

October 19, 2020 09:00 PM GMT

## Galapagos NV | North America

Catalyst Driven Idea: US  
Filgotinib Outcomes

✔ Stock Rating  
Equal-weight

◉ Industry View  
In-Line

◎ Price Target  
\$159.00

A potential decision on the commercial path forward for filgotinib in the US specifically for RA or potentially even more broadly could be made after a meeting with the FDA in late October or November. With a variety of outcomes, GLPG could move +/-15-20%.

**What and when is the catalyst? Filgotinib US commercialization decision**

**potentially in coming weeks:** Galapagos has previously licensed rights to JAK inhibitor filgotinib to Gilead. While management received approval in the lead indication for Rheumatoid Arthritis in both the EU and Japan, the US FDA issued a complete response letter requesting more data on male toxicity and questioning the relative safety profile of the 200mg dose versus the 100mg dose (see our prior note [here](#)). While we had originally expected data from the male toxicity study in 1Q21 and a potential refiling with the FDA subsequently, Gilead management is conducting a Type A meeting with FDA in the near-term and has indicated that if it believes approval of the 200mg dose is unlikely to have a path forward after that meeting, it may adjust its commercial stance in the US related to the marketing of filgotinib. Such actions could include a full return of US commercial rights, a decision to not pursue the RA indication, but continue to pursue the IBD indications or a decision to move ahead based on a positive outcome related to 200mg.

**What are the potential outcomes for this event? Scenario 1:** Gilead returns US commercial rights to Galapagos. In this scenario we would expect some additional consideration such as a renegotiation of European rights where Galapagos may take over commercialization in the EU. **Scenario 2:** Gilead decides not to file RA in the US, but continues with the IBD indications. **Scenario 3:** The Type A meeting suggests 200mg is potentially approvable and there is no change to the commercialization agreement.

**What are the potential stock implications from these outcomes? Scenario 1:**

Removing US filgotinib from our model decreases our Galapagos valuation by ~20%. We would expect some offset if Galapagos regains European rights and see GLPG down 10-15% **Scenario 2:** Removing US filgotinib in RA from our model decreases our Galapagos valuation by ~10%. However, we would expect some investor relief if Gilead reaffirms its commitment to the US IBD indications and see GLPG down 5-7% **Scenario 3:** We expect broad investor relief and see GLPG up 10-20%.

MORGAN STANLEY &amp; CO. LLC

Matthew Harrison

EQUITY ANALYST

Matthew.Harrison@morganstanley.com +1 212 761-8055

Connor Meehan

RESEARCH ASSOCIATE

Connor.Meehan@morganstanley.com +1 212 761-8266

Thomas F Lavery, J.D.

RESEARCH ASSOCIATE

Thomas.Lavery@morganstanley.com +1 212-761-0325

## Galapagos NV ( GLPG.O, GLPG US )

Biotechnology / United States of America

Stock Rating	Equal-weight			
Industry View	In-Line			
Price target	\$159.00			
Shr price, close (Oct 16, 2020)	\$128.83			
Mkt cap, curr (mm)	\$3,947			
52-Week Range	\$274.03-112.00			
Fiscal Year Ending	12/19	12/20e	12/21e	12/22e
ModelWare EPS (\$)	5.91	(1.92)	(3.65)	(6.08)
Prior ModelWare EPS (\$)	-	-	-	-
P/E	35.0	NM	NM	NM
EPS (\$) <sup>§</sup>	4.69	(5.10)	(5.80)	(5.19)
Div yld (%)	-	-	-	-

Unless otherwise noted, all metrics are based on Morgan Stanley ModelWare framework

§ = Consensus data is provided by Thomson Reuters Estimates

e = Morgan Stanley Research estimates

## QUARTERLY MODELWARE EPS (\$)

Quarter	2019	2020e	2020e	2021e	2021e
		Prior	Current	Prior	Current
Q1	(1.14)	-	(0.21)a	-	-
Q2	(1.12)	-	(2.11)a	-	-
Q3	8.89	-	(1.40)	-	-
Q4	(1.43)	-	1.87	-	(0.29)

e = Morgan Stanley Research estimates, a = Actual Company reported data

Morgan Stanley does and seeks to do business with companies covered in Morgan Stanley Research. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of Morgan Stanley Research. Investors should consider Morgan Stanley Research as only a single factor in making their investment decision.

For analyst certification and other important disclosures, refer to the Disclosure Section, located at the end of this report.

**What is our base case expectation for this event?** Our base case expectation is Scenario 2, where we believe a filing in RA will not proceed in the US, but development will continue with the IBD indications. We base this on the fact that other JAK inhibitors have been approved at higher doses in IBD compared to RA and that management is unlikely to gain clarity on the acceptability of the 200mg dose in RA at the Type A meeting.

Details of the scenario	Scenario 1	Scenario 2	Scenario 3
<b>US commercialization outcomes</b>	<b>US rights returned</b>	<b>Only IBD moves ahead</b>	<b>Both RA and IBD progress</b>
Probability	30%	55%	15%
<b>GLPG - POTENTIAL CHANGE IN STOCK PRICE (%)</b>	<b>-10-15%</b>	<b>-5-7%</b>	<b>+10-20%</b>
<b>GLPG - CORRESPONDING PROJECTED STOCK PRICE</b>	<b>~\$143 - \$135</b>	<b>~\$151 - \$148</b>	<b>~\$175 - \$191</b>

Source: Morgan Stanley Research; The probabilities shown are only illustrative. They do not forecast a precise series of events and do not account for all possible outcomes but instead illustrate our sense of the relative plausibility of selected scenarios, based on current industry dynamics.

Morgan Stanley is acting as financial advisor to Gilead Sciences, Inc. ("Gilead"), in relation to its agreement with Arcus Biosciences, Inc. ("Arcus") to co-develop and co-commercialize current and future therapeutic candidates in Arcus's pipeline, as announced on May 27, 2020. The proposed transaction is subject to regulatory approvals and other customary closing conditions. Gilead has agreed to pay fees to Morgan Stanley for its financial services, including transaction fees that are contingent upon the consummation of the transaction. Please refer to the notes at the end of the report.

## Valuation Methodology and Risks

### **Gilead Sciences Inc.(GILD.O)**

We Derive Our PT From A Discounted Cash Flow Analysis That Uses A WACC Of 10% And A 0% Terminal Growth Rate.

#### **Risks to Upside**

- Better than expected pipeline success on key late-stage drugs

#### **Risks to Downside**

- Unexpected competition in HIV
- More rapid HCV erosion than appreciated by consensus
- Failure of CAR-T to achieve significant market penetration & failure to meaningfully expand CAR-T label
- Significant delays with regulatory progress for JAK inhibitor filgotinib

### **Galapagos NV(GLPG.O)**

GLPG: Our price target is based on a DCF that uses a 12.5% discount rate, a 2% terminal growth rate, and explicit revenue projections until 2030E. Our revenue projections incorporate filgotinib royalties for various inflammatory diseases, including RA, CD, UC, AS, and PsA, in addition to sales of GLPG1690 in IPF, sales of GLPG1972 in OA. Key risks include regulatory risk, development risk in IPF, and competition in these markets.

#### **Risks to Upside**

- Products with greater risk-adjustments may succeed in late stage trials

#### **Risks to Downside**

- MANTA and/or MANTA-RAy studies may uncover unexpected male testicular toxicity safety signals, potentially further delaying commercialization for filgotinib
- FDA may reject the 200mg dose for filgotinib in RA
- Phase II safety profiles may not assure protection from unknown side-effects in broader Phase III programs

## Disclosure Section

The information and opinions in Morgan Stanley Research were prepared by Morgan Stanley & Co. LLC, and/or Morgan Stanley C.T.V.M. S.A., and/or Morgan Stanley Mexico, Casa de Bolsa, S.A. de C.V., and/or Morgan Stanley Canada Limited. As used in this disclosure section, "Morgan Stanley" includes Morgan Stanley & Co. LLC, Morgan Stanley C.T.V.M. S.A., Morgan Stanley Mexico, Casa de Bolsa, S.A. de C.V., Morgan Stanley Canada Limited and their affiliates as necessary.

For important disclosures, stock price charts and equity rating histories regarding companies that are the subject of this report, please see the Morgan Stanley Research Disclosure Website at [www.morganstanley.com/researchdisclosures](http://www.morganstanley.com/researchdisclosures), or contact your investment representative or Morgan Stanley Research at 1585 Broadway, (Attention: Research Management), New York, NY, 10036 USA.

For valuation methodology and risks associated with any recommendation, rating or price target referenced in this research report, please contact the Client Support Team as follows: US/Canada +1 800 303-2495; Hong Kong +852 2848-5999; Latin America +1 718 754-5444 (U.S.); London +44 (0)20-7425-8169; Singapore +65 6834-6860; Sydney +61 (0)2-9770-1505; Tokyo +81 (0)3-6836-9000. Alternatively you may contact your investment representative or Morgan Stanley Research at 1585 Broadway, (Attention: Research Management), New York, NY 10036 USA.

### Analyst Certification

The following analysts hereby certify that their views about the companies and their securities discussed in this report are accurately expressed and that they have not received and will not receive direct or indirect compensation in exchange for expressing specific recommendations or views in this report: Matthew Harrison.

Unless otherwise stated, the individuals listed on the cover page of this report are research analysts.

### Global Research Conflict Management Policy

Morgan Stanley Research has been published in accordance with our conflict management policy, which is available at [www.morganstanley.com/institutional/research/conflict/policies](http://www.morganstanley.com/institutional/research/conflict/policies). A Portuguese version of the policy can be found at [www.morganstanley.com.br](http://www.morganstanley.com.br)

### Important Regulatory Disclosures on Subject Companies

The analyst or strategist (or a household member) identified below owns the following securities (or related derivatives): Thomas F Lavery, J.D. - Amgen Inc. (common or preferred stock).

As of September 30, 2020, Morgan Stanley beneficially owned 1% or more of a class of common equity securities of the following companies covered in Morgan Stanley Research: Alnylam Pharmaceuticals Inc, Amgen Inc., Cytokinetics Inc, Editas Medicine, Epizyme Inc, Inoviva Inc, Moderna Inc, NextCure Inc., Preval Therapeutics Inc, Schrodinger Inc..

Within the last 12 months, Morgan Stanley managed or co-managed a public offering (or 144A offering) of securities of ADC Therapeutics SA, Akero Therapeutics Inc, Alector Inc, AlloVir Inc, Amgen Inc., argenx SE, Ascendis Pharma A/S, AVROBIO Inc, Axsome Therapeutics, Biogen Inc, Biomarin Pharmaceutical Inc, Cabaletta Bio Inc, Cytokinetics Inc, Editas Medicine, Evelo Biosciences Inc, Evofem Biosciences Inc, Freeline Therapeutics Holdings plc, Fusion Pharmaceuticals Inc, Gilead Sciences Inc., Imara Inc, Kaleido Biosciences Inc., Karyopharm Therapeutics Inc, Kymera Therapeutics Inc, Legend Biotech Corp, Moderna Inc, NextCure Inc., Pandion Therapeutics, Regeneron Pharmaceuticals Inc., Repare Therapeutics Inc, Rhythm Pharmaceuticals Inc, Schrodinger Inc., Taysha Gene Therapies Inc., Theravance Biopharma Inc, Viela Bio, Y-mAbs Therapeutics Inc., Zentalis Pharmaceuticals Inc.

Within the last 12 months, Morgan Stanley has received compensation for investment banking services from ADC Therapeutics SA, Akero Therapeutics Inc, Alector Inc, Alexion Pharmaceuticals, AlloVir Inc, Amgen Inc., argenx SE, Ascendis Pharma A/S, AVROBIO Inc, Axsome Therapeutics, Biogen Inc, Biomarin Pharmaceutical Inc, Cabaletta Bio Inc, Cytokinetics Inc, Editas Medicine, Evelo Biosciences Inc, Evofem Biosciences Inc, Freeline Therapeutics Holdings plc, Fusion Pharmaceuticals Inc, Gilead Sciences Inc., Imara Inc, Kaleido Biosciences Inc., Karyopharm Therapeutics Inc, Kymera Therapeutics Inc, Legend Biotech Corp, Moderna Inc, NextCure Inc., Pandion Therapeutics, Regenxbio Inc, Repare Therapeutics Inc, Rhythm Pharmaceuticals Inc, Schrodinger Inc., Taysha Gene Therapies Inc., Theravance Biopharma Inc, Viela Bio, Y-mAbs Therapeutics Inc., Zentalis Pharmaceuticals Inc.

In the next 3 months, Morgan Stanley expects to receive or intends to seek compensation for investment banking services from Acadia Pharmaceuticals Inc, Accelaron Pharma Inc, ADC Therapeutics SA, Akebia Therapeutics Inc, Akero Therapeutics Inc, Alector Inc, Alexion Pharmaceuticals, AlloVir Inc, Alnylam Pharmaceuticals Inc, Amgen Inc., Aprea Therapeutics Inc, argenx SE, Ascendis Pharma A/S, AVROBIO Inc, Axsome Therapeutics, BeiGene Ltd, Biogen Inc, Biohaven Pharmaceutical Holding Company, Biomarin Pharmaceutical Inc, Bluebird Bio Inc, Blueprint Medicines Corporation, Cabaletta Bio Inc, Cytokinetics Inc, Denali Therapeutics Inc, Editas Medicine, Epizyme Inc, Evelo Biosciences Inc, Evofem Biosciences Inc, Exelixis Inc., Freeline Therapeutics Holdings plc, Fulcrum Therapeutics Inc, Fusion Pharmaceuticals Inc, **Galapagos NV**, Genmab A/S, Gilead Sciences Inc., Global Blood Therapeutics Inc, Imara Inc, Immunomedics Inc, Incyte Corp, Inoviva Inc, Insmad Inc, Ionis Pharmaceuticals Inc, Ironwood Pharmaceuticals, Inc., Kaleido Biosciences Inc., Karyopharm Therapeutics Inc, Kodiak Sciences Inc, Kymera Therapeutics Inc, Legend Biotech Corp, Moderna Inc, MyoKardia Inc, Neurocrine Biosciences Inc, NextCure Inc., Pandion Therapeutics, Preval Therapeutics Inc, Radius Health Inc, Regeneron Pharmaceuticals Inc., Regenxbio Inc, Repare Therapeutics Inc, Rhythm Pharmaceuticals Inc, Rubius Therapeutics Inc., Sarepta Therapeutics Inc, Schrodinger Inc., Seagen Inc, Syndax Pharmaceuticals Inc, Taysha Gene Therapies Inc., Theravance Biopharma Inc, Ultragenyx Pharmaceutical Inc, Unity Biotechnology Inc., Vertex Pharmaceuticals, Viela Bio, Voyager Therapeutics Inc, Y-mAbs Therapeutics Inc., Zealand Pharma A/S, Zentalis Pharmaceuticals Inc.

Within the last 12 months, Morgan Stanley has received compensation for products and services other than investment banking services from Amgen Inc., Biogen Inc, Gilead Sciences Inc., Vertex Pharmaceuticals.

Within the last 12 months, Morgan Stanley has provided or is providing investment banking services to, or has an investment banking client relationship with, the following company: Acadia Pharmaceuticals Inc, Accelaron Pharma Inc, ADC Therapeutics SA, Akebia Therapeutics Inc, Akero Therapeutics Inc, Alector Inc, Alexion Pharmaceuticals, AlloVir Inc, Alnylam Pharmaceuticals Inc, Amgen Inc., Aprea Therapeutics Inc, argenx SE, Ascendis Pharma A/S, AVROBIO Inc, Axsome Therapeutics, BeiGene Ltd, Biogen Inc, Biohaven Pharmaceutical Holding Company, Biomarin Pharmaceutical Inc, Bluebird Bio Inc, Blueprint Medicines Corporation, Cabaletta Bio Inc, Cytokinetics Inc, Denali Therapeutics Inc, Editas Medicine, Epizyme Inc, Evelo Biosciences Inc, Evofem Biosciences Inc, Exelixis Inc., Freeline Therapeutics Holdings plc, Fulcrum Therapeutics Inc, Fusion Pharmaceuticals Inc, **Galapagos NV**, Genmab A/S, Gilead Sciences Inc., Global Blood Therapeutics Inc, Imara Inc, Immunomedics Inc, Incyte Corp, Inoviva Inc, Insmad Inc, Ionis Pharmaceuticals Inc, Ironwood Pharmaceuticals, Inc., Kaleido Biosciences Inc., Karyopharm Therapeutics Inc, Kodiak Sciences Inc, Kymera Therapeutics Inc, Legend Biotech Corp, Moderna Inc, MyoKardia Inc, Neurocrine Biosciences Inc, NextCure Inc., Pandion Therapeutics, Preval Therapeutics Inc, Radius Health Inc, Regeneron Pharmaceuticals Inc., Regenxbio Inc, Repare Therapeutics Inc, Rhythm Pharmaceuticals Inc, Rubius Therapeutics Inc., Sarepta Therapeutics Inc, Schrodinger Inc., Seagen Inc, Syndax Pharmaceuticals Inc, Taysha Gene Therapies Inc., Theravance Biopharma Inc, Ultragenyx Pharmaceutical Inc, Unity Biotechnology Inc., Vertex Pharmaceuticals, Viela Bio, Voyager Therapeutics Inc, Y-mAbs Therapeutics Inc., Zealand Pharma A/S, Zentalis Pharmaceuticals Inc.

Within the last 12 months, Morgan Stanley has either provided or is providing non-investment banking, securities-related services to and/or in the past has entered into an agreement to provide services or has a client relationship with the following company: Amgen Inc., BeiGene Ltd, Biogen Inc, Biomarin Pharmaceutical Inc, Cytokinetics Inc, **Galapagos NV**, Genmab A/S, Gilead Sciences Inc., Regeneron Pharmaceuticals Inc., Vertex Pharmaceuticals. Morgan Stanley & Co. LLC makes a market in the securities of Acadia Pharmaceuticals Inc, Accelaron Pharma Inc, ADC Therapeutics SA, Akebia Therapeutics Inc, Alector Inc, Alexion Pharmaceuticals, AlloVir Inc, Alnylam Pharmaceuticals Inc, Amgen Inc., AVROBIO Inc, Biogen Inc, Biomarin Pharmaceutical Inc, Bluebird Bio Inc, Blueprint Medicines Corporation, Cabaletta Bio Inc, Cytokinetics Inc, Epizyme Inc, Evelo Biosciences Inc, Exelixis Inc.,

Fulcrum Therapeutics Inc, Fusion Pharmaceuticals Inc, Gilead Sciences Inc., Global Blood Therapeutics Inc, Imara Inc, Incyte Corp, Inoviva Inc, Insmed Inc, Ionis Pharmaceuticals Inc, Ironwood Pharmaceuticals, Inc., Karyopharm Therapeutics Inc, Kodiak Sciences Inc, Kymera Therapeutics Inc, Legend Biotech Corp, MacroGenics Inc, Moderna Inc, Neurocrine Biosciences Inc, NextCure Inc., Prevail Therapeutics Inc, Radius Health Inc, Regeneron Pharmaceuticals Inc., Repare Therapeutics Inc, Rhythm Pharmaceuticals Inc, Schrodinger Inc., Seagen Inc, Theravance Biopharma Inc, Ultragenyx Pharmaceutical Inc, Vertex Pharmaceuticals, Zealand Pharma A/S, Zentaris Pharmaceuticals Inc.

The equity research analysts or strategists principally responsible for the preparation of Morgan Stanley Research have received compensation based upon various factors, including quality of research, investor client feedback, stock picking, competitive factors, firm revenues and overall investment banking revenues. Equity Research analysts' or strategists' compensation is not linked to investment banking or capital markets transactions performed by Morgan Stanley or the profitability or revenues of particular trading desks.

Morgan Stanley and its affiliates do business that relates to companies/instruments covered in Morgan Stanley Research, including market making, providing liquidity, fund management, commercial banking, extension of credit, investment services and investment banking. Morgan Stanley sells to and buys from customers the securities/instruments of companies covered in Morgan Stanley Research on a principal basis. Morgan Stanley may have a position in the debt of the Company or instruments discussed in this report. Morgan Stanley trades or may trade as principal in the debt securities (or in related derivatives) that are the subject of the debt research report.

Certain disclosures listed above are also for compliance with applicable regulations in non-US jurisdictions.

## STOCK RATINGS

Morgan Stanley uses a relative rating system using terms such as Overweight, Equal-weight, Not-Rated or Underweight (see definitions below). Morgan Stanley does not assign ratings of Buy, Hold or Sell to the stocks we cover. Overweight, Equal-weight, Not-Rated and Underweight are not the equivalent of buy, hold and sell. Investors should carefully read the definitions of all ratings used in Morgan Stanley Research. In addition, since Morgan Stanley Research contains more complete information concerning the analyst's views, investors should carefully read Morgan Stanley Research, in its entirety, and not infer the contents from the rating alone. In any case, ratings (or research) should not be used or relied upon as investment advice. An investor's decision to buy or sell a stock should depend on individual circumstances (such as the investor's existing holdings) and other considerations.

## Global Stock Ratings Distribution

(as of September 30, 2020)

The Stock Ratings described below apply to Morgan Stanley's Fundamental Equity Research and do not apply to Debt Research produced by the Firm. For disclosure purposes only (in accordance with FINRA requirements), we include the category headings of Buy, Hold, and Sell alongside our ratings of Overweight, Equal-weight, Not-Rated and Underweight. Morgan Stanley does not assign ratings of Buy, Hold or Sell to the stocks we cover. Overweight, Equal-weight, Not-Rated and Underweight are not the equivalent of buy, hold, and sell but represent recommended relative weightings (see definitions below). To satisfy regulatory requirements, we correspond Overweight, our most positive stock rating, with a buy recommendation; we correspond Equal-weight and Not-Rated to hold and Underweight to sell recommendations, respectively.

STOCK RATING CATEGORY	COVERAGE UNIVERSE		INVESTMENT BANKING CLIENTS (IBC)			OTHER MATERIAL INVESTMENT SERVICES CLIENTS (MISC)	
	COUNT	% OF TOTAL	COUNT	% OF TOTAL IBC	% OF RATING CATEGORY	COUNT	% OF TOTAL OTHER MISC
<b>Overweight/Buy</b>	<b>1326</b>	<b>40%</b>	<b>360</b>	<b>46%</b>	<b>27%</b>	<b>590</b>	<b>39%</b>
<b>Equal-weight/Hold</b>	<b>1444</b>	<b>43%</b>	<b>341</b>	<b>43%</b>	<b>24%</b>	<b>676</b>	<b>45%</b>
<b>Not-Rated/Hold</b>	<b>4</b>	<b>0%</b>	<b>1</b>	<b>0%</b>	<b>25%</b>	<b>3</b>	<b>0%</b>
<b>Underweight/Sell</b>	<b>557</b>	<b>17%</b>	<b>85</b>	<b>11%</b>	<b>15%</b>	<b>226</b>	<b>15%</b>
<b>TOTAL</b>	<b>3,331</b>		<b>787</b>			<b>1495</b>	

Data include common stock and ADRs currently assigned ratings. Investment Banking Clients are companies from whom Morgan Stanley received investment banking compensation in the last 12 months. Due to rounding off of decimals, the percentages provided in the "% of total" column may not add up to exactly 100 percent.

## Analyst Stock Ratings

Overweight (O). The stock's total return is expected to exceed the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Equal-weight (E). The stock's total return is expected to be in line with the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Not-Rated (NR). Currently the analyst does not have adequate conviction about the stock's total return relative to the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Underweight (U). The stock's total return is expected to be below the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Unless otherwise specified, the time frame for price targets included in Morgan Stanley Research is 12 to 18 months.

## Analyst Industry Views

Attractive (A): The analyst expects the performance of his or her industry coverage universe over the next 12-18 months to be attractive vs. the relevant broad market benchmark, as indicated below.

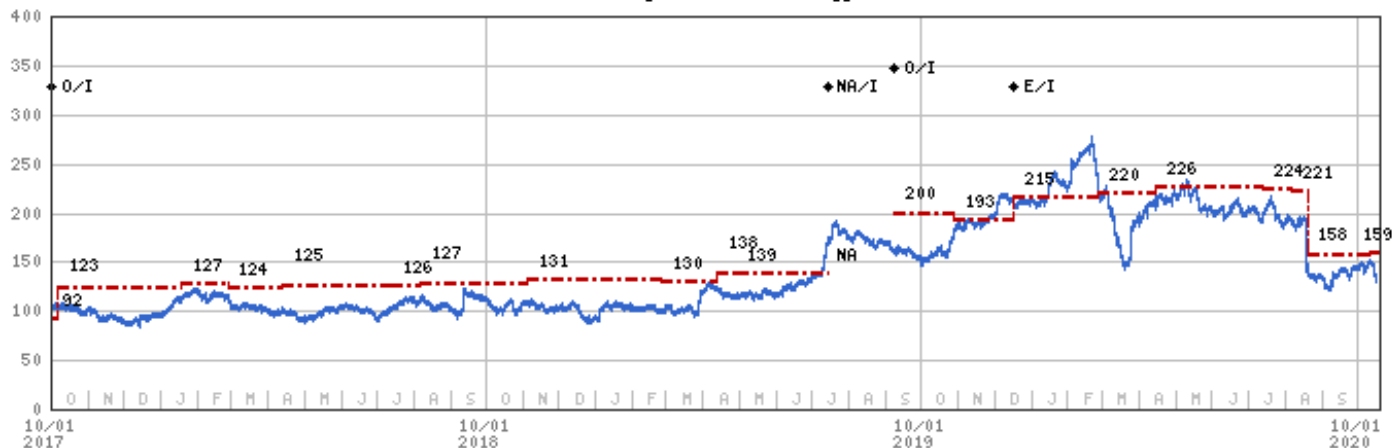
In-Line (I): The analyst expects the performance of his or her industry coverage universe over the next 12-18 months to be in line with the relevant broad market benchmark, as indicated below.

Cautious (C): The analyst views the performance of his or her industry coverage universe over the next 12-18 months with caution vs. the relevant broad market benchmark, as indicated below.

Benchmarks for each region are as follows: North America - S&P 500; Latin America - relevant MSCI country index or MSCI Latin America Index; Europe - MSCI Europe; Japan - TOPIX; Asia - relevant MSCI country index or MSCI sub-regional index or MSCI AC Asia Pacific ex Japan Index.

Stock Price, Price Target and Rating History (See Rating Definitions)

Galapagos NV (GLPG.O) - As of 10/18/20 in USD  
Industry : Biotechnology



Stock Rating History: 10/1/15 : O/I; 7/14/19 : NA/I; 9/8/19 : O/I; 12/17/19 : E/I

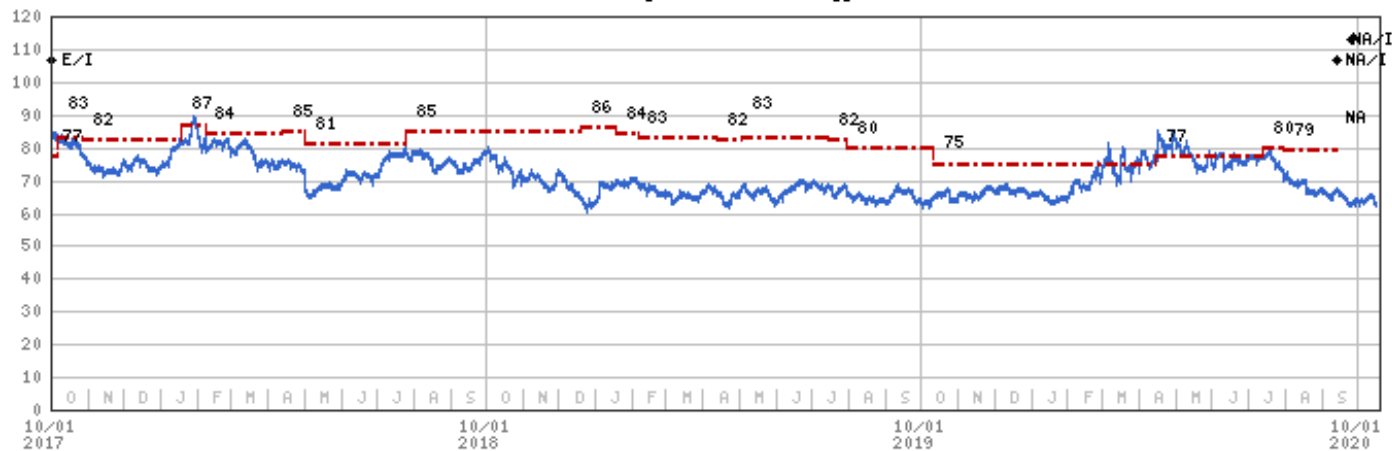
Price Target History: 8/10/15 : 75; 1/7/16 : 89; 4/8/16 : 92; 5/2/16 : 89; 1/17/17 : 90; 4/13/17 : 92; 5/1/17 : 93; 7/19/17 : 87; 7/31/17 : 92; 10/6/17 : 123; 1/18/18 : 127; 2/26/18 : 124; 4/13/18 : 125; 7/13/18 : 126; 8/6/18 : 127; 11/5/18 : 131; 2/25/19 : 130; 4/12/19 : 138; 4/29/19 : 139; 7/14/19 : NA; 9/8/19 : 200; 10/28/19 : 193; 12/17/19 : 215; 2/26/20 : 220; 4/15/20 : 226; 7/14/20 : 224; 8/7/20 : 221; 8/20/20 : 158; 10/12/20 : 159

Source: Morgan Stanley Research Date Format : MM/DD/YY Price Target --- No Price Target Assigned (NA)  
 Stock Price (Not Covered by Current Analyst) — Stock Price (Covered by Current Analyst) —  
 Stock and Industry Ratings (abbreviations below) appear as ♦ Stock Rating/Industry View  
 Stock Ratings: Overweight (O) Equal-weight (E) Underweight (U) Not-Rated (NR) No Rating Available (NA)  
 Industry View: Attractive (A) In-line (I) Cautious (C) No Rating (NR)

Effective January 13, 2014, the stocks covered by Morgan Stanley Asia Pacific will be rated relative to the analyst's industry (or industry team's) coverage.

Effective January 13, 2014, the industry view benchmarks for Morgan Stanley Asia Pacific are as follows: relevant MSCI country index or MSCI sub-regional index or MSCI AC Asia Pacific ex Japan Index.

Gilead Sciences Inc. (GILD.O) - As of 10/18/20 in USD  
Industry : Biotechnology



Stock Rating History: 10/1/15 : E/NR; 10/1/15 : O/I; 9/13/20 : NA/I; 9/25/20 : NA/I

Price Target History: 8/26/15 : 127; 10/7/15 : 121; 10/28/15 : 123; 12/15/15 : 125; 1/15/16 : 120; 2/3/16 : 111; 4/8/16 : 108; 4/29/16 : 107; 5/26/16 : 103; 7/11/16 : 100; 10/6/16 : 97; 11/2/16 : 95; 12/19/16 : 91; 1/17/17 : 85; 2/8/17 : 77; 4/13/17 : 75; 7/27/17 : 77; 10/6/17 : 83; 10/27/17 : 82; 1/18/18 : 87; 2/7/18 : 84; 4/13/18 : 85; 5/2/18 : 81; 7/26/18 : 85; 12/19/18 : 86; 1/18/19 : 84; 2/5/19 : 83; 4/12/19 : 82; 5/3/19 : 83; 7/15/19 : 82; 7/31/19 : 80; 10/11/19 : 75; 4/15/20 : 77; 7/14/20 : 80; 7/31/20 : 79; 9/13/20 : NA

Source: Morgan Stanley Research Date Format : MM/DD/YY Price Target --- No Price Target Assigned (NA)  
 Stock Price (Not Covered by Current Analyst) — Stock Price (Covered by Current Analyst) —  
 Stock and Industry Ratings (abbreviations below) appear as ♦ Stock Rating/Industry View  
 Stock Ratings: Overweight (O) Equal-weight (E) Underweight (U) Not-Rated (NR) No Rating Available (NA)  
 Industry View: Attractive (A) In-line (I) Cautious (C) No Rating (NR)

Effective January 13, 2014, the stocks covered by Morgan Stanley Asia Pacific will be rated relative to the analyst's industry (or industry team's) coverage.

Effective January 13, 2014, the industry view benchmarks for Morgan Stanley Asia Pacific are as follows: relevant MSCI country index or MSCI sub-regional index or MSCI AC Asia Pacific ex Japan Index.

## Important Disclosures for Morgan Stanley Smith Barney LLC Customers

Important disclosures regarding the relationship between the companies that are the subject of Morgan Stanley Research and Morgan Stanley Smith Barney LLC or Morgan Stanley or any of their affiliates, are available on the Morgan Stanley Wealth Management disclosure website at [www.morganstanley.com/online/researchdisclosures](http://www.morganstanley.com/online/researchdisclosures). For Morgan Stanley specific disclosures, you may refer to [www.morganstanley.com/researchdisclosures](http://www.morganstanley.com/researchdisclosures).

Each Morgan Stanley Equity Research report is reviewed and approved on behalf of Morgan Stanley Smith Barney LLC. This review and approval is conducted by the same person who reviews the Equity Research report on behalf of Morgan Stanley. This could create a conflict of interest.

### Other Important Disclosures

Morgan Stanley & Co. International PLC and its affiliates have a significant financial interest in the debt securities of Amgen Inc., Biogen Inc, Biomarin Pharmaceutical Inc, Cytokinetics Inc, Gilead Sciences Inc., Insmed Inc, Ionis Pharmaceuticals Inc, Neurocrine Biosciences Inc, Radius Health Inc, Regeneron Pharmaceuticals Inc., Sarepta Therapeutics Inc, Theravance Biopharma Inc.

Morgan Stanley Research policy is to update research reports as and when the Research Analyst and Research Management deem appropriate, based on developments with the issuer, the sector, or the market that may have a material impact on the research views or opinions stated therein. In addition, certain Research publications are intended to be updated on a regular periodic basis (weekly/monthly/quarterly/annual) and will ordinarily be updated with that frequency, unless the Research Analyst and Research Management determine that a different publication schedule is appropriate based on current conditions. Morgan Stanley is not acting as a municipal advisor and the opinions or views contained herein are not intended to be, and do not constitute, advice within the meaning of Section 975 of the Dodd-Frank Wall Street Reform and Consumer Protection Act.

Morgan Stanley produces an equity research product called a "Tactical Idea." Views contained in a "Tactical Idea" on a particular stock may be contrary to the recommendations or views expressed in research on the same stock. This may be the result of differing time horizons, methodologies, market events, or other factors. For all research available on a particular stock, please contact your sales representative or go to Matrix at <http://www.morganstanley.com/matrix>. Morgan Stanley Research is provided to our clients through our proprietary research portal on Matrix and also distributed electronically by Morgan Stanley to clients. Certain, but not all, Morgan Stanley Research products are also made available to clients through third-party vendors or redistributed to clients through alternate electronic means as a convenience. For access to all available Morgan Stanley Research, please contact your sales representative or go to Matrix at <http://www.morganstanley.com/matrix>.

Any access and/or use of Morgan Stanley Research is subject to Morgan Stanley's Terms of Use (<http://www.morganstanley.com/terms.html>). By accessing and/or using Morgan Stanley Research, you are indicating that you have read and agree to be bound by our Terms of Use (<http://www.morganstanley.com/terms.html>). In addition you consent to Morgan Stanley processing your personal data and using cookies in accordance with our Privacy Policy and our Global Cookies Policy ([http://www.morganstanley.com/privacy\\_pledge.html](http://www.morganstanley.com/privacy_pledge.html)), including for the purposes of setting your preferences and to collect readership data so that we can deliver better and more personalized service and products to you. To find out more information about how Morgan Stanley processes personal data, how we use cookies and how to reject cookies see our Privacy Policy and our Global Cookies Policy ([http://www.morganstanley.com/privacy\\_pledge.html](http://www.morganstanley.com/privacy_pledge.html)).

If you do not agree to our Terms of Use and/or if you do not wish to provide your consent to Morgan Stanley processing your personal data or using cookies please do not access our research.

Morgan Stanley Research does not provide individually tailored investment advice. Morgan Stanley Research has been prepared without regard to the circumstances and objectives of those who receive it. Morgan Stanley recommends that investors independently evaluate particular investments and strategies, and encourages investors to seek the advice of a financial adviser. The appropriateness of an investment or strategy will depend on an investor's circumstances and objectives. The securities, instruments, or strategies discussed in Morgan Stanley Research may not be suitable for all investors, and certain investors may not be eligible to purchase or participate in some or all of them. Morgan Stanley Research is not an offer to buy or sell or the solicitation of an offer to buy or sell any security/instrument or to participate in any particular trading strategy. The value of and income from your investments may vary because of changes in interest rates, foreign exchange rates, default rates, prepayment rates, securities/instruments prices, market indexes, operational or financial conditions of companies or other factors. There may be time limitations on the exercise of options or other rights in securities/instruments transactions. Past performance is not necessarily a guide to future performance. Estimates of future performance are based on assumptions that may not be realized. If provided, and unless otherwise stated, the closing price on the cover page is that of the primary exchange for the subject company's securities/instruments.

The fixed income research analysts, strategists or economists principally responsible for the preparation of Morgan Stanley Research have received compensation based upon various factors, including quality, accuracy and value of research, firm profitability or revenues (which include fixed income trading and capital markets profitability or revenues), client feedback and competitive factors. Fixed Income Research analysts', strategists' or economists' compensation is not linked to investment banking or capital markets transactions performed by Morgan Stanley or the profitability or revenues of particular trading desks.

The "Important Regulatory Disclosures on Subject Companies" section in Morgan Stanley Research lists all companies mentioned where Morgan Stanley owns 1% or more of a class of common equity securities of the companies. For all other companies mentioned in Morgan Stanley Research, Morgan Stanley may have an investment of less than 1% in securities/instruments or derivatives of securities/instruments of companies and may trade them in ways different from those discussed in Morgan Stanley Research. Employees of Morgan Stanley not involved in the preparation of Morgan Stanley Research may have investments in securities/instruments or derivatives of securities/instruments of companies mentioned and may trade them in ways different from those discussed in Morgan Stanley Research. Derivatives may be issued by Morgan Stanley or associated persons.

With the exception of information regarding Morgan Stanley, Morgan Stanley Research is based on public information. Morgan Stanley makes every effort to use reliable, comprehensive information, but we make no representation that it is accurate or complete. We have no obligation to tell you when opinions or information in Morgan Stanley Research change apart from when we intend to discontinue equity research coverage of a subject company. Facts and views presented in Morgan Stanley Research have not been reviewed by, and may not reflect information known to, professionals in other Morgan Stanley business areas, including investment banking personnel.

Morgan Stanley Research personnel may participate in company events such as site visits and are generally prohibited from accepting payment by the company of associated expenses unless pre-approved by authorized members of Research management.

Morgan Stanley may make investment decisions that are inconsistent with the recommendations or views in this report.

To our readers based in Taiwan or trading in Taiwan securities/instruments: Information on securities/instruments that trade in Taiwan is distributed by Morgan Stanley Taiwan Limited ("MSTL"). Such information is for your reference only. The reader should independently evaluate the investment risks and is solely responsible for their investment decisions. Morgan Stanley Research may not be distributed to the public media or quoted or used by the public media without the express written consent of Morgan Stanley. Any non-customer reader within the scope of Article 7-1 of the Taiwan Stock Exchange Recommendation Regulations accessing and/or receiving Morgan Stanley Research is not permitted to provide Morgan Stanley Research to any third party (including but not limited to related parties, affiliated companies and any other third parties) or engage in any activities regarding Morgan Stanley Research which may create or give the appearance of creating a conflict of interest. Information on securities/instruments that do not trade in Taiwan is for informational purposes only and is not to be construed as a recommendation or a solicitation to trade in such securities/instruments. MSTL may not execute transactions for clients in these securities/instruments.

Morgan Stanley is not incorporated under PRC law and the research in relation to this report is conducted outside the PRC. Morgan Stanley Research 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. Neither this report nor any part of it is intended as, or shall constitute, provision of any consultancy or advisory service of securities investment as defined under PRC law. Such information is provided for your reference only.

Morgan Stanley Research is disseminated in Brazil by Morgan Stanley C.T.V.M. S.A. located at Av. Brigadeiro Faria Lima, 3600, 6th floor, São Paulo - SP, Brazil; and is regulated by the Comissão de Valores Mobiliários; in Mexico by Morgan Stanley México, Casa de Bolsa, S.A. de C.V which is regulated by Comisión Nacional Bancaria y de Valores. Paseo de los Tamarindos 90, Torre 1, Col. Bosques de las Lomas Floor 29, 05120 Mexico City; in Japan by Morgan Stanley MUFG Securities Co., Ltd. and, for Commodities related research reports only, Morgan Stanley Capital Group Japan Co., Ltd; in Hong Kong by Morgan Stanley Asia Limited (which accepts responsibility for its contents) and by Morgan Stanley Asia International Limited, Hong Kong Branch; in Singapore by Morgan Stanley Asia (Singapore) Pte. (Registration number 199206298Z) and/or Morgan Stanley Asia (Singapore) Securities Pte Ltd (Registration number 200008434H), regulated by the Monetary Authority of Singapore (which accepts legal responsibility for its contents and should be contacted with respect to any matters arising from, or in connection with, Morgan Stanley Research) and by Morgan Stanley Asia International Limited, Singapore Branch (Registration number T11FC0207F); in Australia to "wholesale clients" within the meaning of the Australian Corporations Act by Morgan Stanley Australia Limited A.B.N. 67 003 734 576, holder of Australian financial services license No. 233742, which accepts responsibility for its contents; in Australia to "wholesale clients" and "retail clients" within the meaning of the Australian Corporations Act by Morgan Stanley Wealth Management Australia Pty Ltd (A.B.N. 19 009 145 555, holder of Australian financial services license No. 240813, which accepts responsibility for its contents; in Korea by Morgan Stanley & Co International plc, Seoul Branch; in India by Morgan Stanley India Company Private Limited; in Indonesia by PT. Morgan Stanley Sekuritas Indonesia; in Canada by Morgan Stanley Canada Limited, which has approved of and takes responsibility for its contents in Canada; in Germany and the European Economic Area where required by Morgan Stanley Europe S.E., regulated by Bundesanstalt fuer Finanzdienstleistungsaufsicht (BaFin); in Spain by Morgan Stanley, S.V., S.A., a Morgan Stanley group company, which is supervised by the Spanish Securities Markets Commission (CNMV) and states that Morgan Stanley Research has been written and distributed in accordance with the rules of conduct applicable to financial research as established under Spanish regulations; in the US by Morgan Stanley & Co. LLC, which accepts responsibility for its contents. Morgan Stanley & Co. International plc, authorized by the Prudential Regulatory Authority and regulated by the Financial Conduct Authority and the Prudential Regulatory Authority, disseminates in the UK research that it has prepared, and approves solely for the purposes of section 21 of the Financial Services and Markets Act 2000, research which has been prepared by any of its affiliates. RMB Morgan Stanley Proprietary Limited is a member of the JSE Limited and A2X (Pty) Ltd. RMB Morgan Stanley Proprietary Limited is a joint venture owned equally by Morgan Stanley International Holdings Inc. and RMB Investment Advisory (Proprietary) Limited, which is wholly owned by FirstRand Limited. The information in Morgan Stanley Research is being disseminated by Morgan Stanley Saudi Arabia, regulated by the Capital Market Authority in the Kingdom of Saudi Arabia, and is directed at Sophisticated investors only.

The information in Morgan Stanley Research is being communicated by Morgan Stanley & Co. International plc (DIFC Branch), regulated by the Dubai Financial Services Authority (the DFSA), and is directed at Professional Clients only, as defined by the DFSA. The financial products or financial services to which this research relates will only be made available to a customer who we are satisfied meets the regulatory criteria to be a Professional Client.

The information in Morgan Stanley Research is being communicated by Morgan Stanley & Co. International plc (QFC Branch), regulated by the Qatar Financial Centre Regulatory Authority (the QFCRA), and is directed at business customers and market counterparties only and is not intended for Retail Customers as defined by the QFCRA.

As required by the Capital Markets Board of Turkey, investment information, comments and recommendations stated here, are not within the scope of investment advisory activity. Investment advisory service is provided exclusively to persons based on their risk and income preferences by the authorized firms. Comments and recommendations stated here are general in nature. These opinions may not fit to your financial status, risk and return preferences. For this reason, to make an investment decision by relying solely to this information stated here may not bring about outcomes that fit your expectations.

The trademarks and service marks contained in Morgan Stanley Research are the property of their respective owners. Third-party data providers make no warranties or representations relating to the accuracy, completeness, or timeliness of the data they provide and shall not have liability for any damages relating to such data. The Global Industry Classification Standard (GICS) was developed by and is the exclusive property of MSCI and S&P.

Morgan Stanley Research, or any portion thereof may not be reprinted, sold or redistributed without the written consent of Morgan Stanley.

Indicators and trackers referenced in Morgan Stanley Research may not be used as, or treated as, a benchmark under Regulation EU 2016/1011, or any other similar framework.

#### INDUSTRY COVERAGE: Biotechnology

COMPANY (TICKER)	RATING (AS OF)	PRICE* (10/16/2020)
<b>David N Lebowitz, CFA, MPH</b>		
Akebia Therapeutics Inc (AKBA.O)	E (09/07/2018)	\$3.78
Anylam Pharmaceuticals Inc (ALNY.O)	O (03/05/2019)	\$145.40
Ascendis Pharma A/S (ASND.O)	O (10/11/2019)	\$158.47
AVROBIO Inc (AVRO.O)	O (07/16/2018)	\$15.68
Blueprint Medicines Corporation (BPMC.O)	O (04/03/2019)	\$102.33
Epizyme Inc (EPZM.O)	O (12/05/2019)	\$13.38
Ionis Pharmaceuticals Inc (IONS.O)	U (11/07/2019)	\$47.13
Ironwood Pharmaceuticals, Inc. (IRWD.O)	E (03/27/2019)	\$10.37
Karyopharm Therapeutics Inc (KPTI.O)	O (07/01/2020)	\$15.80
MacroGenics Inc (MGNX.O)	U (11/21/2019)	\$24.41
Nabiva Therapeutics PLC (NBRV.O)	E (03/17/2020)	\$0.58
Rhythm Pharmaceuticals Inc (RYTM.O)	O (09/07/2018)	\$24.40
Schrodinger Inc. (SDGR.O)	E (03/02/2020)	\$57.94
Syndax Pharmaceuticals Inc (SNDX.O)	E (10/29/2018)	\$17.60
Y-mAbs Therapeutics Inc. (YMAB.O)	E (04/29/2020)	\$40.35
Zealand Pharma A/S (ZEAL.O)	O (09/12/2018)	\$40.14

Jeffrey Hung



Acadia Pharmaceuticals Inc (ACAD.O)	O (08/20/2020)	\$42.61
Acceleron Pharma Inc (XLRN.O)	O (02/03/2020)	\$116.81
Aprea Therapeutics Inc (APRE.O)	E (10/28/2019)	\$24.04
Cytokines Inc (CYTK.O)	O (04/09/2020)	\$16.47
Evoform Biosciences Inc (EVFM.O)	E (08/20/2020)	\$2.86
Exelixis Inc. (EXEL.O)	E (03/18/2019)	\$23.23
MyoKardia Inc (MYOK.O)	E (10/05/2020)	\$222.00
Neurocrine Biosciences Inc (NBIX.O)	O (09/10/2018)	\$102.51
NextCure Inc. (NXTC.O)	E (07/13/2020)	\$11.39
Prevail Therapeutics Inc (PRVL.O)	O (07/15/2019)	\$9.75
Repare Therapeutics Inc (RPTX.O)	O (07/14/2020)	\$25.27
Ultragenyx Pharmaceutical Inc (RARE.O)	O (03/27/2019)	\$91.97
Vela Bio (VE.O)	O (10/28/2019)	\$33.46
Voyager Therapeutics Inc (VYGR.O)	E (09/10/2018)	\$12.28

**Matthew Harrison**

ADC Therapeutics SA (ADCT.N)	O (06/09/2020)	\$27.73
Akero Therapeutics Inc (AKRO.O)	O (09/10/2020)	\$28.35
Alector Inc (ALEC.O)	O (03/04/2019)	\$10.29
Alexion Pharmaceuticals (ALXN.O)	E (12/17/2019)	\$124.13
AlloVir Inc (ALVR.O)	O (08/24/2020)	\$28.10
Amgen Inc. (AMGN.O)	O (12/17/2019)	\$235.72
argenx SE (ARGX.O)	O (01/04/2019)	\$269.90
BeiGene Ltd (6160.HK)	O (01/17/2020)	HK\$187.70
BeiGene Ltd (BGNE.O)	O (01/17/2020)	\$316.61
Biogen Inc (BIIB.O)	O (07/27/2020)	\$280.01
Biohaven Pharmaceutical Holding Company (BHMN.N)	E (04/09/2019)	\$77.93
Biomarin Pharmaceutical Inc (BMRN.O)	E (07/08/2020)	\$79.25
Bluebird Bio Inc (BLUE.O)	E (11/03/2017)	\$56.10
Cabaletta Bio Inc (CABAO)	O (11/19/2019)	\$12.15
Denali Therapeutics Inc (DNLI.O)	O (01/02/2018)	\$44.15
Editas Medicine (EDIT.O)	E (02/29/2016)	\$33.66
Evelo Biosciences Inc (EVLO.O)	E (05/21/2020)	\$4.93
Freeline Therapeutics Holdings plc (FRLN.O)	O (09/01/2020)	\$16.09
Fulcrum Therapeutics Inc (FULC.O)	E (08/12/2020)	\$10.93
Fusion Pharmaceuticals Inc (FUSN.O)	O (07/21/2020)	\$12.65
Galapagos NV (GLPG.O)	E (12/17/2019)	\$128.83
Genmab A/S (GMAB.CO)	O (08/12/2019)	DKr 2,306.00
Genmab A/S (GMAB.O)	O (08/12/2019)	\$36.79
Gilead Sciences Inc. (GILD.O)	++	\$62.00
Global Blood Therapeutics Inc (GBT.O)	E (03/21/2018)	\$62.90
Imara Inc (IMRA.O)	O (04/06/2020)	\$19.47
Immunomedics Inc (IMMU.O)	++	\$87.56
Innoviva Inc (INVA.O)	U (08/14/2014)	\$9.94
Insmed Inc (INSM.O)	O (03/21/2018)	\$36.30
Kaleido Biosciences Inc. (KLDO.O)	E (05/21/2020)	\$8.80
Kodiak Sciences Inc (KOD.O)	O (10/29/2018)	\$76.49
Legend Biotech Corp (LEGN.O)	O (06/30/2020)	\$28.10
Moderna Inc (MRNA.O)	O (01/02/2019)	\$73.94
Regeneron Pharmaceuticals Inc. (REGN.O)	E (10/01/2015)	\$599.74
Regenxbio Inc (RGNX.O)	O (11/09/2017)	\$28.74
Rubius Therapeutics Inc. (RUBY.O)	E (03/13/2020)	\$5.41
SAGE Therapeutics Inc (SAGE.O)	O (02/26/2018)	\$69.09
Sarepta Therapeutics Inc (SRPT.O)	O (08/01/2018)	\$142.42
Seagen Inc (SGEN.O)	E (12/10/2019)	\$200.93
Taysha Gene Therapies Inc. (TSHA.O)	O (10/19/2020)	\$21.80
Unity Biotechnology Inc. (UBX.O)	E (08/18/2020)	\$4.06
Vertex Pharmaceuticals (VRTX.O)	E (07/08/2020)	\$218.08
Zentalis Pharmaceuticals Inc (ZNTL.O)	O (04/28/2020)	\$42.00

**Vikram Purohit**

Axsome Therapeutics (AXSMO)	O (09/10/2020)	\$73.74
Incyte Corp (INCY.O)	E (04/29/2020)	\$90.63
Kymera Therapeutics Inc (KYMR.O)	E (09/15/2020)	\$38.38
Pandion Therapeutics (PAND.O)	O (08/11/2020)	\$11.03
Radius Health Inc (RDUS.O)	E (05/13/2020)	\$13.44
Theravance Biopharma Inc (TBPH.O)	O (10/14/2020)	\$18.53

Stock Ratings are subject to change. Please see latest research for each company.

\* Historical prices are not split adjusted.