Gilead Sciences

Phase III Filgotinib UC Data Coming - Yes Other Stuff Besides Coronavirus Too

March 29, 2020

Key Takeaway

GILD will report out Phase III UC data for filgotinib in Q2 and positive data could drive investor sentiment and consensus sales higher across the Street. GILD is ahead of ABBV in UC so this is an area of pot'l differentiation against competitors. We describe expectations and compare the landscape of UC data (chart inside this report). With a 3.5% yield and minimal impact from coronavirus, GILD remains a favored large cap biotech in this tough environment.

Big Picture: GILD remains a defensive positioning stock particularly in this macro environment. We appreciate short-term trading has been mostly dictated around market volatility risk-on/off and expectations on remdesivir for COVID-19 data starting in April (recently confirmed by CEO this weekend in an open letter to the public). Fundamentally however, we still like GILD for the improving story, starting more M&A ($5B FTSV deal was a good start), and it's still cheap. We think Phase III UC data for filgotinib ($1-2B + pot'l GILD sales here in $6B+ UC market) would be a nice catalyst in Q2 and further improve sentiment around the franchise as an area of differentiation to ABBV.

Phase III UC data is due in Q2: Generally speaking, we think pbo-adjusted remission rates of 10-15% at Week 10 (induction period) and 20-25% at Week 58 (maintenance) would make filgotinib "competitive" with other UC drugs, including Humira, Entyvio, and other JAKs (ABBV Rinvoq in Phase III and PFE Xeljanz). While we expect investors to make cross-trial comparisons, we caution comparing directly to other UC datasets is imprecise due to differing baseline characteristics such as proportion of biologic naive/experienced and slightly different endpoints of the Mayo score. However -- recent commentary from GILD suggests positive confidence around results and good activity in both biologic naive and experienced. ***See Exhibit 1 for UC dataset comparison table****

PDUFA in RA is August 2020: Two other approval debates in RA: (1) Will they get a Black Box? Expectations are already yes given ABBV FDA approval correspondence letter suggesting the agency was likely to give a class label Black Box to the class due to the uncertainty of degree of bleeding difference between various JAKs (GILD traded down on that)**, (2) Will filgotinib get the 200mg "high dose" approved in RA?** GILD has not commented on any Adcom panel and ABBV did not have a panel. However, it is technically possible filgotinib only gets initial approval in RA for the lower 100mg dose and not the higher 200mg dose. High dose has slightly better efficacy so we'd like to see 200mg approved. GILD says interim MANTA safety data looking at 200mg will be shared with the FDA during the RA review but note the study was recently halted due to the COVID-19 situation. In any case, it's reasonable to approve 200mg particularly if the MANTA interim look is OK but FDA is a conservative bunch (though we did note Ozanimod in MS has no first dose monitoring which was nice to see in MS last week). Also, even if not, we point out ABBV was only approved at the low dose in RA as well so it would not be a totally critical issue.

COMPANY UPDATE

USA | Biotechnology

RATING	BUY
PRICE	$72.85^
MARKET CAP	$92.8B
PRICE TARGET (PT)	$89.00
UPSIDE SCENARIO PT	$98.00
DOWNSIDE SCENARIO PT	$60.00

^Prior trading day's closing price unless otherwise noted.

FY Dec USD	2018A	2019A	2020E	2021E
EPS	6.68	6.64	6.28	6.47
FY P/E	10.9x	11.0x	11.6x	11.3x

EPS calculation accounts for stock-comp (starting in Q1:20)

Michael J. Yee *
Equity Analyst
(415) 229-1535
michael.yee@jefferies.com

Andrew Tsai *
Equity Analyst
(415) 229-1566
atsai@jefferies.com

Kelechi Chikere, Ph.D. *
Equity Associate
(415) 229-1570
kchikere@jefferies.com

Aryeh Gold *
Equity Associate
(212) 778-8754
agold1@jefferies.com

GILEAD SCIENCES (GILD)

Estimates				
	2018A	2019A	2020E	2021E
Rev. (MM)	22,127.0	22,449.0	22,269.0	22,624.3
Previous				
Consensus EPS	-	-	7.07	6.91
Previous				
EPS				
Q1	1.48	1.76	1.57	-
Previous				
Q2	1.91	1.82	1.63	-
Previous				
Q3	1.84	1.75	1.57	-
Previous				
Q4	1.44	1.30	1.51	-
Previous				
FY Dec	6.68	6.64	6.28	6.47
Previous				

Valuation				
	2018A	2019A	2020E	2021E
P/Rev	4.2x	4.1x	4.2x	4.1x
FY P/E	10.9x	11.0x	11.6x	11.3x

EPS calculation accounts for stock-comp (starting in Q1:20)

Market Data	
52-Week Range:	$85.97 - $60.89
Total Entprs. Value	$91.7B
Avg. Daily Value MM (USD)	1,979.33
Float (%)	98.7%

Financial Summary	
Long-Term Debt (MM)	$24,750.0
Cash & ST Invest. (MM)	$25,840.0

The Long View

Scenarios

Base Case

- Our $89 PT is based on our view that GILD remains a cheap and low-expectation story that is getting better and can achieve even a 13x multiple on 2020 earnings which is still below pharma and big biotech peers.
- Our analysis suggests a durable HIV business along with a manageable/more predictable HCV business
- Importantly, GILD does more M&A, including string-of-pearls type bolt-ons and continues to build its mid/late-stage pipeline to improve 2020-2022 visibility

Upside Scenario

- Our $98 upside scenario price is based on applying a 15-16x multiple to our 2020 non-GAAP EPS estimate, or our DCF of base business and pipeline products
- Our upside target is based on a durable HIV business that remains flattish instead of declining post 2019-2020
- We could see multiple expansion if there is near-term stabilization and/or growth in the Hep C franchise or upside positive data readouts from pipeline programs in NASH, inflammation and oncology
- The Yescarta launch goes better than expected in 2020

Downside Scenario

- Our $60 downside scenario is based on applying a 9x multiple to our 2020 non-GAAP EPS estimate
- Viread will face generics in the EU that could take more share than expected
- GSK could take increasing market share in HIV based on dolutegravir-based two-drug regimens
- HCV franchise is likely to face pricing pressures from ABBV, MRK, and JNJ with new effective HCV regimens
- The Yescarta launch could disappoint in 2020

Investment Thesis / Where We Differ

- We believe GILD will continue to do more M&A (potentially in the gene therapy/ gene-editing space)
- We believe GILD's HIV franchise could be durable against potential GSK competition and generics
- We believe the HCV business has increased visibility and will become more manageable (volume stabilization)

Catalysts

March/April: Preliminary data from remdesivir in SARS-CoV2

Q2:20: Topline data from Phase IIb/III in UC (SELECTION)

Aug 19, 2020: Potential approval of filgotinib

H2:20: Data from pivotal Phase III study in 2nd line DLBCL (ZUMA-7)

Filgotinib For Ulcerative Colitis (UC)

For the Upcoming Phase III UC Data in Q2:20, We Expect To See Placebo-Adjusted "Remission" Rates of (1) 10-15% at Week 10 and (2) 20-25% at Week 58

Generally speaking, we think placebo-adjusted remission rates of 10-15% at Week 10 (induction period) and 20-25% at Week 58 (maintenance) would make filgotinib competitive with currently approved drugs, including TNF-alphas (Humira and Simponi), integrin inhibitors (Entyvio), and other JAKs (Rinvoq in Phase III and Xeljanz approved).

While we certainly expect investors to make cross-trial comparisons, we caution that comparing filgotinib directly to other UC datasets could be challenging (and somewhat imprecise), due to: **(1)** differing baseline patient characteristics such that the proportion of biologic-exposed patients enrolled in this filgotinib study could be significantly greater, (making it more challenging for filgotinib to demonstrate comparable efficacy), and **(2)** differing efficacy timepoints and clinical endpoints. For instance, GLPG is using a Modified mayo score (vs traditional Mayo score) so the baseline severity could differ, and filgotinib's co-primary endpoints are assessed at slightly later timepoints.

- **During GILD's Q4:19 EPS call in early Feb 2020, management noted it still expects to see efficacy in the treatment-experienced subgroup - akin to what other Phase III UC trials have previously shown:** *"But, in terms of expectations of response, I think if you look at this population, as you know, they cycle through a variety of medications. And while the response rate, when they cycle to the next medication, isn't usually as robust as a naïve patient, there are good -- there's good evidence that going from let's say Entyvio to a TNF inhibitor or vice versa, you have -- you still have a good proportion of patients who respond in that. So, I think our expectations are fairly realistic about what the response -- that we'll have responders in there to filgotinib."*
- **GLPG's definition of 'clinical remission':** The SELECTION trial's definition of 'clinical remission' utilizes the modified Mayo score called "EBS" (entails 5-9 points for inclusion), rather than the more traditional Phase III Mayo score endpoint (6-12 points for inclusion).

Compared to PFE's Xeljanz (approved oral JAK inhibitor), our base assumption is for filgotinib to show (1) comparable efficacy and (2) a more favorable safety profile (e.g. lesser DVT/PE instances). Also, while we do not fully expect to see a clear efficacy separation between the 100/200mg doses as the US sites can only administer the 200mg dose to treatment-experienced patients (or "harder to treat" patients), it still wouldn't surprise us to see a dose-response given the higher dose did demonstrate slightly better efficacy in the separate Phase III rheumatoid arthritis (RA) studies.

- **We expect to see an overall 10-15% pbo-adj remission rate at the 10-week mark (induction period).** For relative context, remission rates for other Phase III studies that enrolled a mix of biologic-naive and biologic-experienced patients were:
- **(1) 7-9% for ABBV's Humira** at Week 8 (22% of patients were TNF refractory or TNF-IR),
- **(2) 12% for Takeda's Entyvio** at Week 6 (39% were TNF-IR),
- **(3) 12% for JNJ's Stelara** at Week 8 (51% were biologic-IR, and 17% were dual refractory to TNF/integrin blockers),
- **(4) 10-13% for PFE's Xeljanz** at Week 8 (50%+ were TNF-IR);

- **(5)** Notably, **ABBV's Rinvoq (JAK1)** showed a higher 15-20% placebo-adjusted remission rate, although the results were based on a smaller Phase IIb study so this could moderate when they complete their Phase III.

UC Efficacy Comparison Table

Company*	Drug	Mechanism of Action (MOA)	Status	Relevant Trial Data	%Prior Biologic Exposure[1]	Arm	Response Rates						Remission Rates							
							Wk	Induce[2]	vs Pbo	Wk	Sustain[3]	vs Pbo	Wk	Induce[2]	vs Pbo	Wk	Maintain[4]	vs Pbo	Wk	Sustain[3]	vs. Pbo
Janssen (JNJ)	Remicade (Infliximab)	TNFα	Approved (2005)	Phase III	N/M	5mg/kg	8	65-69%	**32-36%**	8,30,54	39%	**25%**	8	34-39%	**24-28%**	54	35%	**18%**	8,30,54	20%	**13%**
						placebo		29-37%			14%			6-15%			17%			7%	
AbbVie (ABBV)	Humira (Adalimumab)	TNFα	Approved (2012)	Phase III	~22% (TNF-IR)	160/80mg	8	42-50%	**7-15%**	8, 52	24%	**12%**	8	17-19%	**7-9%**	54	17%	**9%**	8, 52	9%	**4%**
						Placebo		35%			12%			9%			9%			4%	
Janssen (JNJ)	Simponi (Golimumab)	TNFα	Approved (2013)	Phase III	0%	200/100mg	6	51%	**21%**	30,54	50%	**19%**	6	18%	**11%**	54	34%	**12%**	30, 54	28%	**12%**
						Placebo		30%			31%			6%			22%			16%	
Takeda/ Millennium	Entyvio (vedolizumab)	Integrin inhibitor (IRA)	Approved (2014)	Phase III	~39% (TNF-IR)	300mg	6	47%	**22%**	6, 52	57%	**33%**	6	17%	**12%**	52	42%	**26%**	6, 52	21%	**12%**
						Placebo		26%			24%			5%			16%			9%	
Pfizer (PFE)	Xeljanz (Tofacitnib)	JAK 1,2,3	Approved (2018)	Phase III	~52% (TNF-IR)	10mg/5mg	8	55-60%	**26-27%**	8,32,60	52%	**32%**	8	17-19%	**10-13%**	52	34%	**23%**	0,24,52	46%	**36%**
						Placebo		29-33%			20%			4-8%			11%			10%	
Jonhson (JNJ)	Stelara (ustekinumab)	IL-12/IL-23	Approved (2019)	Phase III	~51% (Bio-IR) ~17% (TNF/IRA-IR)	6mg/kg, 90mg	8	58%	**27%**	8, 52	74%	**26%**	8	19%	**12%**	52	45%	**19%**	8, 52	66%	**30%**
						Placebo		31%			48%			7%			26%			36%	
AbbVie (ABBV)**	Rinvoq (Upadacitinib)	JAK1	In clinic	Phase IIb	~74% (Bio-IR)	15-45mg	8	44-50%	**31-37%**	-	-	-	8	14-20%	**14-20%**	-	-	-	-	-	-
						Placebo		13%			-			0%			-			-	
Roche	etrolizumab	Integrin inhibitor (IRA)	In clinic	Phase II	~61% (TNF-IR)	100-300mg	10	31-33%	**2-4%**	-	-	-	10	10-21%	**10-21%**	-	-	-	-	-	-
						placebo		29%			-			0%			-			-	

*** For all trials (except Rinvoq):**

(1) Clinical response: Mayo score reduction by ≥30% and ≥3 points, plus decrease in rectal bleeding subscore of ≥1 or a rectal bleeding subscore of ≤1 point

(2) Clinical remission: Mayo score of ≤2 points, plus no individual subscore >1 point

** **For ABBV Rinvoq:**

(1) Clinical response: (per Adapted Mayo Score) is defined as a decrease from baseline in the Adapted Mayo score >2 points and >30% from baseline, plus a decrease in RBS >1 or an absolute RBS <1.

(2) Clinical remission: (Adapted Mayo Score [Mayo Score without Physician Global Assessment]) is defined as stool frequency subscore (SFS)<1, rectal bleeding subscore (RBS)=0, and endoscopic subscore (ES)<1.

[1] **TNF-IR:** TNF-Inadequate Responder; **Bio-IR:** Biologic-Inadequate Responder; **IRA-IR:** Inadequate Responder to Integrin Receptor Antagonist

[2] **Induce:** Induction phase - "initial" dosing period, with response/remission rates evaluated at Weeks 6-10 (e.g. end of study portion)

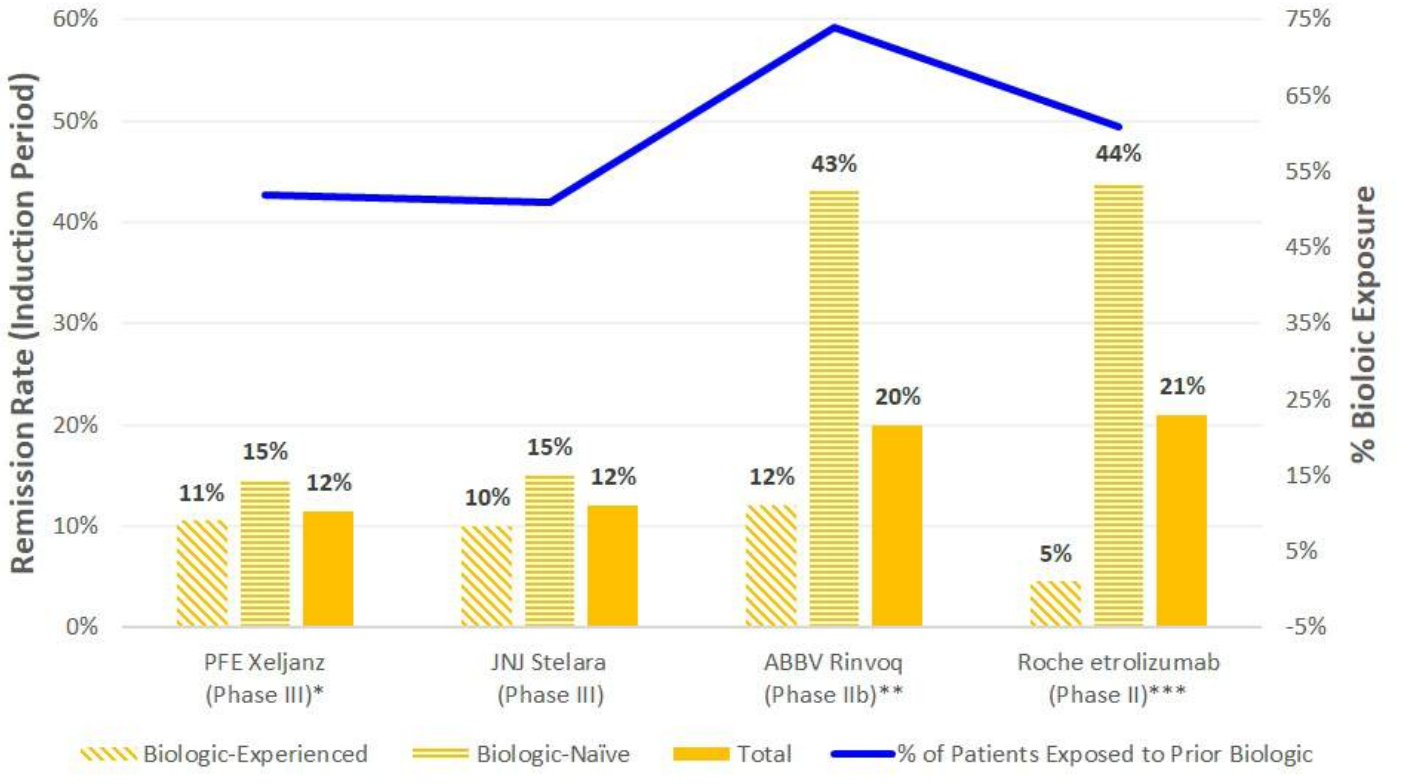
[3] **Sustain**: % of patients with sustained responses/remissions at further timepoints (e.g. at Weeks 8, 30 , 52)

[4] **Maintain:** Maintenance phase - % of patients who maintain responses/remissions at end of study period (e.g. at Week 52)

Source: Jefferies estimates, Company reports

- **We are hopeful the treatment-experienced patient subgroup can show a fairly similar short-term remission rate to that of the treatment-naive subgroup**. We note PFE Xeljanz and JNJ Stelara have shown that their respective JAK and IL-12/IL-23 inhibitors achieve a remission rate that appears mostly irrespective to prior treatment (e.g. 10-11% for biologic-experienced vs 15% for biologic-naive patients).
- **Separately, we expect to see a 20-25% pbo-adj remission rate at Year 1 (maintenance period).** Again, remission rates seen by comparable Phase III studies range between **10-20% for TNFs** and **15-25% for others**, including PFE's Xeljanz (JAK). Even though ABBV's Rinvoq and Roche's etrolizumab have shown a stark efficacy difference between their patient subgroups, we would attribute their findings to a relatively small Phase II study - so this is difficult to interpret (see chart below).
- **Our general expectations for the other efficacy parameters: (1)** A consistent 20-30% response rate throughout the entire study would be comparable, in our view, **(2)** for endoscopic remission, the comparable data points are sparse but a 10-25% remission rate during the initial 10-week period would appear comparable to PFE's Xeljanz and ABBV's Rinvoq (both of which are JAK inhibitors).

Exhibit 1 - Comparing the Placebo-Adjusted Remission Rates for Various UC drugs (During the Initial Induction Period), Broken out by Treatment-Naïve and Treatment-Experienced Patients



*Averaged across trials; **45mg dose only, used different clinical remission definition; ***100mg dose only

Source: Company reports, Jefferies estimates

Data Should Also Confirm Filgotinib's Differentiated Safety Profile...

Even though a handful of companies including GILD/GLPG are developing or already commercializing oral drugs that target the "JAK signaling" pathway, we believe filgotinib has more JAK1 selectivity (than on JAK2/3) than any other JAK inhibitor which could improve safety. Other JAK inhibitors have shown to produce a range of side effects, including higher bleeding rates, abnormalities in LDL, cholesterol, red blood cell counts, etc. In fact, the FDA issued a black box warning for LLY Xeljanz's unapproved 10mg BID dose back in July 2019 - a few months after the agency concluded the higher dose increased the risk of blood clots and death.

- **We continue to expect Phase III filgotinib UC data to show a favorable safety profile versus other JAKs, such as: (1)** a very low incidence of deep venous thrombosis (DVT) and pulmonary embolisms (PE), **(2)** low infection rates, **(3)** increased hemoglobin (Hb) levels, **(4)** prevention of fatty plaque formation in the arteries, and **(5)** increased lipid fractions, including HDL.

However -- whether the agency still puts a Black Box on the filgotinib label remains an unanswered question given the conservative nature of the agency and typical practice for "class labeling" by FDA. In addition, commentary in the ABBV FDA approval correspondence letter suggested the FDA was likely to give a class label Black Box to all drugs in the class given the uncertainty of degree of difference between the various drugs.

- It is also possible that this year - GILD's filgotinib only gets approval in RA for the lower 100mg dose in the US and not the higher 200mg dose.
- While the EMA did not have major concerns about the 200mg dose and allowed this to be tested in clinical trials for RA, the FDA has had concerns about this dose and has been requiring an ongoing Phase II "male reproductive toxicity" study to determine if the 200mg dose has adverse male reproductive effects (may include lower sperm count or other factors). Because the clinical efficacy is slightly better for 200mg over 100mg in RA - but not significantly different - and because the male tox study may not yet be finished by the time of FDA approval - it's reasonable the FDA might only approve the lower 100mg dose in the US. The EU may approve the 200mg dose however.

Current Status of Filgotinib for Rheumatoid Arthritis (RA)

Filgotinib is a highly-selective oral JAK1 inhibitor currently under regulatory review in the US, Europe, and Japan for rheumatoid arthritis (RA). We expect regulatory approvals for all three regions in H2:20.

- **(1)** In the US, GILD used a priority review voucher during its NDA filing on Dec 19, 2019, implying an FDA decision around Aug 19, 2020. Interestingly, the co did not formally press release the acceptance of the NDA but has acknowledged it was accepted with Priority Review.
- **(2)** In the EU, GILD submitted the MAA around mid-2019 (EMA validated the filing in Aug 2019), so we estimate a CHMP recommendation and approval decision sometime around Q3:20.
- **(3)** In Japan, GILD submitted the JNDA in Q3:19, meaning that a PDUFA decision is expected in H2:20.

- To date, GLPG has generated compelling Phase II/III data in RA, as well as positive Phase II datasets in psoriatic arthritis (PsA), ankylosing spondylitis (AS), and Crohn's disease (CD).

Timing of Phase III UC Data in Q2:20 Should Be Unaffected by the Coronavirus Situation

The Coronavirus pandemic has slightly delayed filgotinib's ongoing clinical programs, but the important Phase III ulcerative colitis (UC) data remains on track for Q2:20. Filgotinib is currently in three Phase III studies for Ulcerative Colitis (UC), Crohn's disease (CD), and psoriatic arthritis (PsA). In March 2020, GLPG paused patient enrollment for the Phase III CD (DIVERSITY) and PsA (PENGUIN) studies, due to the Covid-19 pandemic. The CD program was originally expected to complete enrollment in H2:20 (suggesting topline data in H2:21 or early 2022), while PENGUIN began enrolling patients in Q4:19. *Fortunately, the Phase III ulcerative colitis program (SELECTION) remains unaffected and is on track to report data in Q2:20.*

- **In addition to CD and PsA, the company halted enrollment in filgotinib's other clinical studies, including: (1)** a Phase II uveitis trial, **(2)** the MANTA/MANTA-RAy trials (male toxicity studies), and **(3)** a Phase III ankylosing spondylitis study, which is now expected to start later in 2020 (vs prior guidance of H1:20).

Exhibit 2 - Selected Filgotinib Studies

Area	Program	Phase	Status
Rheumatoid Arthritis (RA)	**FINCH**	**Filing**	**Regulatory Review (US, EU, Japan)**
Ulcertative Colitis (UC)	**SELECTION**	**Phase III**	**Data in Q2:20**
Crohn's Disease (CD)*	DIVERSITY	Phase III	Complete enrollment in H2:20
Psoriatic Arthritis (PsA)*	PENGUIN	Phase III	Enrolling
Ankylosing Spondylitis (AS)*	-	Phase III	Starting Phase III in 2020
Safety (Male Toxicity)*	MANTA/MANTA-RAy	Phase II	Complete enrollment in H2:20
Small bowel Crohn's	DIVERGENCE1	Phase II	Ongoing (enrollment completed)
Uveitis*	HUMBOLDT	Phase II	Enrolling
Fistulizing Crohn's	DIVERGENCE2	Phase II	Enrolling
Sjogren's	-	Phase II	Data in 2019
Cutaneous Lupus (CLE)	-	Phase II	Data in 2019
Lupus nephropathy	-	Phase II	No longer enrolling

*** Enrollment paused due to Coronavirus**

Source: Company reports, Jefferies estimates

Compared to currently approved biologic agents such as TNFs (e.g. Humira, Remicade), filgotinib is administered orally, targets JAK1 specifically, and has a rapid onset, sustained response with potential for monotherapy use. For RA, UC and CD, the current standard-of-care includes biologics consisting of mostly TNF therapies. However, since biologics require injections and often lose their efficacy over time, there remains a considerable unmet need in terms of efficacy, safety and convenience of use.

As a JAK1 inhibitor, filgotinib prevents the overstimulation of JAK1 proteins (located inside immune cells), which in turn reduces inflammation and curbs the instances of abdominal pain, diarrhea and bloody stools.

MANTA (Male Toxicity) Safety Study Remains Paramount - We Expect Further Updates in 2020

The recent Coronavirus pandemic has forced GLPG to halt patient enrollment in many of filgotinib's ongoing clinical studies, including the MANTA/MANTA-RAy male toxicity trials. Over the past few years, the FDA became concerned with the 200mg high-dose as

preclinical data in rats and dogs suggested filgotinib could potentially cause testicular toxicity (low sperm count), after which GLPG excluded males from the 200mg cohort in the Phase II RA study (DARWIN).

- The FDA's concerns led GLPG to start the dedicated Phase II male toxicity safety trial in UC and CD patients (MANTA). Later in 2019, GLPG initiated a second safety study called MANTA-RAy that leverages a more relaxed inclusion criterion (e.g. by enrolling patients with rheumatic diseases such as RA, PsA, AS) to accelerate recruitment.
- ***It remains unclear when GILD/GLPG will share the topline MANTA data, given GILD expects patient recruitment to finish in "H2:20". We initially assumed the partners would unblind the data in 2020 to support the RA filing (PDUFA expected in Aug 2020), but GLPG has recently said MANTA is not required for approval, and that the company would share the data in an unblinded manner.***
- While the Phase II RA dataset (DARWIN) and the subsequent Phase III data (FINCH) ultimately confirmed no meaningful changes in male hormone levels - even at the 200mg high dose studied in FINCH, US males in the Phase III UC study (SELECTION) can only receive the higher dose if they have failed **(1)** at least one anti-TNF (e.g. Humira/ Remicade), and/or **(2)** vedolizumab (Entyvio), which is an integrin receptor antagonist.

Rationale of Pursuing Filgotinib in Ulcerative Colitis (UC)

In 2016, positive Phase II filgotinib data in Crohn's disease (FITZROY) prompted GILD to start two Phase III studies in Crohn's disease (CD) as well as ulcerative colitis (UC). Since CD and UC are both inflammatory bowel diseases (IBDs) and are somewhat similar in nature, UC represented a natural extension for filgotinib. Whereas CD affects the gastrointestinal (GI) tract broadly, UC causes inflammation of only the colon and rectum.

- In short, the Phase II FITZROY data (n=174) showed that 47% of Crohn's patients achieved the 10-week primary endpoint of clinical remission, compared to 23% for placebo (or a 24% stat-sig difference).

We believe IBD affects ~2M patients in the US and Europe (of which 0.5M are treated with biologics), representing a $9B+ market. Specifically, we think UC affects over 1.2M+ patients, representing a $5B+ market. While anti-TNF biologics are widely used, only ~33% of UC patients achieve long-term remission, and many of them become unresponsive to treatment over time.

Phase III UC Trial Design (SELECTION)

In Dec 2016, GILD initiated the placebo-controlled Phase IIb/III study (SELECTION) to evaluate 100mg and 200mg once-daily filgotinib doses in moderate/severe UC patients, including both biologic-naive and biologic-experienced patients. The study completed screening in 2019 and has enrolled 1,350+ patients who reside in the US, Europe, Latin America, Canada and Asia. Topline data is expected in Q2:20, with the primary endpoint being % remission (based on Mayo score components).

- 4 of 5 patients receive filgotinib for 10 weeks during the initial induction phase. Patients who respond favorably during this period move on to the maintenance phase.
- 2 of 3 patients receive filgotinib for another 48 weeks during the maintenance phase.
- Patients whose symptoms get worse after 10 weeks in the induction phase can receive filgotinib in a separate long-term extension study.

Please see important disclosure information on pages 13 - 19 of this report.

Interim futility analysis completed in 2018: In May 2018, the independent Data Monitoring Committee (DMC) conducted a planned interim futility analysis of SELECTION after 350 UC patients completed the induction period in the Phase IIb portion of the study. The DMC recommended GLPG/GILD to move into Phase III and evaluate the 100mg and 200mg daily doses against placebo.

Design of the III SELECTION study:

- **Patients:** 3551 adult UC patients who are biologic-naive and biologic-experienced. Treatment-experienced patients must have at least 1 prior inadequate response to a corticosteroid, immunomodulator, TNF-antagonist, or Entyvio (the prior treatment regimen depends on country treatment guidelines).
- **Inclusion criteria:** Moderate/Severe UC diagnosis of at least 6 months, with a minimum disease extent of 15cm from the anal verge.
- **Exclusion criteria:** Presence of Crohn's disease, indeterminate colitis, ischemic colitis, fulminant colitis, ulcerative proctitis, or toxic mega-colon.
- **Doses:** 100mg and 200mg vs placebo (once-daily)
- **Specific dosing restriction for US patients:** US males can only receive the higher 200mg dose if they have failed **(1)** at least one anti-TNF (e.g. Humira/Remicade), and/or **(2)** vedolizumab (Entyvio), which is an integrin receptor antagonist.
- **Duration:** 10 weeks for the induction phase, plus 48 weeks for the maintenance phase
- **Co-Primary Endpoints:** Remission at Week 10 (induction) and Week 58 (maintenance), based on components of the Mayo Clinical Score (MCS)
- **Secondary Endpoints:** Endoscopic remission, histologic remission, safety
- **Extension Phase:** Patients who do not meet the response/remission criteria at Week 10 have the option to enter a long-term extension (LTE) study.
- **Primary Completion Date:** April 2020
- **Clinicaltrials.gov Identifier:** NCT02914522

GLPG/GILD Collaboration Details

Galapagos Collaboration

Dec 2015 (Filgotinib): GILD partnered with GLPG to develop and commercialize filgotinib for inflammatory indications, paying GLPG $725M upfront including a $300M fee and $425M equity stake. In addition, GLPG is entitled to **(1)** development and regulatory milestones of up to $755M ($110M of which has been paid to GLPG, as of Dec 2019), **(2)** sales milestones of up to $600M, and **(3)** ex-EU royalties in the 20-30% range, except for certain EU co-commercialization territories where profits are shared equally (e.g. UK, Germany, France, Italy, Spain, Belgium, Netherlands and Luxemberg).

- GILD has a worldwide sublicensable license for filgotinib.
- GILD is primarily responsible for the development and regulatory approval of filgotinib, whereas GLPG has agreed to co-fund 20% of development costs through regulatory approval.

July 2019 (Significant Expanded partnership deal): In the revised collaboration, GILD now gets access to a portfolio beyond filgotinib, including multiple clinical compounds, 20 pre-clinical programs and a drug discovery platform: **(1)** GILD paid $4B upfront and acquired a $1.1B equity investment, increasing its stake from 12% to 22% (paid at a 20% premium) which could be increased towards 30%. **(2)** GILD receives USA (ex-EU) rights to Phase III

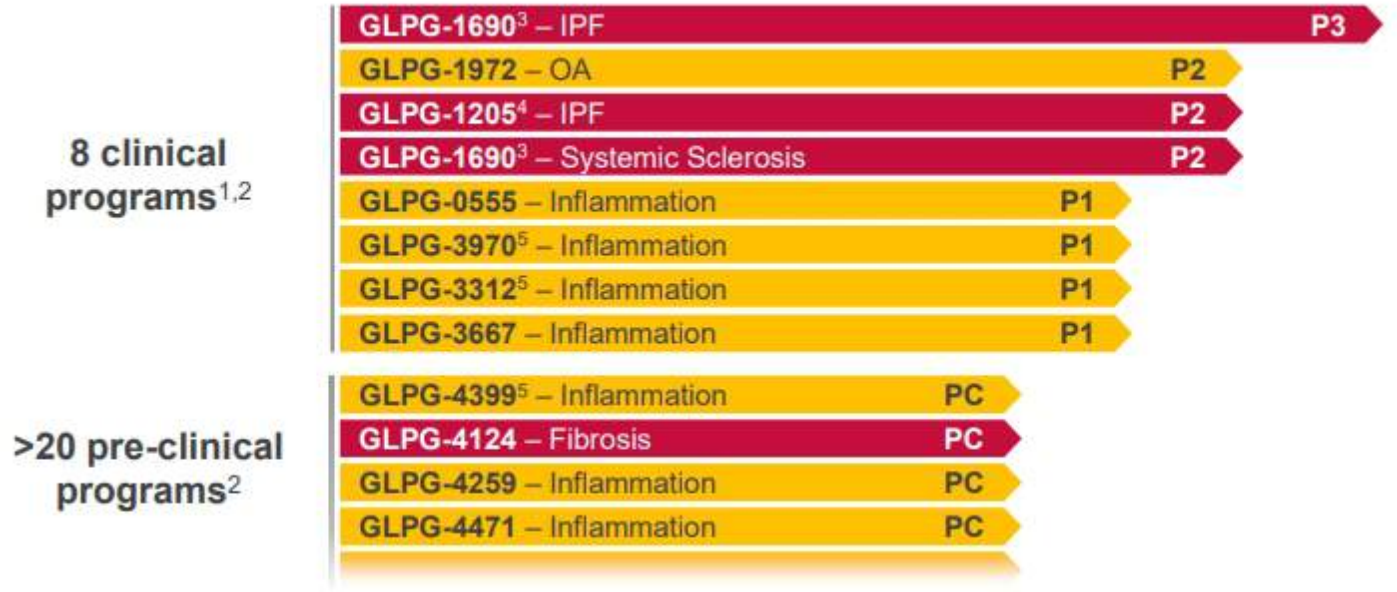
'1690 for IPF, an option ($250M opt-in) on '1972 in OA after the Phase IIb data, and an option ($150M ex-EU option rights) to all of GLPG's other programs post Phase II data. **(3)** Meanwhile, GLPG agrees to co-commercialize filgotinib in certain EU countries with a 50/50 profit-share, and is entitled to $1.3B in milestones and 20-30% in royalties for ex-EU countries. For assets outside of filgotinib, GLPG is entitled to royalties in 20-24% range, **(4)** agreement also includes a 10-year standstill.

- In Q4:19, GILD exercised a warrant and purchased 2.6M shares of GLPG for $586M. GILD now owns 16.7M of GLPG shares and holds a ~25.8% stake (up from 22%).

Eisai Collaboration for Filgotinib

Dec 2019 (Eisai to co-promote filgotinib in Japan): GILD handles manufacturing and marketing approval of filgotinib in Japan, while Eisai is responsible for product distribution in Japan in RA and other potential future indications, including UC, Crohn's and Psoriatic Arthritis.

Exhibit 3 - Optionable Partnered Programs Outside of Filgotinib (GILD/GLPG Collaboration)



Source: Company reports

Exhibit 4 - GILD Income Statement

Fiscal Year (Ending in December) ($ figures in MM, except per share)	FY17	1Q18 Mar-18	2Q18 Jun-18	3Q18 Sep-18	4Q18 Dec-18	FY18	1Q19 Mar-19	2Q19 Jun-19	3Q19 Sep-19	4Q19 Dec-19	FY19	1Q20E Mar-20	2Q20E Jun-20	3Q20E Sep-20	4Q20E Dec-20	FY20E	FY21E
Non-GAAP Income Statement																	
HCV Sales	**$9,137.0**	**$1,048.0**	**$1,000.0**	**$902.0**	**$738.0**	**$3,688.0**	**$790.0**	**$842.0**	**$674.0**	**$630.0**	**$2,936.0**	**$624.0**	**$618.0**	**$607.0**	**$596.0**	**$2,445.0**	**$2,274.6**
Harvoni	4,370.0	350.0	331.0	311.0	232.0	1,224.0	225.0	193.0	124.0	101.0	643.0	105.0	100.0	90.0	85.0	380.0	323.0
Sovaldi	964.0	55.0	60.0	11.0	(24.0)	102.0	11.0	81.0	(29.0)	8.0	71.0	3.0	3.0	3.0	3.0	12.0	12.0
Epclusa (SOF / VEL)	3,510.0	536.0	500.0	477.0	453.0	1,966.0	491.0	493.0	516.0	465.0	1,965.0	460.0	460.0	460.0	455.0	1,835.0	1,729.0
Vosevi (SOF/VEL/VOX)	293.0	107.0	109.0	103.0	77.0	396.0	63.0	75.0	63.0	56.0	257.0	56.0	55.0	54.0	53.0	218.0	210.6
HIV Sales	**$14,003.0**	**$3,247.0**	**$3,665.0**	**$3,727.0**	**$4,065.0**	**$14,704.0**	**$3,618.0**	**$4,041.0**	**$4,202.0**	**$4,577.0**	**$16,438.0**	**$4,216.0**	**$4,378.0**	**$4,440.0**	**$4,487.0**	**$17,521.0**	**$17,799.7**
Atripla (Emtriva/Viread/Sustiva)	1,806.0	314.0	349.0	258.0	285.0	1,206.0	171.0	152.0	149.0	128.0	600.0	105.0	95.0	85.0	75.0	360.0	150.0
Truvada (Emtriva/Viread)	3,134.0	652.0	765.0	757.0	823.0	2,997.0	606.0	718.0	721.0	768.0	2,813.0	522.0	370.0	318.0	216.0	1,426.0	704.0
Complera (Rilpivirine/Emtriva/Viread)	966.0	190.0	199.0	139.0	125.0	653.0	115.0	123.0	93.0	75.0	406.0	60.0	50.0	40.0	30.0	180.0	100.0
Stribild (Elvitegravir/Cobicistat/Emtriva/Viread)	1,053.0	174.0	187.0	146.0	137.0	644.0	96.0	108.0	94.0	71.0	369.0	50.0	45.0	40.0	35.0	170.0	100.0
Viread (TDF)	1,046.0	97.0	-	-	-	97.0	-	-	-	-	-	-	-	-	-	-	-
Genvoya (Elvitegravir/Cobicistat/Emtriva/TAF)	3,674.0	1,082.0	1,160.0	1,176.0	1,206.0	4,624.0	1,015.0	980.0	978.0	958.0	3,931.0	935.0	950.0	930.0	910.0	3,725.0	3,482.7
Descovy (Emtriva/TAF)	1,218.0	361.0	403.0	406.0	411.0	1,581.0	342.0	358.0	363.0	437.0	1,500.0	555.0	715.0	775.0	835.0	2,880.0	3,059.0
Odefsey (Rilpivirine/Emtriva/TAF)	1,106.0	342.0	385.0	423.0	448.0	1,598.0	397.0	387.0	436.0	435.0	1,655.0	410.0	420.0	415.0	410.0	1,655.0	1,560.0
Biktarvy (Bictegravir/F/TAF)	-	35.0	185.0	386.0	578.0	1,184.0	793.0	1,116.0	1,259.0	1,570.0	4,738.0	1,440.0	1,590.0	1,690.0	1,825.0	6,545.0	8,000.0
HIV Other (Post Viread Generic 2018)	-	-	32.0	36.0	52.0	120.0	83.0	99.0	109.0	135.0	426.0	139.0	143.0	147.0	151.0	580.0	644.0
Other antiviral	**$196.0**	**$80.0**	-	-	-	**$80.0**	-	-	-	-	-	-	-	-	-	-	-
Other Product Sales	**$2,326.0**	**$626.0**	**$875.0**	**$826.0**	**$878.0**	**$3,205.0**	**$792.0**	**$724.0**	**$640.0**	**$589.0**	**$2,745.0**	**$512.0**	**$487.0**	**$474.0**	**$490.0**	**$1,963.0**	**$2,200.0**
Axi-Cel (KTE-C19)	7.0	40.0	68.0	75.0	81.0	264.0	96.0	120.0	118.0	122.0	456.0	140.0	150.0	160.0	170.0	620.0	780.0
Filgotinib (RA)	-	-	-	-	-	-	-	-	-	-	-	-	-	5.0	13.0	18.0	190.0
Zydelig (iNHL/CLL)	149.0	33.0	39.0	20.0	41.0	133.0	27.0	26.0	26.0	24.0	103.0	22.0	20.0	18.0	16.0	76.0	50.0
AmBisome (ex-US)	366.0	107.0	103.0	102.0	108.0	420.0	93.0	105.0	99.0	110.0	407.0	65.0	55.0	35.0	30.0	185.0	80.0
Letairis	887.0	204.0	244.0	241.0	254.0	943.0	197.0	204.0	121.0	96.0	618.0	45.0	20.0	10.0	5.0	80.0	-
Ranexa	717.0	195.0	208.0	178.0	177.0	758.0	155.0	19.0	31.0	11.0	216.0	5.0	2.0	1.0	1.0	9.0	-
Vemlidy	-	-	76.0	87.0	100.0	263.0	101.0	116.0	134.0	137.0	488.0	150.0	160.0	170.0	180.0	660.0	820.0
Viread (TDF)	-	-	82.0	70.0	58.0	210.0	72.0	75.0	57.0	39.0	243.0	35.0	30.0	25.0	25.0	115.0	80.0
Other (excludes Sovaldi)	200.0	47.0	55.0	53.0	59.0	214.0	51.0	59.0	54.0	50.0	214.0	50.0	50.0	50.0	50.0	200.0	200.0
Product Sales (Antiviral Franchise + Other Products)	**$25,662.0**	**$5,001.0**	**$5,540.0**	**$5,455.0**	**$5,681.0**	**$21,677.0**	**$5,200.0**	**$5,607.0**	**$5,516.0**	**$5,796.0**	**$22,119.0**	**$5,352.0**	**$5,483.0**	**$5,521.0**	**$5,573.0**	**$21,929.0**	**$22,274.3**
Royalty, contract and other revenues	445.0	87.0	108.0	141.0	114.0	450.0	81.0	78.0	88.0	83.0	330.0	85.0	85.0	85.0	85.0	340.0	350.0
Total Revenues	**$26,107.0**	**$5,088.0**	**$5,648.0**	**$5,596.0**	**$5,795.0**	**$22,127.0**	**$5,281.0**	**$5,685.0**	**$5,604.0**	**$5,879.0**	**$22,449.0**	**$5,437.0**	**$5,568.0**	**$5,606.0**	**$5,658.0**	**$22,269.0**	**$22,624.3**
Cost of Sales	3,422.0	687.0	875.0	771.0	1,257.0	3,590.0	660.0	714.0	759.0	1,406.0	3,539.0	670.3	697.4	757.3	792.2	2,917.2	2,917.9
Operating Expenses	**$6,654.0**	**$1,698.0**	**$1,761.0**	**$1,696.0**	**$1,971.0**	**$7,126.0**	**$1,833.0**	**$1,931.0**	**$1,921.0**	**$2,161.0**	**$7,846.0**	**$2,130.2**	**$2,129.4**	**$2,220.4**	**$2,351.3**	**$8,831.3**	**$8,954.3**
Research and Development (R&D)	3,291.0	814.0	921.0	844.0	939.0	3,518.0	871.0	916.0	954.0	1,029.0	3,770.0	1,038.4	1,012.6	1,041.2	1,133.9	4,226.0	4,276.7
Sales, General and Administrative (SG&A)	3,363.0	884.0	840.0	852.0	1,032.0	3,608.0	962.0	1,015.0	967.0	1,132.0	4,076.0	1,091.9	1,116.8	1,179.2	1,217.5	4,605.3	4,677.6
Total Costs and Expenses	**10,076.0**	**2,385.0**	**2,636.0**	**2,467.0**	**3,228.0**	**10,716.0**	**2,493.0**	**2,645.0**	**2,680.0**	**3,567.0**	**11,385.0**	**2,800.5**	**2,826.7**	**2,977.7**	**3,143.6**	**11,748.5**	**11,872.2**
Operating Income (EBIT)	**$16,031.0**	**$2,703.0**	**$3,012.0**	**$3,129.0**	**$2,567.0**	**$11,411.0**	**$2,788.0**	**$3,040.0**	**$2,924.0**	**$2,312.0**	**$11,064.0**	**$2,636.5**	**$2,741.3**	**$2,628.3**	**$2,514.4**	**$10,520.5**	**$10,752.1**
Operating Margin	*61.4%*	*53.1%*	*53.3%*	*55.9%*	*44.3%*	*51.6%*	*52.8%*	*53.5%*	*52.2%*	*39.3%*	*49.3%*	*48.5%*	*49.2%*	*46.9%*	*44.4%*	*47.2%*	*47.5%*
Total Other Income	**(577.0)**	**(165.0)**	**(130.0)**	**(127.0)**	**(94.0)**	**(516.0)**	**(84.0)**	**(77.0)**	**(86.0)**	**(121.0)**	**(368.0)**	**(112.5)**	**(123.5)**	**(118.2)**	**(112.9)**	**(467.0)**	**(463.4)**
Pre-tax income	**15,454.0**	**2,538.0**	**2,882.0**	**3,002.0**	**2,473.0**	**10,895.0**	**2,704.0**	**2,963.0**	**2,838.0**	**2,191.0**	**10,696.0**	**2,523.9**	**2,617.8**	**2,510.1**	**2,401.6**	**10,053.4**	**10,288.7**
Provision for taxes	3,784.0	579.0	376.0	597.0	600.0	2,152.0	453.0	637.0	617.0	545.0	2,252.0	530.0	549.7	527.1	504.3	2,111.2	2,160.6
Effective Tax Rate (non-GAAP)	*24.5%*	*22.8%*	*13.0%*	*19.9%*	*24.3%*	*19.8%*	*16.8%*	*21.5%*	*21.7%*	*24.9%*	*21.1%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*	*21.0%*
Net loss attributable to noncontrolling interest	16.0	1.0	2.0	2.0	-	5.0	(7.0)	(5.0)	(3.0)	(7.0)	(22.0)	-	-	-	-	-	-
Net Income (non-GAAP)	**$11,654.0**	**$1,958.0**	**$2,504.0**	**$2,403.0**	**$1,873.0**	**$8,738.0**	**$2,258.0**	**$2,331.0**	**$2,224.0**	**$1,653.0**	**$8,466.0**	**$1,993.9**	**$2,068.1**	**$1,983.0**	**$1,897.2**	**$7,942.2**	**$8,128.1**
EPS Basic (non-GAAP)	$8.92	$1.50	$1.93	$1.85	$1.45	$6.73	$1.77	$1.84	$1.76	$1.31	$6.67	$1.58	$1.64	$1.58	$1.51	$6.30	$6.50
EPS Diluted (non-GAAP)	**$8.84**	**$1.48**	**$1.91**	**$1.84**	**$1.44**	**$6.68**	**$1.76**	**$1.82**	**$1.75**	**$1.30**	**$6.64**	**$1.57**	**$1.63**	**$1.57**	**$1.51**	**$6.28**	**$6.47**
Shares Outstanding - Basic (non-GAAP)	1,307.0	1,307.0	1,298.0	1,296.0	1,290.0	1,297.8	1,276.0	1,270.0	1,267.0	1,266.0	1,269.8	1,265.6	1,261.6	1,257.8	1,254.1	1,259.8	1,250.8
Shares Outstanding - Diluted (non-GAAP)	**1,319.0**	**1,320.0**	**1,308.0**	**1,307.0**	**1,299.0**	**1,308.5**	**1,283.4**	**1,277.4**	**1,267.4**	**1,273.4**	**1,275.4**	**1,271.2**	**1,267.3**	**1,263.5**	**1,259.8**	**1,265.4**	**1,256.6**

Source: Jefferies estimates, Company reports

Company Description

Gilead Sciences

Gilead is a leader in the development and marketing of anti-infective drugs, with approved products for the treatment of HIV/AIDS, Hep C, hepatitis B, liver and pulmonology diseases. Gilead is developing a pipeline of antivirals, liver disease, immunology and oncology. The company has an extensive worldwide sales and marketing infrastructure.

Company Valuation/Risks

Gilead Sciences

Our PT is based on a pipeline-adjusted DCF and multiple of our 2020 EPS estimate. Risks: competition, pipeline disappointments, and worse-than-expected sales.

Galapagos

Our Price Target is based on a sum-of-the-parts valuation largley comprising probability-adjusted NPVs for filgotinib, GLPG1690 in IPF, GLPG1972 in osteoarthritis, and Toledo in autoimmune disorders, plus Net Cash. Risks include: (1) regulatory setbacks for filgotinib; (2) upcoming late-stage pipeline catalysts are high risk; and (3) clinical trial failures.

GlaxoSmithKline Plc

Valuation: Our Price Target is based on a 50:50 blend of P/E and NPV, assuming a 0% premium to the sector 2021E PE and a discount to the NPV sum-of-the-parts valuation. Risks: Dividend, Competition; M&A; Regulatory; LOEs/ litigation; FX; R&D; Manufacturing.

Analyst Certification:

I, Michael J. Yee, certify that all of the views expressed in this research report accurately reflect my personal views about the subject security(ies) and subject company(ies). I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in this research report.
I, Andrew Tsai, certify that all of the views expressed in this research report accurately reflect my personal views about the subject security(ies) and subject company(ies). I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in this research report.
I, Kelechi Chikere, Ph.D., certify that all of the views expressed in this research report accurately reflect my personal views about the subject security(ies) and subject company(ies). I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in this research report.
I, Aryeh Gold, certify that all of the views expressed in this research report accurately reflect my personal views about the subject security(ies) and subject company(ies). I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in this research report.
As is the case with all Jefferies employees, the analyst(s) responsible for the coverage of the financial instruments discussed in this report receives compensation based in part on the overall performance of the firm, including investment banking income. We seek to update our research as appropriate, but various regulations may prevent us from doing so. Aside from certain industry reports published on a periodic basis, the large majority of reports are published at irregular intervals as appropriate in the analyst's judgement.

Investment Recommendation Record

(Article 3(1)e and Article 7 of MAR)

Recommendation Published	March 29, 2020 , 17:31 ET.
Recommendation Distributed	March 29, 2020 , 17:31 ET.

Company Specific Disclosures

Jefferies LLC is acting as a financial advisor to Kite Pharma (KITE) on the sale of the company to Gilead Sciences (GILD).
Jefferies Group LLC makes a market in the securities or ADRs of Gilead Sciences, Inc.
Jefferies Group LLC makes a market in the securities or ADRs of Galapagos.
Jefferies Group LLC makes a market in the securities or ADRs of GlaxoSmithKline Plc.

Explanation of Jefferies Ratings

Buy - Describes securities that we expect to provide a total return (price appreciation plus yield) of 15% or more within a 12-month period.
Hold - Describes securities that we expect to provide a total return (price appreciation plus yield) of plus 15% or minus 10% within a 12-month period.
Underperform - Describes securities that we expect to provide a total return (price appreciation plus yield) of minus 10% or less within a 12-month period.
The expected total return (price appreciation plus yield) for Buy rated securities with an average security price consistently below $10 is 20% or more within a 12-month period as these companies are typically more volatile than the overall stock market. For Hold rated securities with an average security price consistently below $10, the expected total return (price appreciation plus yield) is plus or minus 20% within a 12-month period. For Underperform rated securities with an average security price consistently below $10, the expected total return (price appreciation plus yield) is minus 20% or less within a 12-month period.

NR - The investment rating and price target have been temporarily suspended. Such suspensions are in compliance with applicable regulations and/or Jefferies policies.
CS - Coverage Suspended. Jefferies has suspended coverage of this company.
NC - Not covered. Jefferies does not cover this company.
Restricted - Describes issuers where, in conjunction with Jefferies engagement in certain transactions, company policy or applicable securities regulations prohibit certain types of communications, including investment recommendations.
Monitor - Describes securities whose company fundamentals and financials are being monitored, and for which no financial projections or opinions on the investment merits of the company are provided.

Valuation Methodology

Jefferies' methodology for assigning ratings may include the following: market capitalization, maturity, growth/value, volatility and expected total return over the next 12 months. The price targets are based on several methodologies, which may include, but are not restricted to, analyses of market risk, growth rate, revenue stream, discounted cash flow (DCF), EBITDA, EPS, cash flow (CF), free cash flow (FCF), EV/EBITDA, P/E, PE/growth, P/CF, P/FCF, premium (discount)/average group EV/EBITDA, premium (discount)/average group P/E, sum of the parts, net asset value, dividend returns, and return on equity (ROE) over the next 12 months.

Jefferies Franchise Picks

Jefferies Franchise Picks include stock selections from among the best stock ideas from our equity analysts over a 12 month period. Stock selection is based on fundamental analysis and may take into account other factors such as analyst conviction, differentiated analysis, a favorable risk/reward ratio and investment themes that Jefferies analysts are recommending. Jefferies Franchise Picks will include only Buy rated stocks and the number can vary depending on analyst recommendations for inclusion. Stocks will be added as new opportunities arise and removed when the reason for inclusion changes, the stock has met its desired return, if it is no longer rated Buy and/or if it triggers a stop loss. Stocks having 120 day volatility in the bottom quartile of S&P stocks will continue to have a 15% stop loss, and the remainder will have a 20% stop. Franchise Picks are not intended to represent a recommended portfolio of stocks and is not sector based, but we may note where we believe a Pick falls within an investment style such as growth or value.

Risks which may impede the achievement of our Price Target

This report was prepared for general circulation and does not provide investment recommendations specific to individual investors. As such, the financial instruments discussed in this report may not be suitable for all investors and investors must make their own investment decisions based upon their specific investment objectives and financial situation utilizing their own financial advisors as they deem necessary. Past performance of the financial instruments recommended in this report should not be taken as an indication or guarantee of future results. The price, value of, and income from, any of the financial instruments mentioned in this report can rise as well as fall and may be affected by changes in economic, financial and political factors. If a financial instrument is denominated in a currency other than the investor's home currency, a change in exchange rates may adversely affect the price of, value of, or income derived from the financial instrument described in this report. In addition, investors in securities such as ADRs, whose values are affected by the currency of the underlying security, effectively assume currency risk.

Other Companies Mentioned in This Report

- Galapagos (GLPG: $182.14, HOLD)
- GlaxoSmithKline Plc (GSK: $36.44, BUY)

Rating and Price Target History for: Gilead Sciences, Inc. (GILD) as of 03-26-2020

Jefferies LLC is acting as a financial advisor to Kite Pharma (KITE) on the sale of the company to Gilead Sciences (GILD).

Rating and Price Target History for: Galapagos (GLPG) as of 03-26-2020

Rating and Price Target History for: GlaxoSmithKline Plc (GSK) as of 03-26-2020

Notes: Each box in the Rating and Price Target History chart above represents actions over the past three years in which an analyst initiated on a company, made a change to a rating or price target of a company or discontinued coverage of a company.

Legend:

I: Initiating Coverage

D: Dropped Coverage

B: Buy

H: Hold

UP: Underperform

Distribution of Ratings

Distribution of Ratings						
			IB Serv./Past12 Mos.		JIL Mkt Serv./Past12 Mos.	
	Count	Percent	Count	Percent	Count	Percent
BUY	1288	54.28%	114	8.85%	12	0.93%
HOLD	935	39.40%	34	3.64%	3	0.32%
UNDERPERFORM	150	6.32%	1	0.67%	0	0.00%

Other Important Disclosures

Jefferies does business and seeks to do business with companies covered in its research reports, and expects to receive or intends to seek compensation for investment banking services among other activities from such companies. As a result, investors should be aware that Jefferies may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

Jefferies Equity Research refers to research reports produced by analysts employed by one of the following Jefferies Group LLC ("Jefferies") group companies:

United States: Jefferies LLC which is an SEC registered broker-dealer and a member of FINRA (and distributed by Jefferies Research Services, LLC, an SEC registered Investment Adviser, to clients paying separately for such research).

United Kingdom: Jefferies International Limited, which is authorized and regulated by the Financial Conduct Authority; registered in England and Wales No. 1978621; registered office: 100 Bishopsgate, London EC2N 4JL; telephone +44 (0)20 7029 8000; facsimile +44 (0)20 7029 8010.

Hong Kong: Jefferies Hong Kong Limited, which is licensed by the Securities and Futures Commission of Hong Kong with CE number ATS546; located at Suite 2201, 22nd Floor, Cheung Kong Center, 2 Queen's Road Central, Hong Kong.

Singapore: Jefferies Singapore Limited, which is licensed by the Monetary Authority of Singapore; located at 80 Raffles Place #15-20, UOB Plaza 2, Singapore 048624, telephone: +65 6551 3950.

Japan: Jefferies (Japan) Limited, Tokyo Branch, which is a securities company registered by the Financial Services Agency of Japan and is a member of the Japan Securities Dealers Association; located at Tokyo Midtown Hibiya 30F Hibiya Mitsui Tower, 1-1-2 Yurakucho, Chiyoda-ku, Tokyo 100-0006; telephone +813 5251 6100; facsimile +813 5251 6101.

India: Jefferies India Private Limited (CIN - U74140MH2007PTC200509), licensed by the Securities and Exchange Board of India for: Stock Broker (NSE & BSE) INZ000243033, Research Analyst INH000000701 and Merchant Banker INM000011443, located at 42/43, 2 North Avenue, Maker Maxity, Bandra-Kurla Complex, Bandra (East), Mumbai 400 051, India; Tel +91 22 4356 6000.

Australia: Jefferies (Australia) Securities Pty Limited (ACN 610 977 074), which holds an Australian financial services license (AFSL 487263) and is located at Level 22, 60 Martin Place, Sydney NSW 2000; telephone +61 2 9364 2800.

This report was prepared by personnel who are associated with Jefferies (Jefferies International Limited, Jefferies Hong Kong Limited, Jefferies Singapore Limited, Jefferies (Japan) Limited, Tokyo Branch, Jefferies India Private Limited), Jefferies (Australia) Pty Ltd; or by personnel who are associated with both Jefferies LLC and Jefferies Research Services LLC ("JRS"). Jefferies LLC is a US registered broker-dealer and is affiliated with JRS, which is a US registered investment adviser. JRS does not create tailored or personalized research and all research provided by JRS is impersonal. If you are paying separately for this research, it is being provided to you by JRS. Otherwise, it is being provided by Jefferies LLC. Jefferies LLC, JRS, and their affiliates are collectively referred to below as "Jefferies". Jefferies may seek to do business with companies covered in this research report. As a result, investors should be aware that Jefferies may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only one of many factors in making their investment decisions. Specific conflict of interest and other disclosures that are required by FINRA and other rules are set forth in this disclosure section.

* * *

If you are receiving this report from a non-US Jefferies entity, please note the following: Unless prohibited by the provisions of Regulation S of the U.S. Securities Act of 1933, as amended, this material is distributed in the United States by Jefferies LLC, which accepts responsibility for its contents in accordance with the provisions of Rule 15a-6 under the US Securities Exchange Act of 1934, as amended. Transactions by or on behalf of any US person may only be effected through Jefferies LLC. In the United Kingdom and European Economic Area this report is issued and/or approved for distribution by Jefferies International Limited ("JIL") and is intended for use only by persons who have, or have been assessed as having, suitable professional experience and expertise, or by persons to whom it can be otherwise lawfully distributed.

JIL allows its analysts to undertake private consultancy work. JIL's conflicts management policy sets out the arrangements JIL employs to manage any potential conflicts of interest that may arise as a result of such consultancy work. Jefferies LLC, JIL and their affiliates, may make a market or provide liquidity in the financial instruments referred to in this report; and where they do make a market, such activity is disclosed specifically in this report under "company specific disclosures".

For Canadian investors, this material is intended for use only by professional or institutional investors. None of the investments or investment services mentioned or described herein is available to other persons or to anyone in Canada who is not a "Designated

Institution" as defined by the Securities Act (Ontario). In Singapore, Jefferies Singapore Limited ("JSL") is regulated by the Monetary Authority of Singapore. For investors in the Republic of Singapore, this material is provided by JSL pursuant to Regulation 32C of the Financial Advisers Regulations. The material contained in this document is intended solely for accredited, expert or institutional investors, as defined under the Securities and Futures Act (Cap. 289 of Singapore). If there are any matters arising from, or in connection with this material, please contact JSL, located at 80 Raffles Place #15-20, UOB Plaza 2, Singapore 048624, telephone: +65 6551 3950. In Japan, this material is issued and distributed by Jefferies (Japan) Limited to institutional investors only. In Hong Kong, this report is issued and approved by Jefferies Hong Kong Limited and is intended for use only by professional investors as defined in the Hong Kong Securities and Futures Ordinance and its subsidiary legislation. In the Republic of China (Taiwan), this report should not be distributed. The research in relation to this report is conducted outside the People's Republic of China ("PRC"). This report does not constitute an offer to sell or the solicitation of an offer to buy any securities in the PRC. PRC investors shall have the relevant qualifications to invest in such securities and shall be responsible for obtaining all relevant approvals, licenses, verifications and/or registrations from the relevant governmental authorities themselves. In India, this report is made available by Jefferies India Private Limited. In Australia, this report is issued and/or approved for distribution by, or on behalf of, Jefferies (Australia) Securities Pty Ltd. It is directed solely at wholesale clients within the meaning of the Corporations Act 2001 of Australia (the "Corporations Act"), in connection with their consideration of any investment or investment service that is the subject of this report. This report may contain general financial product advice. Where this report refers to a particular financial product, you should obtain a copy of the relevant product disclosure statement or offer document before making any decision in relation to the product. Recipients of this document in any other jurisdictions should inform themselves about and observe any applicable legal requirements in relation to the receipt of this document.

This report is not an offer or solicitation of an offer to buy or sell any security or derivative instrument, or to make any investment. Any opinion or estimate constitutes the preparer's best judgment as of the date of preparation, and is subject to change without notice. Jefferies assumes no obligation to maintain or update this report based on subsequent information and events. Jefferies, and their respective officers, directors, and employees, may have long or short positions in, or may buy or sell any of the securities, derivative instruments or other investments mentioned or described herein, either as agent or as principal for their own account. This material is provided solely for informational purposes and is not tailored to any recipient, and is not based on, and does not take into account, the particular investment objectives, portfolio holdings, strategy, financial situation, or needs of any recipient. As such, any advice or recommendation in this report may not be suitable for a particular recipient. Jefferies assumes recipients of this report are capable of evaluating the information contained herein and of exercising independent judgment. A recipient of this report should not make any investment decision without first considering whether any advice or recommendation in this report is suitable for the recipient based on the recipient's particular circumstances and, if appropriate or otherwise needed, seeking professional advice, including tax advice. Jefferies does not perform any suitability or other analysis to check whether an investment decision made by the recipient based on this report is consistent with a recipient's investment objectives, portfolio holdings, strategy, financial situation, or needs.

By providing this report, neither JRS nor any other Jefferies entity accepts any authority, discretion, or control over the management of the recipient's assets. Any action taken by the recipient of this report, based on the information in the report, is at the recipient's sole judgment and risk. The recipient must perform his or her own independent review of any prospective investment. If the recipient uses the services of Jefferies LLC (or other affiliated broker-dealers), in connection with a purchase or sale of a security that is a subject of these materials, such broker-dealer may act as principal for its own accounts or as agent for another person. Only JRS is registered with the SEC as an investment adviser; and therefore neither Jefferies LLC nor any other Jefferies affiliate has any fiduciary duty in connection with distribution of these reports.

The price and value of the investments referred to herein and the income from them may fluctuate. Past performance is not a guide to future performance, future returns are not guaranteed, and a loss of original capital may occur. Fluctuations in exchange rates could have adverse effects on the value or price of, or income derived from, certain investments.

This report may contain forward looking statements that may be affected by inaccurate assumptions or by known or unknown risks, uncertainties, and other important factors. As a result, the actual results, events, performance or achievements of the financial product may be materially different from those expressed or implied in such statements.

This report has been prepared independently of any issuer of securities mentioned herein and not as agent of any issuer of securities. No Equity Research personnel have authority whatsoever to make any representations or warranty on behalf of the issuer(s). Any comments or statements made herein are those of the Jefferies entity producing this report and may differ from the views of other Jefferies entities.