Galapagos NV

Filgotinib US filing scenario analysis suggests balanced risk/ reward into FDA pre-filing discussions

GLPG.AS, GLPG NA
Overweight
Price: €103.15 (07-Jun)

Price Target: €125.00 (Dec-19)

GLPG, GLPG US
Overweight
Price: $120.42 (07-Jun)

Price Target: $141.00 (Dec-19)

European Healthcare (Pharma, Biotech)

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We have updated our GLPG model for the Q1'19 results and to reflect changes in our timing assumptions for the filgotinib launches. For FY19, we make modest changes and our FY19 cash burn is now at the bottom end (prev. middle) of the guidance range (€320-340m). In addition, we push our US filgotinib Rheumatoid Arthritis (RA) launch to early 2021 (prev. 2H'20), pull forward EU RA launch to 2H'20 (prev. 2021) and push out Crohn's disease (CD) and Ankylosing Spondylitis (AS) launches by 1 year. These changes are broadly neutral to our EmV and our Dec-19 PT of €125/$141 offers 20% upside. The next event is the details from the filgotinib filing discussions with the FDA. In our bull case (file 2H'19, no male tox data) we see GLPG shares up 5%, in our base case (file in 1H'20, some male tox data) we see the shares broadly flat and in our bear case (file 2H'20, all male tox data) we see GLPG shares down 5-10%. Given the very strong Phase III safety and efficacy data we see the bear case as less likely and so we see relatively balanced risk/ reward into this update.

- **Small uplift to FY19 numbers, beyond FY19 forecast changes with updated assumptions around filgotinib approvals.** In FY19, we increase reimbursement income and trim SG&A, which leads to our loss per share being 5% less negative and our cash burn is now towards the bottom end (prev. middle) of guidance of €320-340m. Beyond FY19 our forecasts have changed to reflect updated assumptions for filgotinib launches as (1.) we push out US RA approval to early 2021 (prev. 2H'20), (2.) pulling forward EU RA approval and (3.) pushing out CD and AS by 1 year. As a result of this and changes in milestones consistent with approval timings, our forecast changes have been volatile year to year.
- **Filgotinib US filing scenario analysis highlights 5% potential upside and 5-10% downside, although given the data seen to date, we see the downside scenario as less likely**. Gilead plan to meet with the FDA '*in the short term*' to discuss the totality of the filgotinib data and next steps for filing. We have identified 3 scenarios following this meeting (1.) FDA no longer need MANTA – could file 2H'19 GLPG could be up c.5%, (2.) FDA want to see some, but not all patients in MANTA – could file 1H'20 GLPG likely broadly flat (JPM base case) and (3.) FDA want to see all patients - could lead to filing in 2H'20 - GLPG could be down 5-10%. Our base case is scenario (2.) and given the strong data seen with filgotinib in the Phase III programme, we believe the downside scenario (3.) is less likely, and so we see balanced risk/ reward heading into this data point.

Equity Ratings and Price Targets

Company	Ticker	Mkt Cap ($ mn)	Price CCY	Price	Rating Cur	Rating Prev	Price Target Cur	Price Target End Date	Price Target Prev	Price Target End Date
Galapagos	GLPG NA	6,039.04	EUR	103.15	OW	n/c	125.00	Dec-19	n/c	n/c
Galapagos ADR	GLPG US	6,252.77	USD	120.42	OW	n/c	141.00	Dec-19	142.00	n/c

Source: Company data, Bloomberg, J.P. Morgan estimates. n/c = no change. All prices as of 07 Jun 19.

See page 13 for analyst certification and important disclosures, including non-US analyst disclosures.

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Overweight

Company Data	
Shares O/S (mn)	52
52-week range (€)	111.80-70.64
Market cap ($ mn)	6,039.04
Exchange rate	0.89
Free float(%)	76.8%
3M - Avg daily vol (mn)	0.42
3M - Avg daily val ($ mn)	47.4
Volatility (90 Day)	42
Index	MSCI Europe
BBG BUY|HOLD|SELL	14|2|0

Galapagos NV (GLPG.AS;GLPG NA)

Year-end Dec (€)	FY17A	FY18A	FY19E (Prev)	FY19E (Curr)	FY20E (Prev)	FY20E (Curr)	FY21E (Prev)	FY21E (Curr)
Revenue (€ mn)	156	318	189	200	186	117	201	273
Adj. EBITDA (€ mn)	(86)	(39)	(213)	(199)	(246)	(319)	(261)	(196)
EBITDA margin	(54.8%)	(12.2%)	(112.6%)	(99.4%)	(132.0%)	(272.7%)	(130.2%)	(71.8%)
Adj. net income (€ mn)	(116)	(29)	(210)	(200)	(246)	(323)	(264)	(202)
Adj. EPS (€)	(2.34)	(0.56)	(3.87)	(3.66)	(4.54)	(5.92)	(4.85)	(3.70)
BBG EPS (€)	(1.98)	(1.28)	-	(4.25)	-	(4.31)	-	(3.98)
Reported EPS (€)	(2.34)	(0.56)	(3.87)	(3.66)	(4.54)	(5.92)	(4.85)	(3.70)
DPS (€)	-	-	-	-	-	-	-	-
Dividend yield	-	-	-	-	-	-	-	-
Adj. P/E	NM	NM	NM	NM	NM	NM	NM	NM

Source: Company data, Bloomberg, J.P. Morgan estimates.

Overweight

Company Data	
Shares O/S (mn)	52
52-week range ($)	125.48-85.00
Market cap ($ mn)	6,252.77
Exchange rate	1.00
Free float(%)	-
3M - Avg daily vol (mn)	0.12
3M - Avg daily val ($ mn)	13.4
Volatility (90 Day)	44
Index	MSCI Europe
BBG BUY|HOLD|SELL	13|1|0

Galapagos NV (GLPG;GLPG US)

Year-end Dec (€)	FY17A	FY18A	FY19E (Prev)	FY19E (Curr)	FY20E (Prev)	FY20E (Curr)	FY21E (Prev)	FY21E (Curr)
Revenue (€ mn)	156	318	205	200	229	117	239	273
Adj. EBITDA (€ mn)	(86)	(39)	(201)	(199)	(173)	(319)	(163)	(196)
EBITDA margin	(54.8%)	(12.2%)	(98.0%)	(99.4%)	(75.5%)	(272.7%)	(68.0%)	(71.8%)
Adj. net income (€ mn)	(116)	(29)	(198)	(200)	(172)	(323)	(163)	(202)
Adj. EPS (€)	(2.34)	(0.56)	(3.64)	(3.66)	(3.16)	(5.92)	(3.01)	(3.70)
BBG EPS (€)	(1.98)	(1.28)	-	(4.25)	-	(4.31)	-	(3.98)
Reported EPS (€)	(2.34)	(0.56)	(3.64)	(3.66)	(3.16)	(5.92)	(3.01)	(3.70)
DPS (€)	-	-	-	-	-	-	-	-
Dividend yield	-	-	-	-	-	-	-	-
Adj. P/E	NM	NM	NM	NM	NM	NM	NM	NM

Source: Company data, Bloomberg, J.P. Morgan estimates.

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Forecast Changes

For FY'19 we increase revenue for reimbursement income from NOVN and trim SG&A. JPMe Cash burn of €321m is at the bottom end of guidance.

In 2019, we have updated our revenue forecasts to include c.€12m in reimbursement revenue from Novartis as part of the MOR106 collaboration, where we had previously assumed limited contribution. We also make a modest cut to SG&A (€2m lower) following our update for the Q1'19 results. These changes flow through to operating loss (which is now c.€13m less negative). Given recent FX moves, we expect lower net financials (€5m net financial income vs. prev. €8m net financial income). Overall, with these changes our net loss and Basic loss per share are c.5% less negative.

Beyond 2019, forecast changes relate to changes in filgotinib launch assumptions: pull forward EU RA launch, push out US RA launch, push out CD and AS - broadly neutral impact on the EmV.

Beyond 2019, our model changes are more volatile as we have updated our assumptions for approval of filgotinib in certain indications/ territories, which impacts royalties and milestone income. We make modest changes to our costs lines, with no changes to R&D but a 4-5% increase in SG&A expenses (mostly associated with increased cost of warrants due to the higher GLPG share price, which we expect to impact each year going forward). For filgotinib timings we have made the following changes;

- **US RA launch pushed out to early 2021**. As discussed below, while the risk/reward around filgotinib has become significantly more positive following the Phase III data, we have taken a more cautious view as we still expect the FDA to want to see at least some data from the MANTA/ MANTA-RAy trials. As a result, we nudge out our US filgotinib launch from 2H'20 to early 2021. We continue to expect that Gilead will use a Priority Review Voucher for the filing of filgotinib.
- **EU filgotinib launch pulled forward to 2H'20**. Gilead have confirmed that they plan to file filgotinib with the EMA in 2H'19 following the Phase III FINCH data. Gilead have also said they are considering filing in Japan in 2H'19 however we have remained cautious on this, with Japanese filgotinib launch from 2021 in our model.
- **CD pushed out by 1 year**. On the 1Q'19 call, Galapagos' CMO mentioned that due to high competition in the Crohn's disease space, recruitment for clinical trials has been slower than expected. As such, they now expect data from the Phase III DIVERSITY-1 trial a year later than Ulcerative Colitis (which is expected in 2020 - CT.gov says primary completion in November 2019). As a result we have pushed out our US/EU launch for filgotinib in CD to 2023/24 (from 2022/23).
- **AS also pushed out by 1 year**. Gilead plan to start a Phase III trial in Psoriatic Arthritis in 2H'19. Timelines on the start of a Phase III study in AS have not been communicated. Therefore, we have pushed out the AS launch by 1 year as we now model US/EU launch in 2024/25 (prev. 2023/24).

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- **Royalty/ milestone assumptions**. In addition to the above, we have changed our milestone assumptions to be consistent with the approval timelines as we expect milestones to be paid on approval.

As a result of these changes to our royalty/ profit share/ milestone assumptions, our forecast changes are quite volatile on the topline and on earnings. In 2020, we have cut revenue by 37%/€69m reflecting the large US filgotinib approval milestone being pushed out to 2021 where the revenue has increased by 36%/€72m. We also see a similar pattern in 2022 where revenues are down c.22% reflecting a shift in the US CD milestones, which shifts into 2023.

Limited changes to our EmV as the pull forward in EU profit share offsets the push out of US royalty income.

Following these changes to our forecasts, our Embedded Value (product by product NPV) is largely unchanged. This is because we have pulled forward EU sales, where Galapagos are entitled to a 50:50 profit split, vs. the US where they gain royalties of 20-30% i.e. EU sales are higher value, especially in the earlier (less discounted) years when the royalty is likely at the lower end of the range. Also, CD and AS are smaller indications, with larger risk adjustments applied. Therefore, as a result of these changes (and discussed below) our EmV is largely unchanged at €127.

Table 1: Galapagos forecast changes (€'000, except per share data)

	2019E	2020E	2021E	2022E	2023E	2020-23 CAGR
Net Revenues						
Old	188,826	186,472	200,711	361,212	503,417	39.2%
New	**200,183**	**116,825**	**273,237**	**282,069**	**569,918**	**69.6%**
Diff - %	6.0%	-37.3%	36.1%	-21.9%	13.2%	
Diff Abs	11,356	-69,647	72,525	-79,143	66,501	
SG&A						
Old	48,721	61,747	71,525	79,625	88,425	12.7%
New	**46,650**	**64,930**	**74,834**	**83,065**	**92,003**	**12.3%**
Diff - %	-4.2%	5.2%	4.6%	4.3%	4.0%	
Diff Abs	-2,070	3,183	3,308	3,440	3,578	
R&D						
Old	358,916	377,424	394,050	392,907	341,588	-3.3%
New	**358,916**	**377,424**	**394,050**	**392,907**	**341,588**	**-3.3%**
Diff - %	0.0%	0.0%	0.0%	0.0%	0.0%	
Diff Abs	-	-	-	-	-	
Operating income (loss)						
Old	(218,811)	(252,699)	(268,115)	(119,712)	56,223	-160.6%
New	**(205,384)**	**(325,529)**	**(203,344)**	**(207,881)**	**112,274**	**-170.1%**
Diff - %	-6.1%	28.8%	-24.2%	73.7%	99.7%	
Diff Abs	13,426	-72,830	64,772	-88,169	56,051	
Basic EPS						
Old	(3.87)	(4.54)	(4.85)	(2.15)	1.09	-162.1%
New	**(3.66)**	**(5.92)**	**(3.70)**	**(3.80)**	**2.06**	**-170.3%**
Diff - %	-5.6%	30.6%	-23.7%	77.0%	88.9%	
Diff Abs	0.2	-1.4	1.1	-1.7	1.0	
Operational cash burn						
Old	(327,793)	(231,243)	(260,554)	(126,799)	69,954	-167.1%
New	**(320,917)**	**(278,334)**	**(208,098)**	**(172,981)**	**113,545**	**-174.2%**
Diff - %	-2.1%	20.4%	-20.1%	36.4%	62.3%	
Diff Abs	6,875	-47,091	52,457	-46,182	43,591	

Source: J.P. Morgan estimates

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Filgotinib Scenario Analysis

Outcome of Gilead's post Phase III studies with the FDA will determine filgotinib filing timelines in the US.

After the read out of the FINCH 1 & 3 trials, Galapagos' development partner Gilead plans to take the full Phase III data package to the FDA to discuss potential filing options. We expect the discussions will also encompass if and how much data is required from the MANTA and MANTA-Ray trials. Ex-US, Gilead expect to file filgotinib for approval in Europe in H2'19, which could lead to approval by H2'20.

Following the initial concerns of the FDA on testicular toxicity and given the Phase III data and data for other JAK inhibitors, we believe the risk/ reward balance for filgotinib has changed significantly. The FDA have known about the pre-clinical testicular toxicity findings and had already suggested a male toxicity study was required since before the DARWIN Phase II programme. Since these initial concerns we note that (1.) The FDA allowed US males to enroll on the 200mg dose of filgotinib, (2.) Testosterone data from males in the DARWIN study increased after treatment with filgotinib, (3.) other JAK inhibitors have demonstrated safety concerns and have been approved at or intend to only file one dose, and (4.) the Phase III data for filgotinib has shown best in class safety (see JPM takeaways here).

As a result, we believe the dynamic has significantly changed over the past couple of years since the FDA required the MANTA trial, which could put Gilead/ Galapagos in a stronger position for the pre-filing meeting with the FDA. As a result, we see three possible scenarios for the outcome for the pre-filing meeting with the FDA:

1. **FDA no longer need to see MANTA before filing - Blue Sky case**. Given the significant shift in risk/ reward since the Phase III FINCH programme was initiated, the FDA could allow Gilead to file filgotinib, and accept the MANTA data set after approval. With Gilead mentioning recently that they expect to meet with the FDA '*in the short term'* this scenario could allow filing of filgotinib in the US by the end of 2019/ early in 2020. Therefore, with a Priority Review Voucher (which we expect GILD to use), filgotinib could be on the market by mid-20/2H'20. If this is the outcome from the meeting with the FDA, we believe the GLPG stock could be up around 5%.
2. **FDA only require data from a limited number of patients - Base case**. The blinded portion of the MANTA trial is 13 weeks. Given the best in class safety profile (and other JAK inhibitors facing safety issues or only one dose approved/ filed), the FDA could allow an interim analysis of data from a portion of the 250 patients in the pooled MANTA/ MANTA-RAy trials. MANTA-RAy opened for recruitment in May'19, giving 7 months of recruitment before the end of 2019. If GILD/ GLPG can recruit sufficient patients for the interim in that time, the data from the final patient should be available by the end of Q1'20 (assuming they are recruited in mid-December). This could allow filing in mid'20 and approval (with a PRV) in early 2021. This scenario now forms our base and is reflected in our GLPG model with US launch in early 2021. If this is the outcome from the meeting with the FDA, we do not expect a significant reaction in the stock as following the GLPG 1Q'19 call, we expect this scenario will form the base case expectations of most in the market.

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3. **FDA require the full MANTA data set – Bear case**. If the FDA require data from the full 250 patients, given the speed of recruitment we have seen so far, we believe that this could lead to filing of filgotinib by the end of 2020/ early 2021 leading to launch by mid-21/ 3Q'21. The slower US ramp could lead to a c.5% hit to our EmV, and given sentiment on the stock would be hit with US sales being pushed out, we expect the stock could be off c.5-10% in this scenario.

While these are three scenarios we see as possible, and while we think that the FDA will likely want to see some data from the MANTA trial, we accept that the FDA can be unpredictable, which adds an element of risk to US filing. However, while we believe that the risk/ reward profile for filgotinib has become significantly more positive with the best in class safety demonstrated in the Phase III, suggesting potential for early filing, we have taken a more cautious approach and so we now expect filing in mid-2020, which could allow US launch in early 2021. Therefore, as described above, we have pushed out our US filgotinib launch from 2020 to early 2021. In terms of the downside case, give the changes in the dynamics in the JAK space, particularly with the read out of the Phase III FINCH programme, we believe it is less likely that the FDA would want to see the full dataset from MANTA and MANTA-RAy before filgotinib can file for approval.

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Upcoming Newsflow

Below we lay out some of our thoughts for some of the key upcoming Newsflow for Galapagos which includes (1.) Filgotinib Phase III data presentations at EULAR (2.) Data presentation of the EQUATOR (filgotinib in Psoriatic Arthritis) study at EULAR (3.) FDA update on next steps following Phase III data (4.) Phase II proof of concept data for filgotinib in Sjögren's syndrome and Cutaneous Lupus and (5.) initial first in human data from the TOLEDO assets.

- **FINCH 1 & 3 data presentations at EULAR 2019**: We will be attending the EULAR 2019 conference in IFEMA conference centre, Madrid (June 12-15, 2019), where data from FINCH 1 (Wednesday 12th June, 16:25 CET, Hall 6, LB0001) and FINCH 3 (Saturday 15th June, 8:00 CET, Hall 7B, LB0003) will be presented. While much of the topline data has already been previously presented, we will be interested in how the KOLs in the field view the data and potentially how it compares to the data presented for the other JAK inhibitors in the field.
- **EQUATOR data at EULAR 2019:** The topline data from filgotinib in Psoriatic Arthritis has also been previously presented. Similarly to the FINCH programme, we are interested to gauge the physician reaction to the data as well as see how EQUATOR stacks up to competing products in the field (data at various stages in development in PsA is being presented for Cosentyx [NOVN]. Taltz [Eli Lilly], Ilumya [Sun Pharma/ Almirall], Xeljanz [Pfizer] and bimekizumab [UCB]). We forecast peak filgotinib sales of only €350m, with a probability of success of 50%, worth €3.8/ 3% of our EmV.
- **Update from meeting with the FDA on next steps following Phase III read out:** Gilead expect to meet with the FDA '*in the short term*' As we have discussed above, we see potential for 5% upside if the FDA allow filing without data from the male tox studies leading to filing in 2H'19, broadly flat share price reaction if the FDA require some data from the male tox studies allowing filing in 1H'20 and we see downside of 5-10% if the FDA require the full male tox study data which could lead to filing in 2H'20. We view the downside scenario as less likely therefore we see fairly balanced risk/ reward into this update.
- **Proof-of-concept Phase II data of filgotinib in Sjögren's syndrome and Cutaneous Lupus:** Initial proof-of-concept data is due in 2H'19. We currently do not include any value for these indications in our model. Therefore, we see limited downside from this read out, but upside optionality if a signal is shown.
- **Topline data from first in human studies from the TOLEDO assets:** Initial Phase I data of the first TOLEDO compounds is expected in 2H'19. Per clinicaltrials.gov the studies are being conducted in healthy male volunteers and so we only expect to see some data on safety as well as potentially the impact on some biomarkers of inflammation. These read outs will inform the Phase II study designs (which in our view are likely to initially focus on IBD given the pre-clinical data), where we expect to see some of the first efficacy data in patients with inflammatory diseases. Therefore, we believe it could be too early to add value for these assets on the basis of these read outs.

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Valuation

Dec-19 PT unchanged at €125 for the shares, modest FX trim to the ADR now $141 (prev. $142).

We value Galapagos using our Embedded Value (EmV) methodology (product by product NPV). While we have pushed out our US filgotinib launch (now early 2021 launch), we have pulled forward our EU launch (2H'20 launch), our EmV is largely unchanged as given the profit share we model Galapagos making a higher margin on EU profit share vs. US royalties. As a result our EmV is still €127 per share which informs our Dec-19 PT of €125. At current FX rates, this leads to a Dec-19 PT for the ADRs of $141 (prev. €142). Our Dec-19 PT for the GLPG shares and ADR offers c.20% upside to current levels.

Table 2: Galapagos Embedded Value Summary (€)

Galapagos Embedded Value (NPV per Share)									€127.3	100%
Royalties and product sales										
Product	**Indication**	**Partner**	**Unadj. Peak Sales (€m)**	**Risk Adj.**	**Risk adj. Peak Sales (€m)**	**Royalty rate - US/ Int'l**	**Profit Share - EU**	**EmV (€m)**	**EmV/Share (€)**	**% of total**
Filgotinib	RA	Gilead	2,600	90%	2,340	20-30%	50%	3,559	66.2	52.0%
Filgotinib	CD	Gilead	600	60%	360	20-30%	50%	380	7.1	5.6%
Filgotinib	UC	Gilead	800	40%	320	20-30%	50%	458	8.5	6.7%
Filgotinib	PsA	Gilead	350	50%	175	20-30%	50%	206	3.8	3.0%
Filgotinib	AS	Gilead	350	50%	175	20-30%	50%	200	3.7	2.9%
Filgotinib Milestones								441	8.2	6.4%
Filgotinib sales force							35% of effort	(312)	(5.8)	-4.6%
Filgotinib R&D spend								(179)	(3.3)	-2.6%
Total Filgotinib		**Gilead**	**4,700**	**72%**	**3,370**			**4,752**	**88.4**	**69.5%**
GLPG1690	IPF	-	1,000	40%	400	-	-	1,378	25.6	20.1%
MOR106	AtD	Novartis	900	50%	450	6-12%	-	269	5.0	3.9%
GLPG1972	OA	Servier (ex-US)	2,200	20%	440	20%	-	222	4.1	3.2%
Cystic Fibrosis	CF	AbbVie	-	-	-	-	-	-	-	0.0%
Total Royalties and Product sales			**8,800**	**53%**	**4,660**			**6,621**	**123.2**	**96.8%**
Other										
General and Admin Cost								(422)	(7.9)	-6.2%
Selling and Marketing - other								(20)	(0.4)	-0.3%
R&D								(579)	(10.8)	-8.5%
Capex								(51)	(0.9)	-0.7%
Cash and Cash Equivalents								1,291	24.0	18.9%
Total Other								**220**	**4.1**	**3.2%**
Total EmV								**6,841**	**127.3**	**100.0%**

Source: J.P. Morgan estimates

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Investment Thesis, Valuation and Risks

Galapagos NV *(Overweight; Price Target: €125.00)*

Investment Thesis

We reiterate our Overweight rating on GLPG with our Dec-19 PT of €125 per share/ $141 per ADR, indicating c.20% upside potential from current levels. The key value is the JAK-1 specific inhibitor filgotinib (partnered with Gilead) in autoimmune diseases, which has an efficacy profile at least as good as other (less selective) members of the JAK inhibitor class and a best in class safety profile - which we believe will drive uptake of the drug from launch in 2020. We forecast peak in market filgotinib sales of €4.7bn and include €3.4bn in our model after applying risk adjustments. In addition we include value from GLPG1690 which, based on Phase II data, could be the first asset in Idiopathic Pulmonary Fibrosis to halt disease progression and we forecast peak sales of €1bn and include €0.4bn in our model. GLPG have full commercial rights to GLPG1690 and intend to commercialise the asset worldwide. We also include value for royalties from MOR106 in atopic dermatitis (partnered with Novartis) and GLPG1972 in Osteoarthritis.

Valuation

We value Galapagos using our Embedded Value methodology (product by product NPV analysis), which informs our Dec-19 price target of €125 per share for the GLPG share and $141 (prev. $142) for the GLPG ADR. In our EmV we include €88.4 per share relating to filgotinib royalties, profit share and related commercial and R&D costs in autoimmune indications. From the other pipeline we include €25.6 per share for GLPG1690 in Idiopathic Pulmonary Fibrosis, €5.0 per share for MOR106 in Atopic Dermatitis and €4.1 per share for GLPG1972 in Osetoarthritis. We include cash of €1.3bn, being €24.0 per share. Offsetting this, we include SG&A costs of -€8.2 per share, R&D of -€10.8 per share and Capex of -€0.9 per share. This leads to an EmV of €127.3 per share, which informs our Dec-19 PT of €125. For the ADR, we translate our GLPG NV value into USD using a €:$ FX rate of 1.12, giving $141.

Risks to Rating and Price Target

- Regulatory risk surrounding filgotinib filing and approval, clinical trial risk from the ISABELA programme in IPF.
- The key markets for filgotinib (RA, CD, UC, PsA and AS) are competitive, with the potential for additional competition within the JAK class from ABBV's upadacitinib, this could impact the commercial potential of filgotinib.
- If the MANTA testicular safety study demonstrates an impact of filgotinib on lowering sperm counts, this could lead to a warning on the label, which could reduce the commercial potential in some indications.
- Galapagos has no experience in commercialising assets, therefore it may not be able to extract the full value from GLPG1690 by leading the worldwide commercialisation in IPF.

The same risks apply to the Galapagos ADR.

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Galapagos: Summary of Financials

Income Statement	FY17A	FY18A	FY19E	FY20E	FY21E
Revenue	**156**	**318**	**200**	**117**	**273**
Gross profit	**156**	**318**	**200**	**117**	**266**
SG&A	(27)	(40)	(47)	(65)	(75)
R&D expenses	(219)	(323)	(359)	(377)	(394)
Reported EBITDA	**(86)**	**(39)**	**(199)**	**(319)**	**(196)**
Adj. EBITDA	**(86)**	**(39)**	**(199)**	**(319)**	**(196)**
D&A	(4)	(6)	(6)	(7)	(7)
Adj. EBIT	**(90)**	**(45)**	**(205)**	**(326)**	**(203)**
Net Interest	(26)	16	6	2	1
Adj. PBT	**(116)**	**(29)**	**(200)**	**(323)**	**(202)**
Tax	(0)	(0)	0	0	0
Minority Interest	-	-	-	-	-
Adj. Net Income	**(116)**	**(29)**	**(200)**	**(323)**	**(202)**
Reported EPS	(2.34)	(0.56)	(3.66)	(5.92)	(3.70)
Adj. EPS	**(2.34)**	**(0.56)**	**(3.66)**	**(5.92)**	**(3.70)**
DPS	**-**	**-**	**-**	**-**	**-**
Payout ratio	-	-	-	-	-
Shares outstanding	49	52	55	55	55

Balance Sheet	FY17A	FY18A	FY19E	FY20E	FY21E
Cash and cash equivalents	1,151	1,291	970	692	483
Accounts receivable	40	30	31	23	66
Inventories	0	0	0	0	0
Other current assets	6	8	8	8	8
Current assets	**1,198**	**1,329**	**1,009**	**722**	**558**
PP&E	17	23	50	50	50
Intangible assets	2	4	4	4	4
LT investments	-	-	-	-	-
Other non current assets	72	88	88	88	88
Total assets	**1,286**	**1,439**	**1,147**	**860**	**695**
Short term borrowings	0	0	5	5	5
Payables	47	69	71	77	82
Other short term liabilities	125	151	1	1	1
Current liabilities	**172**	**220**	**77**	**83**	**88**
Long-term debt	0	0	21	21	21
Pension liabilities	4	4	4	4	4
Other long term liabilities	103	5	5	5	5
Total liabilities	**274**	**225**	**103**	**110**	**114**
Shareholders' equity	1,012	1,214	1,043	750	581
Minority interests	-	-	-	-	-
Total liabilities & equity	**1,286**	**1,439**	**1,147**	**860**	**695**
BVPS	**20.45**	**23.38**	**19.10**	**13.74**	**10.64**
y/y Growth	*23.2%*	*14.3%*	*(18.3%)*	*(28.1%)*	*(22.6%)*
Net debt/(cash)	(1,151)	(1,291)	(944)	(666)	(458)

Cash Flow Statement	FY17A	FY18A	FY19E	FY20E	FY21E
Cash flow from operating activities	**(147)**	**(142)**	**(314)**	**(271)**	**(201)**
o/w Depreciation & amortization	4	4	4	5	5
o/w Changes in working capital	(148)	(146)	(319)	(273)	(202)
Cash flow from investing activities	**(1)**	**(16)**	**(7)**	**(7)**	**(7)**
o/w Capital expenditure	(5)	(10)	(5)	(5)	(5)
as % of sales	*3.4%*	*3.3%*	*2.7%*	*4.5%*	*1.9%*
Cash flow from financing activities	**353**	**288**	**0**	**0**	**0**
o/w Dividends paid	-	-	-	-	-
o/w Shares issued/(repurchased)	353	288	0	0	0
o/w Net debt issued/(repaid)	(0)	(0)	0	0	0
Net change in cash	**178**	**140**	**(321)**	**(278)**	**(208)**
Adj. Free cash flow to firm	**(152)**	**(153)**	**(319)**	**(276)**	**(206)**
y/y Growth	*(162.6%)*	*0.3%*	*108.6%*	*(13.4%)*	*(25.4%)*

Ratio Analysis	FY17A	FY18A	FY19E	FY20E	FY21E
Gross margin	100.0%	100.0%	100.0%	100.0%	97.2%
SG&A/Sales	17.5%	12.5%	23.3%	55.6%	27.4%
R&D/Sales	140.1%	101.6%	179.3%	323.1%	144.2%
Adj. EBITDA margin	(54.8%)	(12.2%)	(99.4%)	(272.7%)	(71.8%)
Adj.EBIT margin	(57.6%)	(14.1%)	(102.6%)	(278.6%)	(74.4%)
Tax rate	(0.2%)	(0.2%)	0.0%	0.0%	0.0%
Net profit margin	(74.2%)	(9.2%)	(99.7%)	(276.9%)	(74.0%)
ROE	(13.1%)	(2.6%)	(17.7%)	(36.1%)	(30.4%)
ROA	(9.8%)	(2.1%)	(15.4%)	(32.2%)	(26.0%)
ROCE	(10.2%)	(4.0%)	(18.0%)	(35.3%)	(29.4%)
Net debt/Equity	NM	NM	NM	NM	NM
Net debt/EBITDA	13.5	33.4	4.7	2.1	2.3
Sales/Assets (x)	0.1	0.2	0.2	0.1	0.4
Assets/Equity (x)	1.3	1.2	1.1	1.1	1.2
Interest cover (x)	NM	2.5	34.7	155.2	193.6
Operating leverage	23998.5%	(48.2%)	(968.1%)	(140.5%)	(28.0%)
Revenue y/y Growth	2.8%	103.9%	(37.0%)	(41.6%)	133.9%
Adj. EBITDA y/y Growth	1070.1%	(54.8%)	414.7%	60.2%	(38.4%)
Adj. EPS y/y Growth	(304.8%)	(75.9%)	548.7%	62.0%	(37.5%)

Valuation	FY17A	FY18A	FY19E	FY20E	FY21E
Adj. P/E (x)	NM	NM	NM	NM	NM
Reported P/E (x)	NM	NM	NM	NM	NM
P/BV (x)	5.0	4.4	5.4	7.5	9.7
EV/EBITDA (x)	NM	NM	NM	NM	NM
Dividend yield	-	-	-	-	-
FCFF yield	(3.0%)	(2.9%)	(5.7%)	(4.9%)	(3.7%)

Source: Company reports and J.P. Morgan estimates.
Note: € in millions (except per-share data).Fiscal year ends Dec. o/w - out of which

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Galapagos ADR: Summary of Financials

Income Statement	FY17A	FY18A	FY19E	FY20E	FY21E
Revenue	**156**	**318**	**200**	**117**	**273**
Gross profit	**156**	**318**	**200**	**117**	**266**
SG&A	(27)	(40)	(47)	(65)	(75)
R&D expenses	(219)	(323)	(359)	(377)	(394)
Reported EBITDA	**(86)**	**(39)**	**(199)**	**(319)**	**(196)**
Adj. EBITDA	**(86)**	**(39)**	**(199)**	**(319)**	**(196)**
D&A	(4)	(6)	(6)	(7)	(7)
Adj. EBIT	**(90)**	**(45)**	**(205)**	**(326)**	**(203)**
Net Interest	(26)	16	6	2	1
Adj. PBT	**(116)**	**(29)**	**(200)**	**(323)**	**(202)**
Tax	(0)	(0)	0	0	0
Minority Interest	-	-	-	-	-
Adj. Net Income	**(116)**	**(29)**	**(200)**	**(323)**	**(202)**
Reported EPS	(2.34)	(0.56)	(3.66)	(5.92)	(3.70)
Adj. EPS	**(2.34)**	**(0.56)**	**(3.66)**	**(5.92)**	**(3.70)**
DPS	**-**	**-**	**-**	**-**	**-**
Payout ratio	-	-	-	-	-
Shares outstanding	49	52	55	55	55

Cash Flow Statement	FY17A	FY18A	FY19E	FY20E	FY21E
Cash flow from operating activities	**(147)**	**(142)**	**(314)**	**(271)**	**(201)**
o/w Depreciation & amortization	4	4	4	5	5
o/w Changes in working capital	(148)	(146)	(319)	(273)	(202)
Cash flow from investing activities	**(1)**	**(16)**	**(7)**	**(7)**	**(7)**
o/w Capital expenditure	(5)	(10)	(5)	(5)	(5)
as % of sales	*3.4%*	*3.3%*	*2.7%*	*4.5%*	*1.9%*
Cash flow from financing activities	**353**	**288**	**0**	**0**	**0**
o/w Dividends paid	-	-	-	-	-
o/w Shares issued/(repurchased)	353	288	0	0	0
o/w Net debt issued/(repaid)	(0)	(0)	0	0	0
Net change in cash	**178**	**140**	**(321)**	**(278)**	**(208)**
Adj. Free cash flow to firm	**(152)**	**(153)**	**(319)**	**(276)**	**(206)**
y/y Growth	*(164.8%)*	*0.3%*	*108.6%*	*(13.4%)*	*(25.4%)*

Balance Sheet	FY17A	FY18A	FY19E	FY20E	FY21E
Cash and cash equivalents	1,151	1,291	970	692	483
Accounts receivable	40	30	31	23	66
Inventories	0	0	0	0	0
Other current assets	6	8	8	8	8
Current assets	**1,198**	**1,329**	**1,009**	**722**	**558**
PP&E	17	23	50	50	50
Intangible assets	2	4	4	4	4
LT investments	-	-	-	-	-
Other non current assets	72	88	88	88	88
Total assets	**1,286**	**1,439**	**1,147**	**860**	**695**
Short term borrowings	0	0	5	5	5
Payables	47	69	71	77	82
Other short term liabilities	125	151	1	1	1
Current liabilities	**172**	**220**	**77**	**83**	**88**
Long-term debt	0	0	21	21	21
Pension liabilities	4	4	4	4	4
Other long term liabilities	103	5	5	5	5
Total liabilities	**274**	**225**	**103**	**110**	**114**
Shareholders' equity	1,012	1,214	1,043	750	581
Minority interests	-	-	-	-	-
Total liabilities & equity	**1,286**	**1,439**	**1,147**	**860**	**695**
BVPS	**20.45**	**23.38**	**19.10**	**13.74**	**10.64**
y/y Growth	*23.2%*	*14.3%*	*(18.3%)*	*(28.1%)*	*(22.6%)*
Net debt/(cash)	(1,151)	(1,291)	(944)	(666)	(458)

Ratio Analysis	FY17A	FY18A	FY19E	FY20E	FY21E
Gross margin	100.0%	100.0%	100.0%	100.0%	97.2%
SG&A/Sales	17.5%	12.5%	23.3%	55.6%	27.4%
R&D/Sales	140.1%	101.6%	179.3%	323.1%	144.2%
Adj. EBITDA margin	(54.8%)	(12.2%)	(99.4%)	(272.7%)	(71.8%)
Adj.EBIT margin	(57.6%)	(14.1%)	(102.6%)	(278.6%)	(74.4%)
Tax rate	(0.2%)	(0.2%)	0.0%	0.0%	0.0%
Net profit margin	(74.2%)	(9.2%)	(99.7%)	(276.9%)	(74.0%)
ROE	(13.1%)	(2.6%)	(17.7%)	(36.1%)	(30.4%)
ROA	(9.8%)	(2.1%)	(15.4%)	(32.2%)	(26.0%)
ROCE	(10.2%)	(4.0%)	(18.0%)	(35.3%)	(29.4%)
Net debt/Equity	NM	NM	NM	NM	NM
Net debt/EBITDA	13.5	33.4	4.7	2.1	2.3
Sales/Assets (x)	0.1	0.2	0.2	0.1	0.4
Assets/Equity (x)	1.3	1.2	1.1	1.1	1.2
Interest cover (x)	NM	2.5	34.7	155.2	193.6
Operating leverage	23998.5%	(48.2%)	(968.1%)	(140.5%)	(28.0%)
Revenue y/y Growth	2.8%	103.9%	(37.0%)	(41.6%)	133.9%
Adj. EBITDA y/y Growth	1070.1%	(54.8%)	414.7%	60.2%	(38.4%)
Adj. EPS y/y Growth	(304.8%)	(75.9%)	548.7%	62.0%	(37.5%)

Valuation	FY17A	FY18A	FY19E	FY20E	FY21E
Adj. P/E (x)	NM	NM	NM	NM	NM
Reported P/E (x)	NM	NM	NM	NM	NM
P/BV (x)	5.2	4.6	5.6	7.8	10.0
EV/EBITDA (x)	NM	NM	NM	NM	NM
Dividend yield	-	-	-	-	-
FCFF yield	(2.9%)	(2.8%)	(5.5%)	(4.7%)	(3.5%)

Source: Company reports and J.P. Morgan estimates.
Note: € in millions (except per-share data).Fiscal year ends Dec. o/w - out of which

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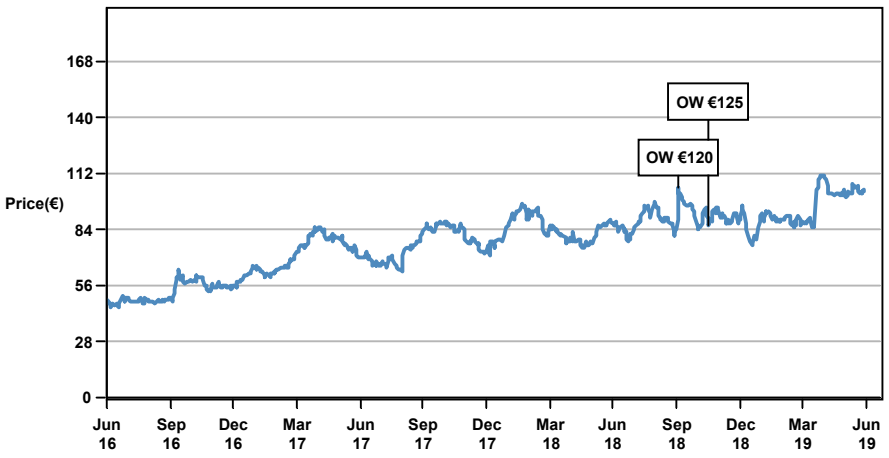
Galapagos (GLPG.AS, GLPG NA) Price Chart



Date	Rating	Share Price (€)	Price Target (€)
13-Sep-18	OW	104.55	120.00
26-Oct-18	OW	86.04	125.00

Source: Bloomberg and J.P. Morgan; price data adjusted for stock splits and dividends.
Initiated coverage Sep 12, 2018. All share prices are as of market close on the previous business day.

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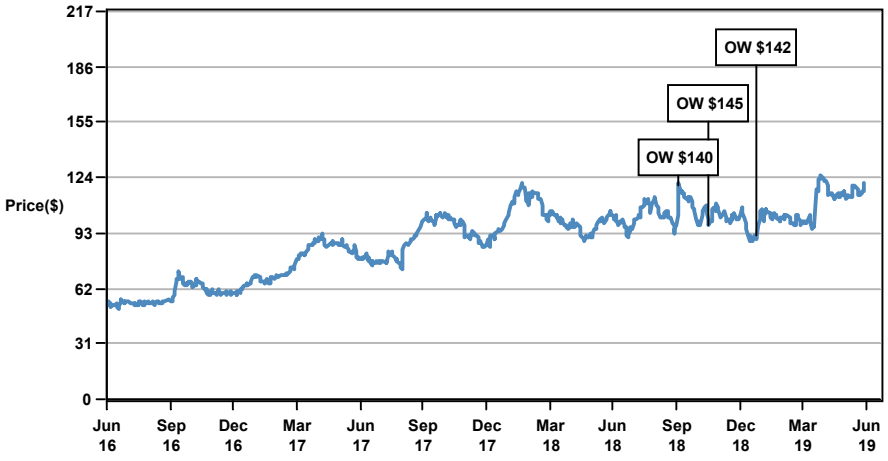
Galapagos ADR (GLPG, GLPG US) Price Chart



Date	Rating	Share Price ($)	Price Target ($)
13-Sep-18	OW	119.71	140.00
26-Oct-18	OW	97.04	145.00
02-Jan-19	OW	91.74	142.00

Source: Bloomberg and J.P. Morgan; price data adjusted for stock splits and dividends.
Initiated coverage Sep 12, 2018. All share prices are as of market close on the previous business day.

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Coverage Universe: Quigley, James P: Galapagos (GLPG.AS), Galapagos ADR (GLPG), Genmab A/S (GEN.CO), Lonza Group AG (LONN.S), Molecular Partners AG (MOLN.S)

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	Overweight (buy)	Neutral (hold)	Underweight (sell)
J.P. Morgan Global Equity Research Coverage	44%	41%	14%
IB clients*	53%	47%	37%
JPMS Equity Research Coverage	42%	44%	14%
IB clients*	74%	64%	56%

*Percentage of subject companies within each of the "buy," "hold" and "sell" categories for which J.P. Morgan has provided investment banking services within the previous 12 months.
For purposes only of FINRA ratings distribution rules, our Overweight rating falls into a buy rating category; our Neutral rating falls into a hold rating category; and our Underweight rating falls into a sell rating category. Please note that stocks with an NR designation are not included in the table above. This information is current as of the end of the most recent calendar quarter.

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