Galapagos NV

GLPG- NASDAQ; GLPG - NA

April 8, 2020 Biotechnology

BUY COMPANY UPDATE

Financial Summary		
Changes	Previous	Current
Rating	_	Buy
Target Price	_	\$298.00
FY19A EPS	_	€2.49
FY20E EPS	_	€(1.61)
FY19A Revenue	_	€895.9
FY20E Revenue	_	€643.3
Price (04/08/20):		\$202.70
52-Week Range:		\$274 - \$111
Market Cap.(mm):		13,175.5
Shr.O/S-Diluted (mm):		65.0
Avg Daily Vol (3 Mo):		223,829
Dividend / Yield:		\$0.00 / 0.0%

Revenue	2018A	2019A	2020E
Q1	€44.8	€40.9	€110.0
Q2	€57.0	€67.6	€110.5
Q3	€103.2	€644.0	€111.1
Q4	€112.8	€143.2	€311.7
FY (Dec)	€317.8A	€895.9A	€643.3
1 7			
EPS	2018A	2019A	2020E
	2018A €(0.73)	2019A €(0.89)	2020E €(0.95)
EPS			
EPS Q1	€(0.73)	€(0.89)	€(0.95)
EPS Q1 Q2	€(0.73) €(0.42)	€(0.89) €(0.86)	€(0.95) €(1.06)

Price Performance



CEO Fireside Chat Recap: Maximizing Execution in COVID-19 Uncertainty; Filgo UC Data On-Deck; Broad Pipeline Progress

Summary

We recently hosted a call with GLPG's CEO Onno van de Stolpe and Elizabeth Goodwin, VP Investor Relations, where we discussed: 1) status of filgo NDA filing for RA; 2) approaching P3 filgo UC data; 3) update on non-filgo pipeline initiatives; 4) anticipated filgo market differentiation; and 5) GLPG EU commercial build. Importantly, management does not anticipate a delay in the filgo RA PDUFA date (Stifel est. August 2020). For filgo in UC (data est. 2Q20), cross trial comparisons with competitors may prove challenging due to subtle differences in trial designs/endpoints, but management thinks Rinvoq is most appropriate (~14-20% pbo-adjusted remission). Non-filgo pipeline, including P3 '1690 and P2 '1205 in IPF, as well as P2b '1972 in OA continue as planned for now, but the situation remains fluid. Street assumes filgo black box given Rinvoq class label, but GLPG internal market research suggests docs will recognize filgo best-in-class safety advantages.

Key Points

GLPG/GILD paused studies with filgotinib; no evidence of delayed approval in RA. Prior to our conversation with management, the Company had 2 updates (March 20th and 22nd) where they acknowledged the impact of the coronavirus on some of its clinical studies, which led to a pause in enrollment of its P2 and P3 studies with filgotinib. We see this as a reasonable step since these patients are immunosuppressed as a result of the therapy. Affected trials include: DIVERSITY (Crhon's), PENGUIN (psoriatic arthritis), a P2 study in uveitis, and both MANTA and MANTA-ray studies. In addition, GLPG said that it now plans to launch a P3 study of filgotinib in AS later this year (prior guidance 1H20). Importantly, management has not seen evidence of a delay in the approval of filgotinib. And while GLPG does not expect an adcom, they did point to the possibility of a virtual adcom, if one were convened.

Filgotinib readout in UC remains on-track for this quarter. Management is bullish, as are we, that the data will be positive given prior success with competing JAKi (PFE's Xeljanz and ABBV's Rinvoq). How positive? We don't know, but GLPG said that it is aiming for filgotinib to fall in line with what Rinvoq has shown (Rinvoq P2b = ~15-20% placebo adjusted remission rate in its P2b and ~10-13% for Xeljanz). Management did caution against cross-trial comparisons given the differences in study designs and slightly different endpoints across JAKs studies. 1) The primary endpoint in the Rinvoq P2b study was clinical remission per adapted Mayo score, which includes PROs. 2) Trials evaluating Rinvoq and Xeljanz used a high dose induction followed by a low maintenance dose. By contrast, the primary endpoint in GLPG/GILD's P3 includes remission based on components of the Mayo Clinic Score, and patients in the treatment arm are randomized to receive either 200 mg or 100 mg of filgotinib.

GLPG forging ahead with PoC studies in the backdrop of COVID-19 disruption. Management was transparent in acknowledging that enrollment in ongoing PoC studies had slowed, but were not prepared to change their guidance (2H20). We outline updates from ongoing studies below:

• **GLPG1690:** Recruitment continues in the ISABELA P3 study in IPF, and remains on track (futility analysis 1H21). However, management is cognizant of the fluidity of the situation (esp. in the US) and acknowledged that things could change. The Company continues to closely monitor patients enrolled in the study to minimize pts drop-offs and missing data points (patients are monitored once a month, to once every 3 mos.) GLPG remains on track to report P2 data with '1690 in SSc (NOVESA) in 2H20.

Continued below...

Adam A. Walsh, M.D. | (617) 488-4626 | adamwalsh@stifel.com Edwin Zhang, PhD | (212) 271-3787 | zhange@stifel.com Stifel Equity Trading Desk | (800) 424-8870

Stifel does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the firm 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.

GLPG - NASDAQ

Biotechnology

Investment Thesis

With the recent GILD partnership, GLPG is well-positioned to capitalize on its core drug discovery and development capabilities. We believe filgotinib has best-in-class safety that will prove a competitive advantage in the market and allow for meaningful penetration despite fourth to market status in RA. We think filgotinib also has significant potential in the IBD space, where oral compounds are likely to dominate the future treatment landscape. GLPG1690 has demonstrated potential in a P2, and P3 is progressing. The Toledo inflammation program remains opaque, but we are optimistic as we expect GILD examined the data in depth as part of its recent due diligence. We view GLPG as a well-funded, R&D productive, corporate partner validated, biotech player with a deep and broad pipeline and multiple significant value-creating milestones on the horizon.

GLPG forging ahead with PoC studies in the backdrop of COVID-19 disruption...continued from above.

- GLPG1205: No change data from the PoC P2 PINTA study in IPF are expected in 3Q20.
- GLPG 1972: The Company is in the midst of finishing the P2b ROCCELLA study in OA with data anticipated in 2H20. As a reminder, quantitative MRI assessment of the target knee is required at the end of the study (NCT03595618), which would require an outpatient visit. Management signaled that the FDA has shown flexibility with respect to study endpoints and protocols. They believe that even if measurements are not taken at the 52 wk time point, and done later, the data points would still be valid.

GLPG sees filgotinib's safety profile as the main differentiator compared to other JAKi. As we have noted previously, one of the debates around filgotinib is whether it will be able to avoid a black box for thromboembolic events (TE), which is likely a class effect. GLPG believes that the drug's safety profile is more favorable when put up against its competitors. Management also pointed to their own market research, which suggests that physicians will be able analyze the data and spot the benefits of filgotinib. In UC, GLPG sees the MANTA and MANTA-ray testicular tox studies as important given the prevalence of UC in younger individuals compared to RA, which tends to affect the older population. Management said that it plans to release substantial safety data from the UC study, similar to other data releases (i.e. FINCH trial).

Commercialization build in the EU remains focused. GLPG is building up its commercial team in Benelux, France, Italy and Spain, and continue to prepare for the launch of filgotinib in RA. Management recognized that Rinvoq's launch has gone well (which bodes well for JAKs in the EU), and believes that they may have an advantage over ABBV in the current climate since marketing of Rinvoq has been halted – potentially giving GLPG time to catch up. GLPG also highlighted potential for meaningful uptake of filgotinib and other JAKi in the EU due their rapid onset, oral availability vs. biologic, and lack of ADAs.

Target Price Methodology/Risks

We arrive at our 12-month target price of \$298 using a discounted cash flow (WACC 10%, terminal growth 1.5%). We probability-adjust our revenue projections for individual product candidates to reflect clinical, developmental and regulatory risks. We use a 10% WACC, which is in line with industry peers, to reflect inherent risk in biotechnology drug development. Our 1.5% terminal growth rate reflects drug patent expirations, partially offset by assumed new drug approvals to sustain steady-state CF.

Risks include: development, clinical, regulatory, manufacturing, commercial, competitive, financing, political, and volatility inherent to the sector.

Company Description

Galapagos is a clinical-stage biotechnology company specialized in the discovery and development of disease modifying, small molecule medicines with novel mechanisms of action. The pipeline includes clinical candidates focused on rheumatoid arthritis, inflammatory bowel disease, idiopathic pulmonary fibrosis, osteoarthritis, and atopic dermatitis. Lead assets include filgotinib (partnered with Gilead), GLPG1690 in IPF, and GLPG1972 in OA. Galapagos recently signed a transformational deal with Gilead that brought in significant cash and should allow for accelerated R&D. The Galapagos group, including fee-for-service subsidiary Fidelta, has approximately 460 employees, operating from its Mechelen, Belgium headquarters and facilities in The Netherlands, France and Croatia.



Galapagos NV

GLPG - NASDAQ

Company Update
April 8, 2020

Biotechnology

GLPG Income Statement	FY	FY	FY	Mar	Jun	Sep	Dec	FY	Mar	Jun	Sep	Dec	FY	FY	FY	FY	FY	FY
(in 000s, except per share data)	2016A	2017A	2018A	1Q19A	2Q19A	3Q19A	4Q19A	2019A	1Q20E	2Q20E	3Q20E	4Q20E	2020E	2021E	2022E	2023E	2024E	2025E
POS																		
Rheumatoid Arthritis (Filgotinib) 95	6												-	57,748	219,495	519,772	838,672	911,704
Crohn's disease (Filgotinib) 504	6												-	-	-	11,340	114,446	186,242
Ulcerative colitis (Filgotinib) 75	6												-	-	8,583	68,331	123,993	181,247
Psoriatic arthritis (Filgotinib) 50°	6													-	6,079	23,105	54,713	88,281
Ankylosing spondylitis (Filgotinib) 40°	6												-	-	2,133	7,079	14,169	21,591
IPF (Autotaxin) 20°	6												-	-	-	7,578	13,759	20,235
Osteoarthritis (OA) 15	6															-	7,767	15,955
Upfront/milestone pmts/other income	151,612	155,917	317,845	40,919	67,590	643,954	143,427	895,890	110,000	110,550	111,103	311,658	643,311	460,000	557,000	450,000	450,000	450,000
Total Revenue €	€ 151,612	€ 155,917	€ 317,845	€ 40,919	€ 67,590	€ 643,954	€ 143,427	€ 895,890	€ 110,000	€ 110,550	€ 111,103	€ 311,658	€ 643,311	€ 517,748		€ 1,087,204	€ 1,617,518	€ 1,875,255
Total Revenue \$	\$163,826	\$185,541	\$378,235	\$46,238	\$76,377	\$727,668	\$162,072	\$1,012,356	\$121,000	\$121,605	\$122,213	\$342,824	\$707,642	\$616,120	\$944,015	\$1,293,773	\$1,924,847	\$2,231,553
COGS	_									_				5.775	23.629	63,720	116,752	142,525
Gross profit	151.612	155,917	317,845	40,919	67.590	643,954	143,427	895.890	110,000	110,550	111,103	311.658	643.311	511,973	769,661	1,023,484	1,500,766	1,732,729
-	- /-							,				. ,	,-		,			
R&D	139,573	218,502	322,876	83,195	94,372	120,680	129,073	427,320	137,050	143,903	152,537	163,214	596,703	626,539	651,600	677,664	704,771	725,914
SG&A	23,529	27,218	39,776	10,966	17,586	32,643	37,083	98,278	37,100	38,213	40,124	42,531	157,968	164,286	169,215	174,291	179,520	184,906
Income from co-promotion activities														15,168	75,890	188,386	320,833	376,554
Restructuring & integration costs																		
Total Operating Expense	163,102	245,720	362,652	94,161	111,958	153,323	166,156	525,598	174,150	182,116	192,660	205,745	754,671	805,993	896,705	1,040,341	1,205,124	1,287,373
Operating income (loss) €	11,491	(89,802)	(44,807)	(53,242)	(44,367)	490,631	(22,730)	370,292	(64,150)	(71,566)	(81,558)	105,913	(111,360)	(263,684)	24,736	359,914	937,309	1,198,463
Operating income (loss) \$	(\$15,651)	(\$106,864)	(\$53,320)	(\$60,163)	(\$50,135)	\$554,413	(\$25,685)	\$418,430	(\$70,565)	(\$78,722)	(\$89,713)	\$116,504	(\$122,496)	(\$313,784)	\$29,436	\$428,297	\$1,115,398	\$1,426,171
Fair value share of subscription agreement	57.479	-	-	_	-	(142,349)	(39,295)	(181,644)	-	-	-	-	-	-	-	-		-
Financial income	9.950	3.663	18,335	6.999	(1.349)	34,755	(18,923)	21,482	4.500	4.410	4,322	4.235	17.467	45.023	40.018	37,254	36.971	40.992
Financial expense	(1,692)	(29,368)	(2,737)	(2,345)	(1.472)	(38,631)	(17,623)	(60,071)	(2,500)	(2,525)	(2,550)	(2,576)	(10,151)	(10,202)	(10,253)	(10,304)	(10,356)	(10,407)
Net income (loss) before taxes	54.246	(115.507)	(29,209)	(48,588)	(47.188)	344,405	(98.570)	150.059	(62,150)	(00.004)	(79,786)	107.573	(104,044)	(228.863)	54.502	386.864	963.924	1,229,048
Income tax provision	(235)	(115,507)	50	(40,366)	(47,100)	(16.828)	16.913	214	100	(69,681) 100	100	107,573	400	(220,003)	3,706	26,307	65.547	83,575
Net income (loss) from continuing operations €	54.012	(115,704)	(29.259)	(48.656)	(47,249)	361,233	(115.483)	149,845	(62,250)	(69,781)	(79,886)	107,473	(104,444)	(228.863)	50.795	360.557	898.377	1.145.473
Net income (loss) from continuing operations \$	\$57,714	(\$137.688)	(\$34,818)	(\$54,981)	(\$53,392)	\$408,193	(\$130,496)	\$169,325	(\$68,475)	(\$76,759)	(\$87.875)	\$118,220	(\$114,888)	(\$272,347)	\$60,447	\$429,063	\$1.069.069	\$1,363,113
Net income (loss) from continuing operations \$ Net income from discontinued operations	\$37,714	(62)	(\$34,010)	(\$34,961)	(\$03,392)	\$400,193	(\$130,496)	\$109,325	(\$00,475)	(\$10,759)	(407,075)	\$110,220	(\$114,000)	(\$212,341)	\$00,44 <i>1</i>	\$429,063	\$1,009,009	\$1,003,113
Translation differences, other	1 [(569)				238		238			[]		- :					
Total comprehensive income (loss) to owners of the parent €	54.012	(116,336)	(29,259)	(48,656)	(47.249)	361.471	(115,483)	150.083	(62,250)	(69.781)	(79,886)	107.473	(104,444)	(228,863)	50.795	360.557	898.377	1.145.473
					. , .,			,		, . ,			, ,		,		, .	, ., .
EPS - continuing operations €	€ 1.14	(€ 2.34)	(€ 0.56)	(€ 0.89)	(€ 0.86)	€ 5.83	(€ 1.79)	€ 2.49	(€ 0.95)	(€ 1.06)	(€ 1.21)	€ 1.62	(€ 1.61)	(€ 3.38)	€ 0.73	€ 5.02	€ 12.14	€ 15.02
EPS - continuing operations \$	\$1.22	(\$2.78)	(\$0.68)	(\$1.01)	(\$0.97)	\$6.59	(\$2.02)	\$2.59	(\$1.05)	(\$1.17)	(\$1.33)	\$1.78	(\$1.77)	(\$4.02)	\$0.87	\$5.97	\$14.44	\$17.88
Shares outstanding (weighted average)	47,308	49,479	52,769	54,615	54,823	61,954	64,667	60,179	65,184	65,575	65,969	66,365	65,773	67,746	69,779	71,872	74,028	76,249

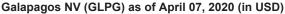
Source: Stifel estimates and reported company data



Biotechnology

Important Disclosures and Certifications

I, Adam A. Walsh, certify that the views expressed in this research report accurately reflect my personal views about the subject securities or issuers; and I, Adam A. Walsh, certify that no part of my compensation was, is, or will be directly or indirectly related to the specific recommendations or views contained in this research report. Our European Policy for Managing Research Conflicts of Interest is available at www.stifel.com/institutional/ImportantDisclosures





*Represents the value(s) that changed.

Buy=B; Hold=H; Sell=S; Discontinued=D; Suspended=SU; Discontinued=D; Initiation=I

For a price chart with our ratings and target price changes for GLPG go to http://stifel2.bluematrix.com/sellside/Disclosures.action?ticker=GLPG

Stifel or an affiliate expects to receive or intends to seek compensation for investment banking services from Galapagos NV in the next 3 months.

Stifel or an affiliate is a market maker or liquidity provider in the securities of Galapagos NV.

The equity research analyst(s) responsible for the preparation of this report receive(s) compensation based on various factors, including Stifel's overall revenue, which includes investment banking revenue.

Our investment rating system is three tiered, defined as follows:

BUY -We expect a total return of greater than 10% over the next 12 months with total return equal to the percentage price change plus dividend yield.

HOLD -We expect a total return between -5% and 10% over the next 12 months with total return equal to the percentage price change plus dividend yield.

SELL -We expect a total return below -5% over the next 12 months with total return equal to the percentage price change plus dividend yield.

Occasionally, we use the ancillary rating of **SUSPENDED** (SU) to indicate a long-term suspension in rating and/or target price, and/or coverage due to applicable regulations or Stifel policies. Alternatively, **SUSPENDED** may indicate the analyst is unable to determine a "reasonable basis" for rating/target price or estimates due to lack of publicly available information or the inability to quantify the publicly available information provided by the company and it is unknown when the outlook will be clarified. **SUSPENDED** may also be used when an analyst has left the firm.

Of the securities we rate, 52% are rated Buy, 33% are rated Hold, 2% are rated Sell and 13% are rated Suspended.

Within the last 12 months, Stifel or an affiliate has provided investment banking services for 20%, 6%, 0% and 5% of the companies whose shares are rated Buy, Hold, Sell and Suspended, respectively.

Within the last 12 months, Stifel or an affiliate has provided material services for 37%, 20%, 33% and 12% of the companies whose shares are rated Buy, Hold, Sell and Suspended, respectively

Additional Disclosures

Please visit the Research Page at www.stifel.com for the current research disclosures and respective target price methodology applicable to the companies mentioned in this publication that are within Stifel's coverage universe. For a discussion of risks to target price including basis of valuation or methodology please see our stand-alone company reports and notes for all stocks.

The information contained herein has been prepared from sources believed to be reliable but is not guaranteed by us and is not a complete summary or statement of all available data, nor is it considered an offer to buy or sell any securities referred to herein. Opinions expressed are



GLPG - NASDAQ

April 8, 2020 Biotechnology

subject to change without notice and do not take into account the particular investment objectives, financial situation or needs of individual investors. Employees of Stifel, or its affiliates may, at times, release written or oral commentary, technical analysis or trading strategies that differ from the opinions expressed within. Stifel or any of its affiliates may have positions in the securities mentioned and may make purchases or sales of such securities from time to time in the open market or otherwise and may sell to or buy from customers such securities on a principal basis; such transactions may be contrary to recommendations in this report. Past performance should not and cannot be viewed as an indicator of future performance.

As a multi-disciplined financial services firm, Stifel regularly seeks investment banking assignments and compensation from issuers for services including, but not limited to, acting as an underwriter in an offering or financial advisor in a merger or acquisition, or serving as a placement agent in private transactions.

Affiliate Disclosures

References to "Stifel" (collectively "Stifel") refer to SFC and other associated affiliated subsidiaries including (i) Stifel, Nicolaus & Company, Incorporated ("SNC"); (ii) Keefe, Bruyette & Woods, Incorporated ("KBWI"), which are both U.S. broker-dealers registered with the United States Securities and Exchange Commission ("SEC") and members of the Financial Industry National Regulatory Authority ("FINRA"), respectively; (iii) Stifel Nicolaus Europe Limited ("SNEL"), which is authorised and regulated by the United Kingdom Financial Conduct Authority ("FCA") (FRN 190412) and is a member of the London Stock Exchange and also trades under the name Keefe, Bruyette & Woods Europe ("KBW Europe"); (iv) our MainFirst affiliates (collectively "MAINFIRST"): MainFirst Bank AG, which is regulated by the German Federal Financial Services Authority (Bundesanstalt für Finanzdienstleistungsaufsicht; "BaFin"), MainFirst Schweiz AG, which is regulated by the Eidgenössische Finanzmarktaufsicht ("FINMA"), and MainFirst Securities US Inc. which is a U.S. broker-dealer registered with the SEC and member of FINRA; and (v) Stifel Nicolaus Canada, Incorporated. ("Stifel Canada"), which is authorised and regulated by Investment Industry Regulatory Organization of Canada ("IIROC"), and also trades under the names "Stifel GMP" and/or "Stifel First Energy".

Registration of non-US Analysts: Any non-US research analyst employed by SNEL contributing to this report is not registered/qualified as a research analyst with FINRA and is not an associated person of the US broker-dealer and therefore may not be subject to FINRA Rule 2241 restrictions on communications with a subject company, public appearances, and trading securities held by a research analyst account.

MAINFIRST Sponsored research:

At MAINFIRST, analysts may produce issuer paid research ('sponsored research'). This research is produced by analysts in accordance with local regulatory requirements relating to such research. These research analysts are not registered or qualified as research analysts with FINRA or the FCA and therefore may not be subject to the same regulatory requirements as research analysts registered or qualified with these regulators. In certain jurisdictions, this issuer paid research may be deemed to be independent research albeit not produced to the same conflicts of interest standards required by all jurisdictions for independent research. Where research has been paid for by an issuer, this will be clearly labelled. Please see our European Policy for Managing Research Conflicts of Interest for additional information.

Country Specific and Jurisdictional Disclosures

United States: Research produced and distributed by SNEL is distributed by SNEL to "Major US Institutional Investors" as defined in Rule 15a-6 under the US Securities Exchange Act of 1934, as amended. SNC may also distribute research prepared by SNEL directly to US clients, including US clients that are not Major US Institutional Investors. In these instances, SNC accepts responsibility for the content. SNEL is a non-US broker-dealer and accordingly, any transaction by a US client in the securities discussed in the document must be effected by SNC. US clients wishing to place an order should contact their SNC representative.

UK and European Economic Area (EEA): This report is distributed in the EEA by SNEL, which is authorized and regulated in the United Kingdom by the FCA. In these instances, SNEL accepts responsibility for the content. Research produced by SNEL is not intended for use by and should not be made available to non-professional clients.

The complete preceding 12-month recommendations history related to recommendation(s) in this research report is available at https://stifel2.bluematrix.com/sellside/MAR.action

Brunei: This document has not been delivered to, registered with or approved by the Brunei Darussalam Registrar of Companies, Registrar of International Business Companies, the Brunei Darussalam Ministry of Finance or the Autoriti Monetari Brunei Darussalam. This document and the information contained within will not be registered with any relevant Brunei Authorities under the relevant securities laws of Brunei Darussalam. The interests in the document have not been and will not be offered, transferred, delivered or sold in or from any part of Brunei Darussalam. This document and the information contained within is strictly private and confidential and is being distributed to a limited number of accredited investors, expert investors and institutional investors under the Securities Markets Order, 2013 ("Relevant Persons") upon their request and confirmation that they fully understand that neither the document nor the information contained within have been approved or licensed by or registered with the Brunei Darussalam Registrar of Companies, Registrar of International Business Companies, the Brunei Darussalam Ministry of Finance, the Autoriti Monetari Brunei Darussalam or any other relevant governmental agencies within Brunei Darussalam. This document and the information contained within must not be acted on or relied on by persons who are not Relevant Persons. Any investment or investment activity to which the document or information contained within is only available to, and will be engaged in only with Relevant Persons.



GLPG - NASDAQ

April 8, 2020 Biotechnology

Canadian Distribution: Research produced by SNEL is distributed in Canada by SNC in reliance on the international dealer exemption. 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 "permitted client" as defined under applicable Canadian securities law.

Republic of South Africa: Research produced by SNEL is distributed by SNEL to "Clients" as defined in FSCA FAIS Notice 20 of 2018 (the "FAIS Notice") issued by the Financial Services Conduct Authority. Research distributed by SNEL is pursuant to an exemption from the licensing requirements under Section 7(1) of the Financial Advisory and Intermediary Services Act, 2002.

In jurisdictions where Stifel is not already licensed or registered to trade securities, transactions will only be affected in accordance with local securities legislation which will vary from jurisdiction to jurisdiction and may require that a transaction is carried out in accordance with applicable exemptions from registration and licensing requirements. Non-US customers wishing to effect transactions should contact a representative of the Stifel entity in their regional jurisdiction except where governing law permits otherwise. US customers wishing to effect transactions should contact their US salesperson.

The recommendation contained in this report was produced at 8 April 2020 21:57EDT and disseminated at 8 April 2020 21:57EDT. Additional Information Is Available Upon Request

© 2020 Stifel. This report is produced for the use of Stifel customers and may not be reproduced, re-distributed or passed to any other person or published in whole or in part for any purpose without the prior consent of Stifel, Stifel, Nicolaus & Company, Incorporated, One South Street, Baltimore, MD 21202.

