-414
Change in Working Capital	-109	-185	272	-159	-120	50	45
Capex	2 000	2 000	2 000	2 000	2 000	2 000	2 000
Restructuring cash	450	150	0	0	0	0	0
D&A	1 000	1 000	1 000	1 000	1 000	1 000	1 000
Free Cash Flows	2 847	3 419	4 226	4 208	4 678	5 203	5 365
Discount rate	1,00	0,94	0,88	0,82	0,77	0,72	0,68
Discounted Free Cash Flows	2 847	3 203	3 958	3 458	3 600	3 751	3 623

Source: Bryan, Garnier & Co ests.

Discounted CF	97 213
Net financial debt	6 767
Provisions	5 223
Financial assets	4 887
Minority interests (restated at market value)	12 076
Net DCF	78 033
Number of shares (m)	4,820
DCF per share (GBP)	**1,620**

Source: Bryan, Garnier & Co ests.

4.3.4. The EVA points to a valuation of GBP1,640 per share

Fig. 18: Sequence of EVA

GBPm	2016	2017	2018	2019	2020	2021	2022
Tangible assets	10 052	10 552	11 052	11 552	12 052	12 552	13 052
Intangible assets	-2 213	-2 353	-2 493	-2 633	-2 773	-2 913	-3 053
Working capital	-407	-222	-494	-335	-214	-265	-310
Invested Capital	7 432	7 977	8 065	8 584	9 065	9 374	9 689
EBIT	4 737	5 434	6 104	6 625	7 066	7 511	7 722
Minority interests	462	491	501	518	527	527	527
Tax rate	20,0%	20,0%	20,0%	20,0%	20,0%	20,0%	20,0%
NOPLAT	3 327	3 857	4 382	4 782	5 125	5 482	5 650
NOPLAT / Invested Capital	44,8%	48,3%	54,3%	55,7%	56,5%	58,5%	58,3%
Cost of capital (WACC)	6,76%	6,76%	6,76%	6,76%	6,76%	6,76%	6,76%
Difference	38,01%	41,58%	47,57%	48,94%	49,78%	51,72%	51,55%
Value Creation (VC)	2 825	3 317	3 837	4 202	4 512	4 848	4 995
Actualisation rate	1,00	0,94	0,88	0,82	0,77	0,72	0,68
Discounted Value	2 825	3 107	3 366	3 453	3 473	3 495	3 373

Source: Company Data; Bryan, Garnier & Co ests.

Sum of the premiums	95 683,35
Shareholder funds	3 085,50
Intrinsic value of operations	98 768,85
Provisions	-5 223,00
Financial assets	4 887,00
Minority interests (at market value)	12 076,21
Net financial debt	6 767,42
Intrinsic value of shareholders' funds	79 589,21
Number of shares	4 820
EVA per share (GBP)	**1,650**

Source: Company Data; Bryan, Garnier & Co ests.

Our new FV is GBP1,635p

The average of the two methodologies points to a valuation of GBP1,635p. Therefore, we adopt a new FV for GSK of GBP1,635 up from GBP1,540. Relative to the last closing price, our FV points to theoretical upside of 15%.

This upside potential is far from the highest in our universe. After the recent pull-back in the market, several large cap companies offer theoretical upside to their FV of over 20%. However, a BUY rating in our coverage list is merited when a certain upside to the FV correlates with positive momentum and some kind of turning point in an investment story. In 2016 maybe more than in any previous year, in our view transformation stories will be needed to support an investment case in the healthcare space.

This is a new BUY

In our coverage, we think that Roche (BUY – FV CHF327) to some extent ticks the boxes but to date AstraZeneca has been our top pick (BUY – FV GBP5,550). Within the midcap universe, Actelion (BUY – FV CHF166) and Ipsen (BUY – FV EUR63) also meet the remit. We see GSK (new BUY – FV GBP1,635) as also corresponding fairly well to our criteria, without even mentioning a 5.7% dividend which is also very supportive.

Appendix 1: Respiratory drugs

GBPm	2014		2015		2016		2017		2018		2019		2020		2021		2022	
Respiratory	**6 181**	**-10%**	**5 595**		**5 681**		**5 680**		**5 619**		**5 376**		**5 329**		**5 539**		**5 648**	
US	***2 810***	***-18%***	***2 575***		***2 637***		***2 537***		***2 378***		***2 094***		***2 033***		***2 164***		***2 267***	
Europe	***1 675***	***-3%***	***1 383***		***1 365***		***1 355***		***1 352***		***1 328***		***1 327***		***1 387***		***1 378***	
Intl	***1 696***		***1 637***		***1 678***		***1 789***		***1 889***		***1 955***		***1 968***		***1 989***		***2 004***	
Flovent	702	-6%	622		746		687		635		584		532		495		461	
US	432	-6%	373	-20%	335	-15%	285	-15%	242	-15%	206	-15%	175	-15%	158	-10%	142	-10%
Europe	102	-9%	86	-6%	80	-10%	72	-10%	65	-10%	59	-10%	53	-10%	47	-10%	43	-10%
Intl	168		163	5%	167	5%	172	3%	176	2%	176	0%	167	-5%	159	-5%	151	-5%
Advair	5 156	-15%	3 522		3 111		2 605		2 040		1 458		1 121		967		839	
US	1 972	-25%	1 701	-20%	1 513	-16%	1 210	-20%	847	-30%	424	-50%	212	-50%	191	-10%	172	-10%
Europe	1 330	-5%	994	-17%	823	-20%	658	-20%	494	-25%	370	-25%	278	-25%	208	-25%	156	-25%
Intl	927		826	-9%	775	-5%	736	-5%	699	-5%	664	-5%	631	-5%	568	-10%	511	-10%
Allermist	238	5%	233		250		264		273		278		278		275		262	
US	31	-21%	27	-20%	25	-10%	27	6%	28	5%	30	5%	30	0%	30	0%	30	0%
Europe	69	4%	65	5%	71	5%	72	2%	72	0%	72	0%	72	0%	69	-5%	65	-5%
Intl	138		141	12%	154	9%	165	7%	173	5%	176	2%	176	0%	176	0%	167	-5%
Ventolin	665	11%	628		632		623		614		606		599		582		567	
US	328	18%	311	-12%	313	-5%	297	-5%	283	-5%	268	-5%	255	-5%	229	-10%	207	-10%
Europe	124	2%	112	0%	113	-2%	110	-3%	104	-5%	99	-5%	94	-5%	89	-5%	85	-5%
Intl	213		205	6%	206	5%	216	5%	227	5%	238	5%	250	5%	263	5%	276	5%
Breo	87		232		423		620		817		962		1 114		1 240		1 364	
US	29		90		191	100%	286	50%	372	30%	427	15%	491	15%	546	11%	600	10%
Europe	18		78		144	80%	224	55%	313	40%	376	20%	432	15%	475	10%	518	9%
Intl	20		64		88	40%	110	25%	132	20%	159	20%	191	20%	219	15%	245	12%
Anoro	17		85		183		301		425		528		630		749		857	
US	10		55		116	100%	186	60%	261	40%	326	25%	391	20%	470	20%	540	15%
Europe	5		20		37	80%	55	50%	75	35%	90	20%	104	16%	119	14%	132	11%
Intl	2		10		30	200%	60	100%	89	50%	112	25%	134	20%	161	20%	185	15%
Arnuity + Incruse			15		21	40%	26	25%	30	15%	33	10%	35	5%	37	5%	38	5%
US			11		13		16		18		20		21		22		23	
Europe			5		8		11		12		13		14		15		15	
Intl			0		2		3		3		3		3		4		4	
Nucala (mepolizumab)			7		222		458		684		832		930		1 121		1 192	
US			7		131		229		327		392		458		526		561	
Europe					65		131		196		229		262		350		350	
Intl					26		98		161		210		210		245		280	
New Other	263		252		253		252		251		239		227		215		205	
US	8		1		0		0		0		0		0		0		0	
Europe	27		23	-5%	23	-5%	22	-5%	21	-5%	20	-5%	19	-5%	18	-5%	17	-5%
Intl	228		228	0%	230	5%	230	0%	230	0%	219	-5%	208	-5%	198	-5%	188	-5%

Source: Company Data; Bryan, Garnier & Co ests.

Appendix 2: Vaccines

GBPm	2014		2015		2016		2017		2018		2019		2020		2021		2022	
Vaccines	***3 192***	***-7%***	***3 649***	***14%***	***3 954***	***8%***	***4 289***	***8%***	***4 770***	***11%***	***5 186***	***9%***	***5 543***	***7%***	***5 958***	***7%***	***6 212***	***4%***
US	***930***	***0%***	***1216***		***1367***		***1545***		***1 822***		***2 036***		***2 207***		***2 410***		***2 479***	
Europe	***978***	***-2%***	***1114***		***1224***		***1287***		***1 399***		***1 486***		***1 561***		***1 636***		***1 707***	
Intl	***1284***		***1319***		***1363***		***1456***		***1549***		***1665***		***1775***		***1912***		***2026***	
Hepatitis	558	-6%	531		554		568		584		601		620		640		663	
US	234	-6%	240	-5%	254	0%	254	0%	254	0%	254	0%	254	0%	254	0%	254	0%
Europe	186	-2%	156	-7%	158	-2%	158	0%	158	0%	158	0%	158	0%	158	0%	158	0%
Intl	138		136	10%	142	10%	156	10%	172	10%	189	10%	208	10%	229	10%	252	10%
Infanrix	828	2%	774		826		852		879		908		938		969		1002	
US	297	15%	291	-9%	309	0%	309	0%	309	0%	309	0%	309	0%	309	0%	309	0%
Europe	369	-3%	322	-3%	350	5%	368	5%	386	5%	405	5%	426	5%	447	5%	469	5%
Intl	162		160	10%	167	10%	176	5%	185	5%	194	5%	204	5%	214	5%	224	5%
Rotarix	376	7%	390		422		458		485		513		531		531		531	
US	86	-16%	116	25%	129	5%	135	5%	142	5%	149	5%	157	5%	157	0%	157	0%
Europe	67	19%	63	5%	72	10%	79	10%	87	10%	96	10%	106	10%	106	0%	106	0%
Intl	223		211	5%	221	10%	243	10%	256	5%	268	5%	268	0%	268	0%	268	0%
Boostrix	317	16%	329		379		426		469		510		555		604		658	
US	163	-7%	197	12%	240	15%	276	15%	303	10%	334	10%	367	10%	404	10%	444	10%
Europe	78	26%	84	20%	96	10%	106	10%	116	10%	122	5%	128	5%	134	5%	141	5%
Intl	76		48	-30%	43	-5%	45	5%	50	10%	55	10%	60	10%	66	10%	73	10%
Cervarix	118	-26%	117		117		120		123		126		129		133		136	
US	5	-17%	10		10		10		10		10		10		10		10	
Europe	48	-16%	50		50		50		50		50		50		50		50	
Intl	65		57	0%	57	5%	60	5%	63	5%	66	5%	69	5%	73	5%	76	5%
Synflorix	398	4%	357		339		329		320		325		331		338		345	
US	0		0		0		0		0		0		0		0		0	
Europe	40	-13%	41	10%	46	10%	50	10%	55	10%	61	10%	67	10%	74	10%	81	10%
Intl	358		317	0%	293	-2%	278	-5%	264	-5%	264	0%	264	0%	264	0%	264	0%
Influenza	215	-9%	247		273		285		299		312		327		342		358	
US	142	2%	176	15%	201	8%	211	5%	222	5%	233	5%	245	5%	257	5%	270	5%
Europe	22	-34%	20	0%	21	0%	21	0%	21	0%	21	0%	21	0%	21	0%	21	0%
Intl	51		51	11%	51	5%	53	5%	56	5%	59	5%	62	5%	65	5%	68	5%
Herpes zoster	0		0		0		133		414		604		745		948		984	
US	0		0		0		104		312		450		554		692		692	
Europe	0		0		0		15		75		113		135		165		188	
Intl			0		0		14		28		42		55		90		104	
Former NOVARTIS	0		393		526		572		623		679		725		771		810	
US	0		166	0%	220	25%	242	10%	266	10%	293	10%	307	5%	323	5%	339	5%
Europe	0		142	0%	182	25%	191	5%	201	5%	211	5%	221	5%	232	5%	244	5%
Intl			85		124		139		156		176		197	12%	217	10%	227	5%
Other	382	-6%	510		519		546		575		607		642		681		723	
US	3		20		5		5		5		5		5		5		5	
Europe	168	-5%	236	30%	249	0%	249	0%	249	0%	249	0%	249	0%	249	0%	249	0%
Intl	211		255	35%	265	10%	291	10%	320	10%	352	10%	388	10%	426	10%	469	10%

Source: Company Data; Bryan, Garnier & Co ests.

Appendix 3: ViiV Healthcare

GBPm	2014		2015		2016		2017		2018		2019		2020		2021		2022	
ViiV	**1 498**		**2 317**		**3 031**		**3 254**		**3 333**		**3 463**		**3 530**		**3 546**		**3 574**	
US	**670**		**1244**		**1668**		**1849**		**1880**		**1887**		**1906**		**1895**		**1886**	
Europe	**534**		**756**		**1000**		**1016**		**1009**		**1076**		**1065**		**1066**		**1077**	
Intl	**294**		**317**		**364**		**389**		**443**		**500**		**559**		**585**		**611**	
Trizivir	36	-61%	28		23		17		13		11		9		8		6	
US	10	-81%	8	-30%	6	-30%	4	-30%	3	-30%	2	-30%	1	-30%	1	-30%	1	-30%
Europe	22	-28%	17	-15%	15	-15%	13	-15%	11	-15%	9	-15%	8	-15%	7	-15%	6	-15%
Intl	4		4		3		0		0		0		0		0		0	
Combivir	59	-46%	38		30		25		20		17		14		12		10	
US	11	-67%	11	-10%	10	-10%	9	-10%	8	-10%	7	-10%	7	-10%	6	-10%	5	-10%
Europe	18	-52%	10	-40%	8	-20%	6	-20%	5	-20%	4	-20%	3	-20%	3	-20%	2	-20%
Intl	30		17	-35%	12	-25%	9	-25%	7	-25%	5	-25%	4	-25%	3	-25%	2	-25%
Epzicom	768	8%	716		695		478		311		256		208		174		149	
US	274	7%	254	-14%	229	-15%	114	-50%	23	-80%	7	-70%	3	-50%	2	-50%	1	-50%
Europe	335	7%	317	5%	328	0%	229	-30%	161	-30%	129	-20%	90	-30%	63	-30%	44	-30%
Intl	159		145	0%	138	-2%	134	-3%	127	-5%	121	-5%	115	-5%	109	-5%	104	-5%
Selzentry	136	0%	126		125		122		119		116		108		100		93	
US	53	-4%	54	-5%	55	-5%	52	-5%	49	-5%	47	-5%	42	-10%	38	-10%	34	-10%
Europe	58	-3%	55	5%	57	0%	57	0%	57	0%	57	0%	54	-5%	51	-5%	49	-5%
Intl	25		17	-25%	14	-15%	13	-5%	13	-5%	12	-5%	11	-5%	11	-5%	10	-5%
Agenerase/Lexiva	87	-17%	65		48		38		27		20		16		12		9	
US	45	-24%	39	-20%	29	-30%	23	-20%	16	-30%	11	-30%	8	-30%	6	-30%	4	-30%
Europe	20	-25%	13	-30%	9	-30%	6	-30%	4	-30%	4	-15%	3	-10%	3	-10%	3	-10%
Intl	22		14	-30%	10	-20%	8	-20%	7	-20%	5	-20%	4	-20%	3	-20%	3	-20%
Tivicay + Triumeq	282		1272		2 050		2 528		2 805		3 012		3 151		3 220		3 289	
US	200		850		1 316	46%	1 627		1 766		1 800		1 835		1 835		1 835	
Europe	56		327		568		692		762		866		900		935		969	
Intl	26		95		166		208		277		346		415		450		485	
Others	130	5%	72		59		47		38		30		25		21		18	
US	77	55%	28	-30%	24	-20%	19	-20%	15	-20%	12	-20%	10	-20%	8	-20%	6	-20%
Europe	25	-30%	18	-20%	15	-20%	12	-20%	10	-20%	8	-20%	6	-20%	5	-20%	4	-20%
Intl	28		26	-35%	20	-20%	16	-20%	13	-20%	10	-20%	9	-10%	8	-10%	8	-10%

Source: Company Data; Bryan, Garnier & Co ests.

Price Chart and Rating History

GlaxoSmithKline

Ratings		
Date	**Ratings**	**Price**
08/02/12	NEUTRAL	1406p
27/07/11	BUY	1373p
18/07/11	SELL	1330p

Target Price	
Date	**Target price**
05/01/16	1540p
05/11/15	1530p
25/09/15	1520p
09/09/15	1470p
30/07/15	1480p
07/05/15	1580p
14/04/15	1810p
12/01/15	1640p
23/10/14	1650p
24/07/14	1685p
10/04/14	1755p
13/03/14	1765p
06/02/14	1750p
07/01/14	1850p
24/10/13	1810p
23/09/13	1870p
25/07/13	1900p
14/05/13	1940p
25/04/13	1790p
08/04/13	1760p

Bryan Garnier stock rating system

For the purposes of this Report, the Bryan Garnier stock rating system is defined as follows:

Stock rating

BUY — Positive opinion for a stock where we expect a favourable performance in absolute terms over a period of 6 months from the publication of a recommendation. This opinion is based not only on the FV (the potential upside based on valuation), but also takes into account a number of elements that could include a SWOT analysis, momentum, technical aspects or the sector backdrop. Every subsequent published update on the stock will feature an introduction outlining the key reasons behind the opinion.

NEUTRAL — Opinion recommending not to trade in a stock short-term, neither as a BUYER or a SELLER, due to a specific set of factors. This view is intended to be temporary. It may reflect different situations, but in particular those where a fair value shows no significant potential or where an upcoming binary event constitutes a high-risk that is difficult to quantify. Every subsequent published update on the stock will feature an introduction outlining the key reasons behind the opinion.

SELL — Negative opinion for a stock where we expect an unfavourable performance in absolute terms over a period of 6 months from the publication of a recommendation. This opinion is based not only on the FV (the potential downside based on valuation), but also takes into account a number of elements that could include a SWOT analysis, momentum, technical aspects or the sector backdrop. Every subsequent published update on the stock will feature an introduction outlining the key reasons behind the opinion.

Distribution of stock ratings

BUY ratings 60.2% NEUTRAL ratings 30.8% SELL ratings 9%

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15	Other disclosures	Other specific disclosures: Report sent to Issuer to verify factual accuracy (with the recommendation/rating, price target/spread and summary of conclusions removed).	No

Summary of Investment Research Conflict Management Policy is available www.bryangarnier.com

Please see the section headed "Important information" on the back page of this report.

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