NOMURA | INSTINET

Galapagos NV GLPG.OQ GLPG US

EQUITY: AMERICAS BIOTECHNOLOGY

Early IPF Data are Promising

Increasing Our Target Price to $124

We increase our target price for GLPG shares to $124 from $108 (pg. 5), adding in GLPG1690 in IPF following proof-of-concept data and announcement of a potentially pivotal study to be initiated in IPF. Galapagos reported positive results from the Phase 2a FLORA study of GLPG1690 in IPF last night and hosted a call this morning. Data from the double-blind, placebo-controlled study demonstrated that patients treated with GLPG1690 experienced disease stabilization compared with continues decline in FVC in the placebo arm. These data represent compelling POC in difficult to treat IPF, particularly in light of the target and preclinical work. GLPG1690 may tap into a market where approved drugs (pirfenidone and nintedanib) with limited safety/efficacy profile have annual sales of >$1.0 bn. GLPG1690 represents $16 of our $124 TP. (Fig 7, pg. 5) **Next up:** Results of the ALBATROSS Phase 2 study in F508del heterozygous CF patients in combo with Kalydeco.

- **GLPG1690 Data are Impressive, but Still Early.** GLPG1690 demonstrated 8mL improvement in FVC vs. 87mL decrease in FVC in the placebo group at 12 weeks (Figure 1, pg.3), suggesting that patients in the treatment arm experienced disease stabilization. We look forward for the full data presentation at ATS (May 18-23, 2018). However, we note that the slope in treatment arm curve seemed similar to this of the placebo (Figure 1, pg. 3) These data will need to be confirmed in a larger cohort of patients and we note that historically IPF trials have demonstrated large trial-to-trial variability.
- **Biomarker Corroborates FVC Data.** Biomarker data demonstrated reduction in LPA, confirming the inhibition of autotaxin and the MOA (Fig. 2, pg. 3). These data align with FVC observations in the treatment and placebo arms (Fig. 1, pg. 3). We view '1690 as another example of the consistency of the translational small molecule platform that Galapagos employs to identify novel targets and drug molecules.
- **Next Steps for IPF: A Potentially *Pivotal* Multiple Dose Study.** Despite the approval of pirfenidone and nintedanib in 2014, there is still unmet need in IPF. We anticipate that the existence of approved drugs is likely to require an active comparator to facilitate trial enrollment, potentially including an arm of GLPG1690 on top of approved therapies. We anticipate that non-inferiority is likely to be sufficient to support approval, while superiority would be likely to support market uptake over approved drugs.

Summary of Financials (€ths except per share)	2016A	2017E	2018E
Total Revenues	€ 151,612	€ 139,551	€ 171,394
Operating Expense	€ 163,103	€ 269,764	€ 381,423
Operating Income	(€ 11,491)	(€ 130,213)	(€ 210,029)
Net Income, (GAAP)	**€ 54,012**	**(€ 130,213)**	**(€ 210,029)**
Diluted EPS, (GAAP)	**€ 1.14**	**(€ 2.55)**	**(€ 3.93)**
Cash (mn)	€ 973	€ 1,141	€ 967
Diluted Shares Outstanding (th)	47,308	51,028	53,397

Source: Company data, Instinet estimates

Key company data: See next page for company data and detailed price/index chart.

Instinet, LLC, Equity Research

10 August 2017

Rating Remains	**Buy**
Target Price Increased from 108.00	USD 124.00
Closing price 9 August 2017	USD 73.17
Potential upside	+69.5%

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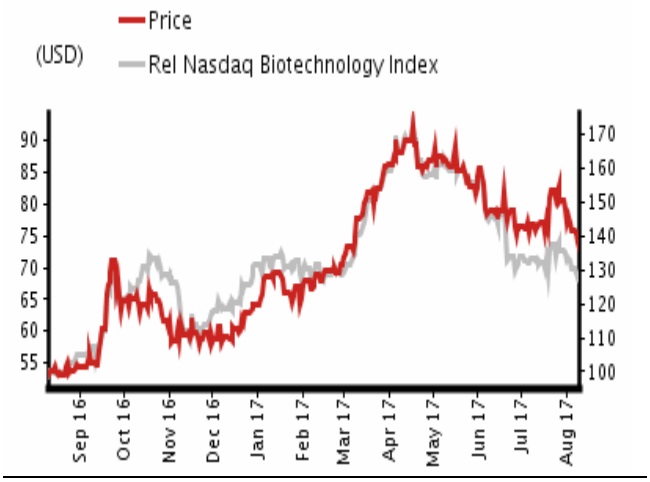
Key data on Galapagos NV

Rating

Stock	Buy
Sector	Not rated

Relative performance chart



Source: Thomson Reuters, Instinet research

Performance

(%)	1M	3M	12M
Absolute	-4.6	-16.0	34.0
Relative to Nasdaq Biotechnology Index	-5.0	-23.0	27.5

Stock price data

Current stock price ($)	73.17
Market cap ($ - mn)	3,722.0
52-week low ($)	52.60
52-week high ($)	94.81
Shares outstanding (mn)	50.87

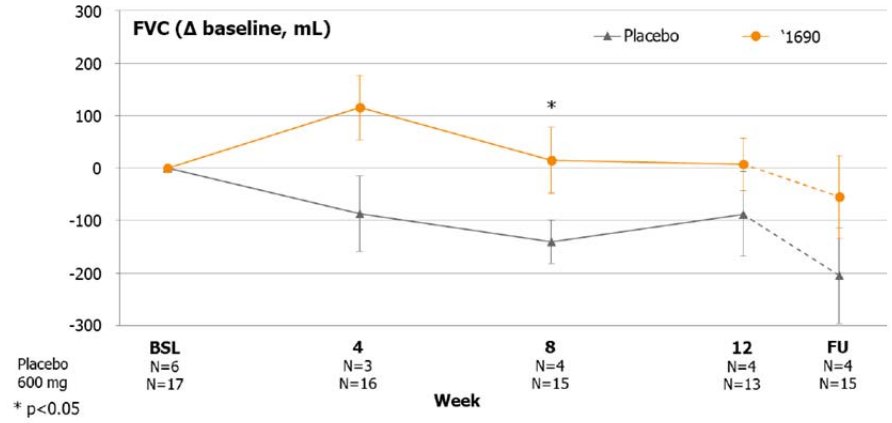
Source: Thomson Reuters, Instinet research

Our Notes Published on Galapagos This Year

- 2Q17 Earnings Update
- Bari Delayed; Filgo to Launch Concurrently
- VRTX Triple Combo Sets the Bar
- Galapagos R&D Day
- On the Road with GLPG: Catalyst-Rich 2H17
- ABBV Upadacitinib Comparable to Filgo
- 1Q17 Earnings—Reiterate Buy
- Increasing TP to $121
- Tez/Iva Results Validate Galapagos Triple
- Galapagos – Next-Gen Combo Under Way

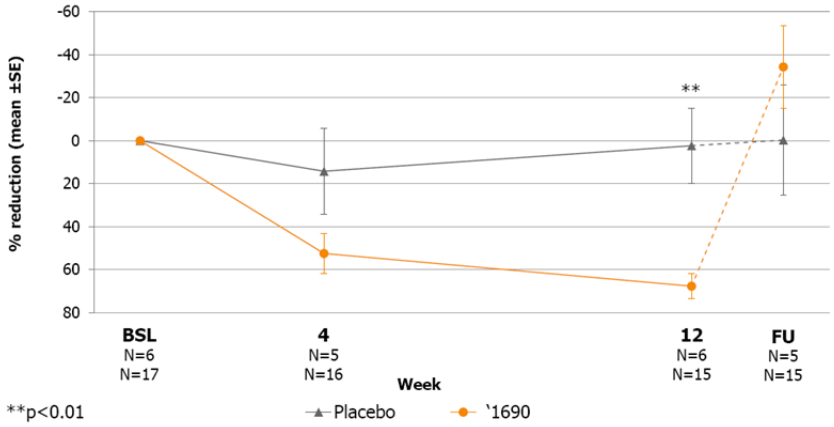
Initiating with Buy Rating, $87 TP

Fig. 1: FVC stabilization demonstrated with '1690 vs. placebo



Source: Company data, Instinet research

Fig. 2: Reduction in LPA Confirms MOA and Aligns with Clinical Benefit



Source: Galapagos Company Reports

Increased Activity in the IPF Space

FG3019 an anti-connective tissue growth factor (CTFG) mAb demonstrated impressive attenuation in the annual decline in FVC in a Phase 2b study with 103 patients (Figure 3). We await readouts from GBT440 in IPF by 4Q17. However, we note that this study is designed to confirm the MOA of GBT440, i.e., increasing oxygen saturation, which is more likely to be reflected in reduction of oxygen consumption and improvement in QoL. Biogen also has an IPF asset, BG00011, a mAb targeting αvβ6 integrin, which completed a dose escalation P2 study.

Fig. 3: FVC Outcomes with Different IPF Treatments

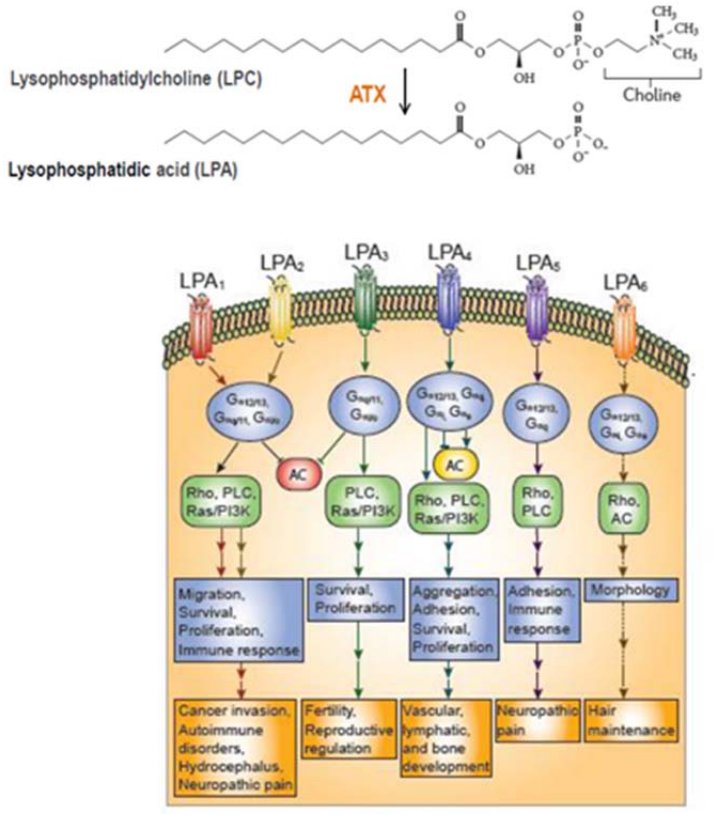
					FVC		
Drug	**Route**	**Phase**	**Duration (Wk)**	**n**	**Treatment (mL)**	**Placebo (mL)**	**P value**
1690	Oral	2a	12	23	8	-87	N/A
FG3019	IV	2	48	103	-129	-308	0.0249
Pirfenidone	Oral	3	52/48	1247	-216	-363	<0.001
Nintedanib	Oral	3	52	513	-114.7	-239.9	<0.001
Nintedanib	Oral	3	52	548	-113.6	-207.3	0.067

Source: Company reports, Instinet research

Autotaxin Has Strong Correlation with Lung Fibrosis

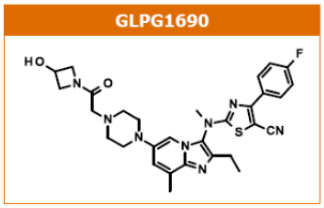
Autotaxin is the enzyme that catalyzes the synthesis of extracellular lysophophatidic acid (LPA). LPA signaling via LPA receptor family results in a pro-fibrotic effect by promoting epithelial cell apoptosis, vascular leakage via modulation of endothelial cells, and recruitment of fibroblasts. Lungs of patients with IPF had increased expression of autotaxin. Deletion of pharmacological inhibition of autotaxin in IPF mice models attenuated development of lung fibrosis.

Fig. 5: Autotaxin Signaling Pathway



Source: Company data, Instinet research

Fig. 4: GLPG1690



Source: Company reports, Instinet research

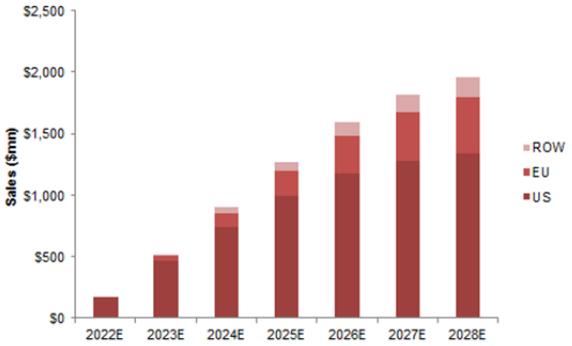
IPF Market Overview

The prevalence of IPF is estimated at 200,000 patients between the US and the EU. There are currently two approved therapies for the disease: pirfenadone and nintedanib,, both demonstrated a slowdown FVC decline. However, no statistical significant improvement in OS was observed. Despite the significant unmet need and large market opportunity, pirfenidone and nintedanib only sold ~$1.3bn in 2016. The relatively low uptake is partly attributed to the high discontinuation rate (25%) due to adverse events.

Increasing our Target Price to $124

We now include IPF in our target price for GLPG shares, raising it to $124 from previous $108. We estimate about 30,000 patients on GLPG1690 at peak (2025E), and an annual price of $90,000 per year in the US and $45,000 ex-US (we note that pirfenidone and nintedanib are priced at ~$95,000/yr). Using these estimates we arrive at peak sales ~$1.3bn WW.

Fig. 6: GLPG1690 Sales Projection



Source: Company reports, Instinet estimates

We increase our TP from $108 to $124 adding in $16 per share for the IPF program. We value IPF by applying an 8x (rare disease) multiple to 2025E sales of GLPG1690 of ~$1.3bn, discounted 45% annually to account for clinical trial risk, arriving at our $16/sh IPF program valuation.

Fig. 7: Top-Line Multiple Valuation

Drug/Indication	Expected Launch	Valuation Sales/Royalty Est ($MM)	Valuation Year Sales	Multiple	Discounted Asset Value	Value / Share	Discount Rate	Partner
Filgotinib - Profit Split EU Big 5								
RA	2021	$306	2025	6	$690	$14	15%	Gilead
Crohns	2022	$76	2025	6	$127	$2	20%	Gilead
UC	2023	$34	2025	6	$57	$1	20%	Gilead
Sub Total		*$416*			*$874*	*$17*		
Filgotinib - US Royalties								
RA	2020	$275	2025	16	$1,654	$32	15%	Gilead
Crohns	2021	$192	2025	16	$857	$17	20%	Gilead
UC	2022	$28	2025	16	$125	$2	20%	Gilead
Sub Total		*$495*			*$2,636*	*$52*		
CF Triple Combo	2022	$224	2025	18	$894	$18	25%	Abbvie
Sub Total		$224			$894	$18		
IPF Sales to GLPG	2022	$1,272	2025	8	$829	$16	45%	
Sub total		$1,272			$829	$16		
Pipeline Value					**$4,405**	**$102**		
Net Cash (YE:2017)					***$1,000***	*$22*		
Total Equity Value						**$124**		
Diluted Shares Outstanding Used for Valuation (MM)							51.0	
Numbers may not add up due to rounding.								

Source: Company data, Instinet estimates

Fig. 8: Income Statement

(€1000s, except per share data) [FY - Dec]	2016A	1Q17A	2Q17	3Q17	4Q17	2017E	2018E
US Filgotinib Sales (RA Only)	0	0	0	0	0	0	0
Intl Filgotinib Sales (RA Only)	0	0	0	0	0	0	0
US Filgotinib Sales (Crohn's)	0	0	0	0	0	0	0
Intl Filgotinib Sales (Crohn's)	0	0	0	0	0	0	0
US Filgotinib Sales (UC only)	0	0	0	0	0	0	0
Intl Filgotinib Sales (UC only)	0	0	0	0	0	0	0
Total Filgotinib Royalties	**0**	**0**	**0**	**0**	**0**	**0**	**0**
US GLPG- Triple Combo Royalties (CF)	0	0	0	0	0	0	0
Intl GLPG-Triple Combo Royalties (CF)	0	0	0	0	0	0	0
Total GLPG1837+Corrector Royalties	**0**	**0**	**0**	**0**	**0**	**0**	**0**
R&D revenue	129,519	32,801	28,124	23,032	27,638	111,595	122,755
Other Income	22,093	7,062	5,044	5,044	5,044	22,194	40,685
Total Revenues	**151,612**	**39,863**	**33,168**	**28,076**	**32,682**	**133,789**	**163,440**
Costs & Expenses:							
Cost of Goods Sold	0	0	0	0	0	0	0
R&D	139,573	44,930	47,983	57,580	69,096	219,588	306,439
SG&A	23,529	6,158	6,862	7,548	8,303	28,871	37,576
Restructuring and integration costs		0	0	0	0	0	0
Total Operating Expenses	**163,103**	**51,088**	**54,845**	**65,128**	**77,399**	**248,459**	**344,015**
Operating Income	**(11,491)**	**(11,225)**	**(21,677)**	**(37,052)**	**(44,716)**	**(114,670)**	**(180,575)**
Interest and Other Income (Expense), net	57,479	(2,380)	(13,874)	0	0	0	0
Pretax Income (Loss)	**54,246**	**(13,605)**	**(35,551)**	**(37,052)**	**(44,716)**	**(114,670)**	**(180,575)**
Income tax expense (Benefit)	(235)		(93)	(93)	(93)	(278)	(278)
Net Income (Loss) as reported	**54,012**	**(13,605)**	**(35,644)**	**(37,145)**	**(44,809)**	**(114,949)**	**(180,854)**
Stock option expense	11,034	2,554		3,256	3,870	9,681	22,523
Other	(1,605)	0	(125)	0	0	0	0
Net Income (Loss) Non-GAAP	**63,441**	**(11,051)**	**(35,769)**	**(33,888)**	**(40,939)**	**(105,268)**	**(158,331)**
Diluted Earnings Per Share Non-GAAP	**€ 1.34**	**(€ 0.24)**	**(€ 0.72)**	**(€ 0.68)**	**(€ 0.82)**	**(€ 2.14)**	**(€ 3.28)**
Basic Earnings Per Share Non-GAAP	€ 1.39	(€ 0.24)	(€ 0.74)	(€ 0.70)	(€ 0.85)	(€ 2.21)	(€ 3.28)
Diluted Earnings Per Share	**€ 1.14**	**(€ 0.29)**	**(€ 0.71)**	**(€ 0.74)**	**(€ 0.89)**	**(€ 2.34)**	**(€ 3.56)**
Basic Earnings Per Share as reported	€ 1.18	(€ 0.29)	(€ 0.74)	(€ 0.77)	(€ 0.93)	(€ 2.41)	(€ 3.75)
Basic Shares Outstanding (th)	45,696	46,256	48,043	48,091	48,139	47,632	48,260
Diluted Shares Outstanding (th)	**47,308**	**46,256**	**49,987**	**50,091**	**50,139**	**49,118**	**50,860**

Source: Company data, Instinet estimates

Fig. 9: Balance Sheet

(€1000s, except per share data) [FY - Dec]	2016A	2017E	2018E
ASSETS			
Current assets:			
Cash and cash equivalents	973,241	1,155,753	1,010,072
Current restricted cash	6,570	6,570	6,570
Current R&D incentives receivables	10,154	10,154	10,154
Current financial assests from share subscription agreement	0		
Short term marketable securities		0	0
Trade & other receivables	9,728	0	0
Inventory	300	300	300
Prepaid expenses and other current assets	7,239	7,239	7,239
Total current assets	**1,007,232**	**1,180,016**	**1,034,335**
Property and equipment, net	14,961	28,350	51,354
Goodwill	0	0	0
Intangible assets	1,023	1,023	1,023
Deferred tax assets/receivables	1,957	1,957	1,957
Non-current R&D incentives receivables	54,188	54,188	54,188
Non-current restricted cash	1,098	1,098	1,098
Other non-current assets	2,880	2,697	2,697
Total assets	**1,083,338**	**1,274,891**	**1,146,653**
LIABILITIES AND STOCKHOLDER'S EQUITY			
Current liabilities:			
Trade and other payables	31,269	38,699	68,803
Current obligations under finance lease	54	37	37
Current tax payable	1,022	1,018	1,018
Accrued charges	619	1,044	1,032
Deferred income	70,827	91,893	91,893
Other current liabilities	0	0	0
Total current liabilities	**103,791**	**132,691**	**162,783**
Long term debt	0	0	0
Obligations under finance lease	9	0	0
Deferred Revenue	214,785	27,512	27,512
Provisions	63	57	57
Pension liabilties	3,520	3,663	3,663
Other liabilities	2,469	164,931	164,931
Total liabilities	**324,637**	**328,854**	**358,946**
Stockholders' equity:			
Common Stock	223,928	233,018	233,018
Additional paid in capital	649,135	958,709	981,232
Other reserves	(1,000)	(809)	(809)
Translation differences	(1,090)	(1,406)	(1,406)
Accumulated other comprehensive loss	0	0	0
Accumulated Deficit	(112,272)	(243,475)	(424,329)
Total stockholders' equity	**758,701**	**946,037**	**787,706**
Total liabilities and stockholders' equity	**1,083,338**	**1,274,891**	**1,146,653**

Source: Company data, Instinet estimates

Fig. 10: Cash Flow Statement

(€1000s, except per share data) [FY - Dec]	2016A	2017E	2018E
CASH FLOWS FROM OPERATING ACTIVITIES			
Net Income (Loss)	54,012	(131,203)	(180,854)
Adjustments			
Tax income/expenses	235	0	0
Other net financial income	(8,258)	0	0
Fair value measurment of share subscription	(57,479)	0	0
Depreciation and amortization	4,182	6,672	7,088
Net realized loss for foreign exchange transaction	1,229	(338)	0
Stock based compensation	11,034	9,681	22,523
Other		0	
Change in assets and liabilities:			
Increase/decrease in provisions	7	0	0
Increase pension liabilities	244	0	0
Gain on sale of fixed assests	(14)	0	0
Inventories	25	0	0
Account receivables	(12,978)	9,728	0
Prepaid expenses & other assets	0	0	0
Accounts payable and accrued expenses	2,102	7,855	30,092
Interest paid	(47)	0	0
Interest received	1,066	0	0
Income taxes paid/received	(1,763)	0	0
Current obligations under finance lease	2	(16)	0
Deferred revenues & other	245,806	(2)	0
Net cash provided by (used in) operating activities	**239,405**	**(97,623)**	**(121,151)**
CASH FLOWS FROM INVESTING ACTIVITIES			
Purchases of property and equipment	(4,458)	(20,061)	(30,092)
Purchase of and expenditure of intangible fixed assets	(332)		0
Proceeds from disposal of PPE	18	0	0
Increase/decrease in restricted cash	235	0	0
Investments, net	(2,750)	0	0
Other	0	0	0
Net cash used in investing activities	**(7,287)**	**(20,061)**	**(30,092)**
CASH FLOWS FROM FINANCING ACTIVITIES			
Proceeds from issuance of shares, net cost	391,784	295,480	0
Exercise of options	4,261	0	0
Repayment obligations under finance and other debt	(49)	0	0
Repurchase of common stock	0	0	0
Other		0	0
Net cash provided by financing activities	**395,996**	**295,480**	**0**
Effect of exchange rate on cash	4,816		
Net increase in cash and cash equivalents	632,927	177,796	(151,243)
Cash and cash equivalents at beginning of period	340,314	973,241	1,151,037
Cash and cash equivalents at end of period	**973,241**	**1,151,037**	**999,794**

Source: Company data, Instinet estimates

Appendix A-1

Analyst Certification

I, Christopher Marai, hereby certify (1) that the views expressed in this Research report accurately reflect my personal views about any or all of the subject securities or issuers referred to in this Research report, (2) 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 and (3) no part of my compensation is tied to any specific investment banking transactions performed by Nomura Securities International, Inc., Nomura International plc or any other Nomura Group company.

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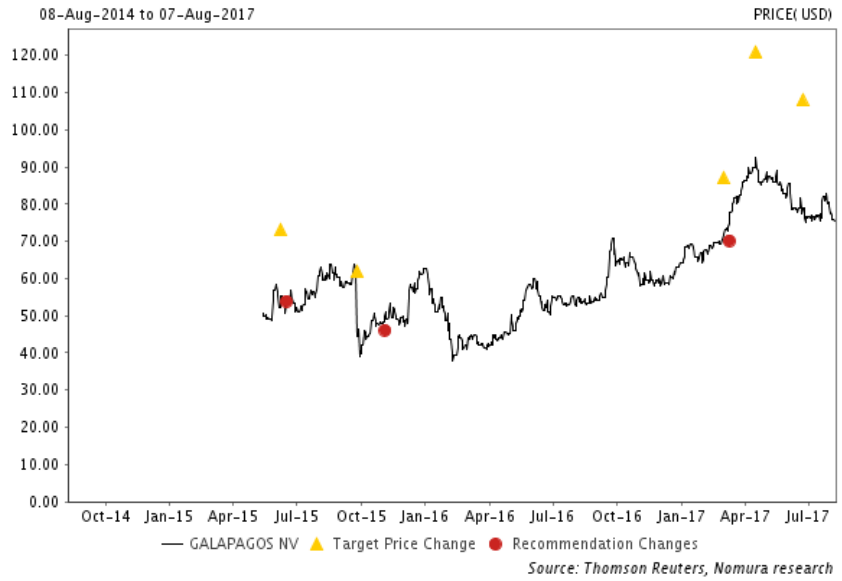
Materially mentioned issuers

Issuer	Ticker	Price	Price date	Stock rating	Sector rating	Disclosures
Galapagos NV	GLPG US	USD 73.17	09-Aug-2017	Buy	Not rated	A6

A6 The Nomura Group expects to receive or intends to seek compensation for investment banking services from the subject company in the next three months.

Galapagos NV (GLPG US) **USD 73.17 (09-Aug-2017)** Buy (Sector rating: Not rated)

Rating and target price chart (three year history)



Date	Rating	Target price	Closing price
22-Jun-17		108.00	78.56
17-Apr-17		121.00	92.40
01-Mar-17	Buy		71.78
01-Mar-17		87.00	71.78
27-Oct-15	Not Rated		47.69
25-Sep-15		62.00	44.60
08-Jun-15	Buy		55.51
08-Jun-15		73.00	55.51

For explanation of ratings refer to the stock rating keys located after chart(s)

Valuation Methodology For Galapagos NV (GLPG), we use a top-line revenue multiple valuation, a method widely used for early-stage biotech companies. Our target price of $124 represents a 6x multiple for EU profit share on filgotinib across inflammatory indications and a 16x multiple for U.S. royalties on filgotinib. In filgotinib for RA, we apply a 15% discount rate, reflecting a lower development risk, as the target, JAK, is already validated by an approved drug in RA. In filgotinib in UC and Crohn's, we apply a 20% discount rate, reflecting a slightly higher risk for these indications, as no JAK inhibitor is approved. For the Cystic Fibrosis program, we use an 18x multiple, reflecting a higher value for the higher-margin orphan program and a 25% discount that reflects a higher development risk. For the IPF program, we use an 8x multiple, reflecting a higher value for the higher-margin orphan program and a 45% discount that reflects a higher development risk. The benchmark for this stock is the Nasdaq Biotechnology Index.

Risks that may impede the achievement of the target price Regulatory risk: The FDA may require Galapagos to present data on the efficacy of the individual triple-combo drugs in the target patient population, which would require the company to conduct a large Phase 2 study. Enrollment of patients in these studies might be challenging, due to the low expectation of efficacy from a single compound. For filgotinib, the FDA may issue a class label on the risk for serious infections and malignancies. This action will not prevent filgotinib from reaching the market, but it could create a negative perception of the

drug among patients and physicians, which would affect commercial viability. Competitive risk: Baricitinib, a JAK 1/2 inhibitor, was expected to be approved by January 19, 2017. In clinical studies, the drug presented compelling efficacy superior to adalimumab. If baricitinib is found to be safe and approved without a black-box warning, it could take the lion's share of the market. Celgene's mongersen, an SMAD7 anti-sense RNA, showed compelling safety and efficacy profile in a Phase 2 study in CD patients. The compound is in a Phase 3 study and is set to report top-line data by 2H18. If approved, mongersen would have first-mover advantage as the only orally available DMT for Crohn's. Clinical risk: The Phase 2 study with filgotinib in CD used the CDAI as the primary outcome measure. The Phase 3 study is using the more traditional PRO as the primary outcome measure. This difference in design may result in a smaller efficacy difference between the placebo and treatment arms in the Phase 3 study.

Important Disclosures

Online availability of research and conflict-of-interest disclosures

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As at 30 June 2017.
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STOCKS

A rating of **'Buy'**, indicates that the analyst expects the stock to outperform the Benchmark over the next 12 months. A rating of **'Neutral'**, indicates that the analyst expects the stock to perform in line with the Benchmark over the next 12 months. A rating of **'Reduce'**, indicates that the analyst expects the stock to underperform the Benchmark over the next 12 months. A rating of **'Suspended'**, indicates that the rating, target price and estimates have been suspended temporarily to comply with applicable regulations and/or firm policies. Securities and/or companies that are labelled as **'Not rated'** or shown as **'No rating'** are not in regular research coverage. Investors should not expect continuing or additional information from Nomura relating to such securities and/or companies. Benchmarks are as follows: **United States/Europe/Asia ex-Japan**: please see valuation methodologies for explanations of relevant benchmarks for stocks, which can be accessed at: http://go.nomuranow.com/research/globalresearchportal/pages/disclosures/disclosures.aspx; **Global Emerging Markets (ex-Asia)**: MSCI Emerging Markets ex-Asia, unless otherwise stated in the valuation methodology; **Japan:** Russell/Nomura Large Cap.

SECTORS

A **'Bullish'** stance, indicates that the analyst expects the sector to outperform the Benchmark during the next 12 months. A **'Neutral'** stance, indicates that the analyst expects the sector to perform in line with the Benchmark during the next 12 months. A **'Bearish'** stance, indicates that

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Target Price

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