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US Equity Strategy | North America

Global Health Care Conference:
Strategy Sector Views + Analyst
Stock Picks

We are overweight Health Care for defensive exposure within our broader pro-cyclical view with lower rate sensitivity, earnings strength, low relative valuations, and potential abatement of political risk after November. Analyst picks: TXG, BIIB, DNLI, ELAN, LLY, IRTC, UNH, COH.AX, NOV.NS, SUN.NS.

Our US Health Care analysts highlight a few of their high conviction stock picks:

10x Genomics (Life Science Tools & Diagnostics, TXG, OW, \$135 PT): TXG's highly differentiated (and affordable) Chromium and Visium platforms facilitate the analysis of complex biological systems at significantly higher resolution and scale compared to legacy approaches, enabling characterization at the single cell level to understand how variation in DNA, RNA and proteins coupled with spatial arrangement patterns can affect function, cause disease and impact treatment. Both platforms have generated robust customer traction post launch, and come with a multi-year runway for growth. Moreover, TXG's closed ecosystem coupled with a mix shift towards consumables lends stability to the top-line while expanding margins (with the BIO litigation royalty impact also set to wind down by 4Q20). We believe there is meaningful room for upward revision in annual consumable pull through forecasts baked into consensus, as the company continues to guide conservatively (and does not break out Visium sales in the consumable line just yet, with the launch of the targeted gene expression solution recently, and the FFPE-compatible solution in 1H21, key catalysts that should drive penetration in the translational research customer segment). Despite its strong run and premium valuation, we see room for material upside in the stock (and a favorable risk-reward), driven by extremely strong demand for single cell and spatial analysis solutions, and a significantly more attractive growth and margin profile relative to peers (we forecast a 5-year revenue CAGR of 31%, with GMs >80% and operating profit breakeven by 2022).

Biogen (Biotech, BIIB, OW, \$357 PT): Our Overweight thesis on Biogen is driven by investors beginning to price in higher odds of success for aducanumab, which is the first potential disease modifying therapy for Alzheimer's disease. We expect the market to price in at least 50% probability of success (compared to 25% currently) as we get closer to a potential Advisory Committee Meeting in early-2021. We do recognize the downside pressure of multiple multiple sclerosis (MS) generic launches for Tecfidera (30% of current product sales), but we expect these events to be offset by the aducanumab narrative. We believe both the aducanumab panel and potential approval could be +/- 20-30% events.

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

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Denali (Biotech, DNLI, OW, \$45 PT): Our Overweight thesis on Denali is driven by a clear path forward for the small molecule LRRK2 program and near-term biomarker PoC data for DNLI310 (EVT:IDS) that has the potential to derisk the blood-brain barrier (BBB) platform. Our view is supported by the recent agreement with Biogen to collaborate on LRRK2 and potentially four assets utilizing Denali's BBB platform. We view the risk/reward profile skewed to the upside going into the PhI/II trial readout testing DNL310 (EVT:IDS) in Hunter syndrome expected in late-2020.

Elanco Animal Health (Pharma, ELAN, OW, \$31 PT): We expect Elanco to execute well on the Bayer acquisition, generate significant cost savings, de-lever the balance sheet, and introduce important pipeline products. We believe moderate revenue growth can translate to significant EBITDA and EPS growth. If the company can introduce high-potential new products over the next 3-4 years, it could drive upward pressure on our long-term revenue CAGR of 3% and benefit the stock multiple. Note that we expect Elanco to provide additional perspective on its pipeline at its investor day in December 2020. Our \$38 Bull Case valuation reflects the potential for greater Bayer acquisition accretion, faster margin expansion, and further P/E expansion.

Eli Lilly (Pharma, LLY, OW, \$176 PT): We expect outperformance to be driven by upward pressure on long-term growth prospects, positive Phase 3 tirzepatide results starting in 4Q20, and rising enthusiasm for Lilly's Alzheimer's pipeline. Among Global Pharma, Lilly ranks among the fastest growers and has the least number of patent expirations over the next five years. We see pipeline candidate tirzepatide as a trifecta opportunity with potential peak sales approaching \$10B. It could offer best-in-class efficacy for glucose lowering, weight loss, and cardiovascular benefits. Beyond diabetes, tirzepatide could become a leading prescription drug for obesity if it demonstrates high-teens percentage weight loss. Separately, we view Lilly's Alzheimer's pipeline potential as a free call option at current stock levels.

iRhythm Technologies (Medical Technology, IRTC, OW, \$259 PT): iRhythm's Zio is a disruptive technology in the large, growing market for ambulatory electrocardiogram monitoring in the US, with better diagnostic yield and cost effectiveness versus incumbent monitoring modalities. iRhythm can successfully penetrate the existing ECG monitoring market and has multiple catalysts for total addressable market expansion from new product launches and indication expansion efforts. We have been vocal about the iRhythm opportunity since initiation, and this remains one of our highest conviction ideas following a material CY21 reimbursement proposal in August (a ~30% payment increase for key iRhythm CPT codes; see [our full analysis here](#)). We detail implications and further catalysts inside; See [iRhythm Technologies \(IRTC\): Overweight, \\$259 Price Target](#)

UnitedHealth Group (Managed Care, UNH, OW, \$371 PT): We highlight UNH as a name we like for the next 12 months. While shares are likely range bound between now and the November elections, we believe United is positioned to outperform regardless of election outcome – status quo, Biden win/split government, or a Blue sweep. Current odds appear to favor a Biden win, a scenario if it materializes, creates a runway for Medicare expansion which should benefit United's Medicare Advantage (MA) book. While a Blue sweep could weigh

on healthcare stocks initially over concerns around a public option, United's exposure should be relatively limited and its diversified portfolio provides earnings support.

In addition to picks from our US Health Care analysts, our international colleagues highlight a few of their high conviction stock picks:

Cochlear (Australian Healthcare, COH.AX, OW, A\$229 PT): Cochlear is a market leader in a growing and under penetrated market. We expect business momentum to return from FY21 as surgeries restart and expect COH to benefit from further share gains due to recent product launches and a competitor recall. We also see upside risk over the long term as COH's Remote Check adoption and Sycle acquisition improve referral rates from the hearing aid channels and may remove bottlenecks at the clinic. We acknowledge near term uncertainty to earnings; however, we think the stock looks attractive relative to other large-cap Australian healthcare plays.

Novartis (European Healthcare, NOVN.S, OW, CHF101 PT): We believe that Novartis is on the cusp of moving from an execution risk to an execution reward story. Investor sentiment reflects rising concerns that Novartis is "running to stand still" without acquiring innovation to offset a steady cadence of patent expiries, a narrative which we think ignores the high innovation pipeline and is reminiscent of the Roche equity story in 2018. We have identified five "hidden" pharma pipeline assets with high innovation risk and two blockbuster biosimilar launches by 2025, alongside pivotal data for wild-card canakinumab in lung cancer and for PSMA-617 in prostate cancer 1H21. Notably half of the 29 pre-registration pipeline assets are expected to report pivotal or proof-of-concept data over the next 18 months, yet they are not included in the current valuation. Novartis looks well placed entering 2021, supported by broad diversification and relatively low exposure to US post-election policy risks, and we argue that greater pipeline recognition should drive a positive re-rating in the equity story.

Sun Pharmaceuticals (India Healthcare, SUN.NS, OW, Rs 611 PT): We expect Sun to benefit from positive operating leverage over the next 12-18 months as high up-front costs pertaining to specialty and low manufacturing utilization gets absorbed with sales growth. We estimate 12% sales CAGR and 6-7% expense CAGR over next two years, which should translate into 18-20% earnings CAGR. Potential scale up of US specialty business over next couple of year (F22-23), should be a re-rating catalyst. Stock is trading at 24x F21 and 21x F22 EPS_e, which appears in line with sector valuations. Ongoing US price fixing investigation and generic exclusivity court case are key risks to our call.

Health Care: Overweight for US Strategist

Michael Wilson, Chief US Equity Strategist and CIO of Morgan Stanley Institutional Securities and Wealth Management

Part I: Market Outlook

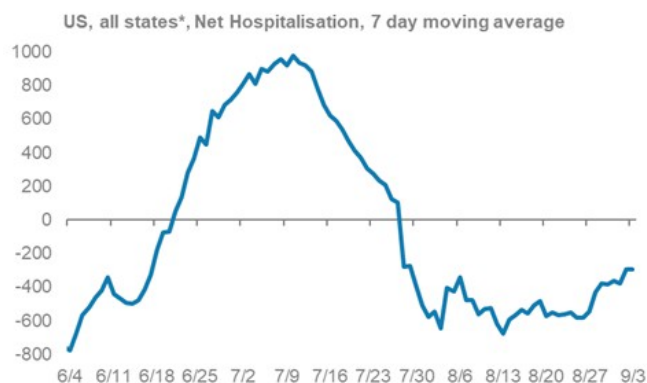
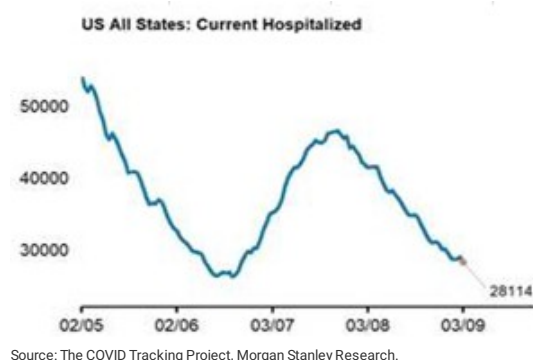
Michael Wilson, Chief US Equity Strategist and CIO of Morgan Stanley Institutional Securities and Wealth Management

In the context of a new cycle and new bull market, we've been positive on equities, but from current levels we think the most attractive return opportunities lie in style and stock selection, not in broader index beta. Through 1H21, we see a range of 3100 - 3700 for S&P 500 as we expect continued strength in earnings growth will offset the effect of higher rates on valuations.

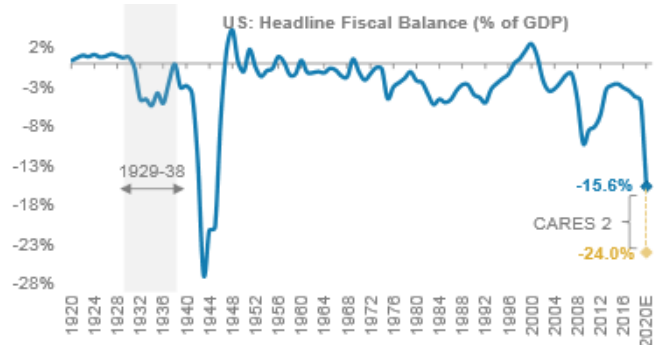
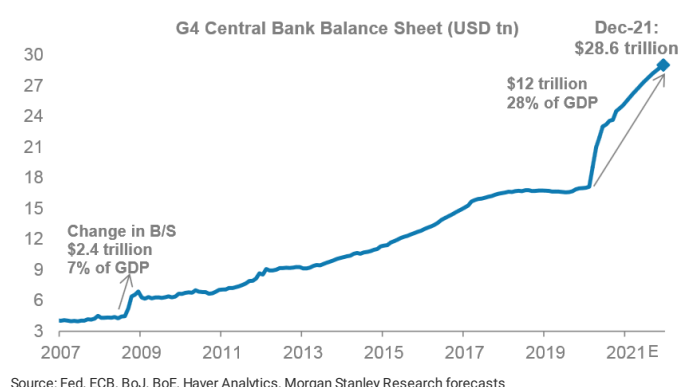
A V-Shaped Recovery

Our positive view on markets and the economy has largely rested on two core tenets: (1) that we would see a faster reopening of the economy as people adapted to new patterns of living and consumption to help mitigate the effects of the virus, and (2) that the large size of fiscal and monetary stimulus programs would provide sufficient support to prevent a consumer deleveraging while potentially delivering a large reflationary push after the initial stages of recovery. For more detail on these drivers of the economy, please see - [A Sharper V](#) - but we highlight a few key points below.

A path to re-opening. Our views on re-opening stemmed from a recognition that the consequences of shutdowns – job loss, disrupted supply chains, social strain, inequitable outcomes, etc. – all made the approach non-viable longer term, forcing adaptation to a new normal. The new normal via the use of social distancing, masks, and greater reliance on technology provides a strong foundation for re-opening and recovery while reducing the strain on healthcare systems and allowing time for the development of better techniques to address the virus. Subsequent rounds of infections around the world, especially in the US, have proven to be different – with more asymptomatic cases and different implications for hospitalization rates ([Exhibit 1](#) and [Exhibit 2](#)) and fatalities while the economic recovery which began in May has continued to gather momentum. We're also optimistic on the prospects for vaccines and treatments headed into the end of the year and 2021.

Exhibit 1: US Net Hospitalizations Trend**Exhibit 2: Current Hospitalizations in The US Are Declining**

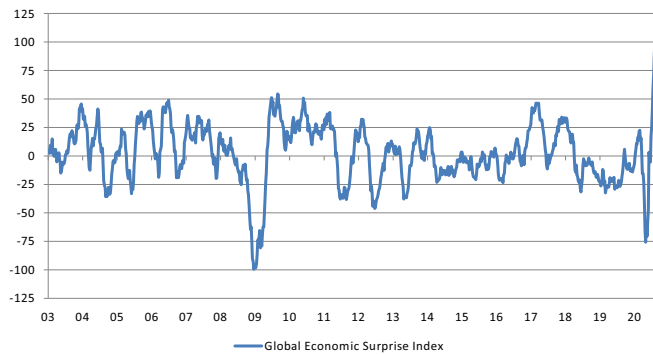
Unprecedented stimulus. Adapting to the virus is an important driver of the recovery and equally important is the policy support necessary to bolster consumer and corporate balance sheets in the early stages of the recovery. We think that trillions of dollars in fiscal support and balance sheet expansion from the Fed provide an effective bridge in that regard and we expect more to come. Our view is that Congress will ultimately pass a CARES 2 package in of around \$1.5T, which will put the US on track to run close to a 24% fiscal deficit this year, the highest since WWII. The Fed has already expanded its balance sheet by roughly 13.7% of GDP (based on 2020 GDP) and M2 growth has accelerated to 22%Y, a post-1943 high. We believe that the Fed's balance sheet will expand (from February 2020 levels) by US\$6.2 trillion (or 29.5% of GDP) to a size of ~US\$10.3 trillion (or 45.5% of GDP) at end-2021, more than the balance sheet expansion during QE1, 2 and 3 combined at 20% of GDP. Other central banks are following suit.

Exhibit 3: US Headline Fiscal Deficit to Widen to Post-WW2 Highs in 2020**Exhibit 4: G4 Central Banks to Expand Balance Sheets by 28% of GDP by the End of 2021**

We see overwhelming evidence that the v-shaped recovery narrative is the right one. To date, economic data have been strongly surprising on the upside. Economic surprise indices are just off records that far surpassed any prior peak both globally ([Exhibit 5](#)) and in the US ([Exhibit 6](#)). For example, US retail sales have surpassed their pre-Covid highs ([Exhibit 7](#)) while manufacturing PMIs are now well into expansionary territory with the latest rating of 56 ([Exhibit 8](#)). Data have been tracking strongly enough that our

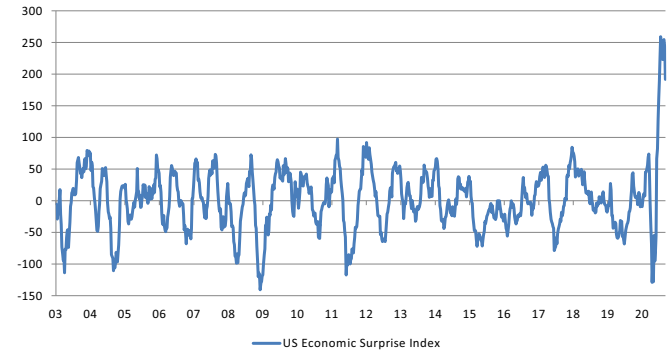
economists recently brought forward their forecasts of a return to prior peak GDP forward from 4Q21 to 2Q21 (assuming the passage of CARES 2 in the range discussed above) (Exhibit 9).

Exhibit 5: Global Economic Surprises Have Been Well Above Prior Highs ...



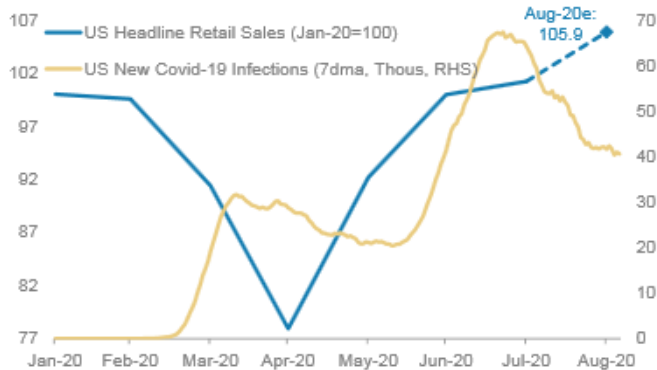
Source: Bloomberg, Morgan Stanley Research.

Exhibit 6: ... With Even Higher Surprises in the US



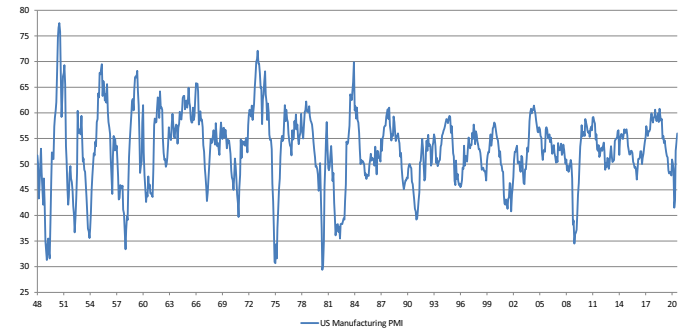
Source: Bloomberg, Morgan Stanley Research.

Exhibit 7: US Retail Sales Recovered Despite High New Cases



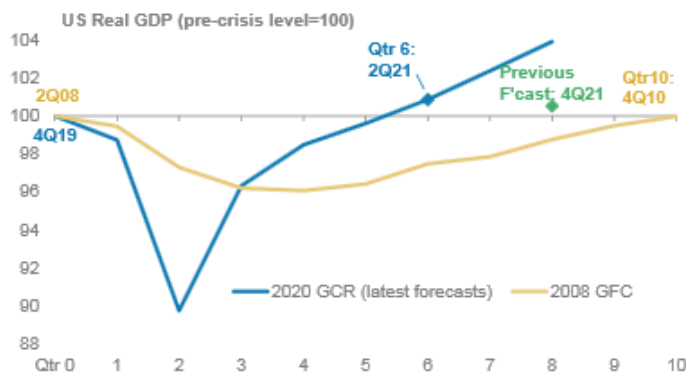
Source: Census Bureau, Johns Hopkins University, Morgan Stanley Research estimates

Exhibit 8: PMIs Have Rebounded Strongly



Source: Bloomberg, Morgan Stanley Research.

Exhibit 9: US GDP to Reach pre-Covid-19 Level By 2Q21



Source: Haver Analytics, BEA, Morgan Stanley Research forecasts

Earnings Driven Markets

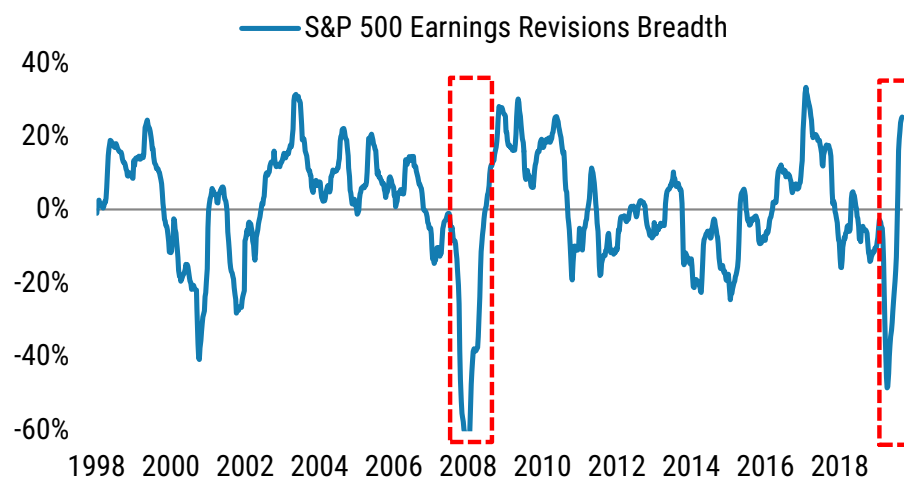
We're bulls on the economy but think equities at the index level have largely priced in

a good portion of the rebound. Further upside from here is about earnings moving higher and we expect valuations to be a headwind. We continue to prefer cyclicals over defensives, small over large, and companies that can exhibit strong operating leverage to an ongoing recovery. In short, we want to own stocks whose NTM EPS can rise more than our expected valuation decline.

Our view is that earnings forecasts will continue to steadily rise ... At this point, bottom up forecasts have caught up to our previously much higher than consensus 2021 EPS forecast of approximately \$166. While that \$166 still has modest upside to \$170 in our view, higher 2021 forecasts are not necessary for next 12 Months (NTM) EPS forecasts to rise. **NTM EPS should rise from \$154 toward \$166 over the next four months as we simply roll forward. That's approximately an 8% increase and similar to the past three months.**

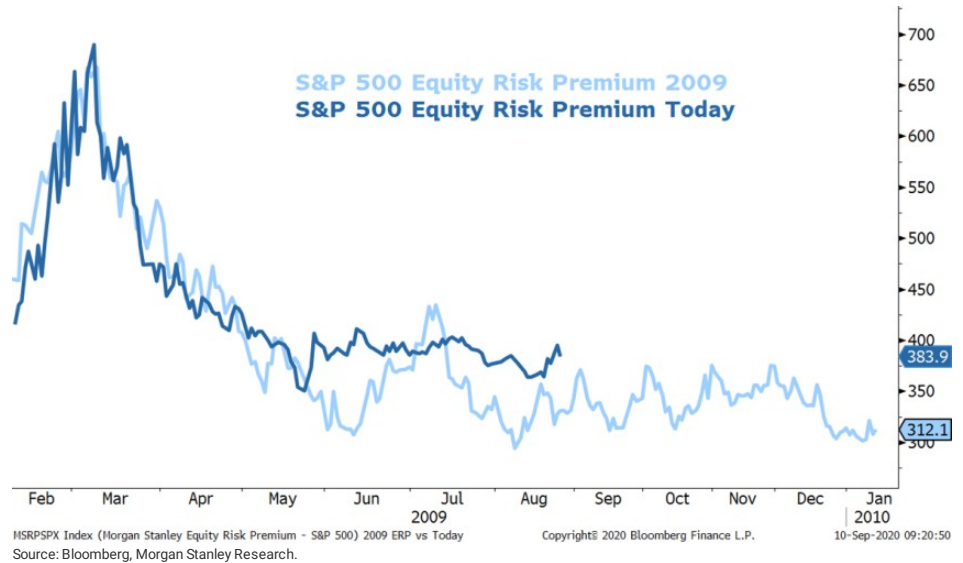
... due to a mix of sales growth and operating leverage. We're optimistic about the earnings rebound in this recession given the fundamental pillars to our economic outlook laid out above. With respect to corporate earnings, we think this means strong topline growth will meet streamlined cost structures such that operating leverage will support an earnings rebound. We were particularly encouraged to see the median S&P 500 company cut COGS + SG&A by 5.4% in 2Q and think this sets the stage for better profits next year as the economy and topline recover. The strength of earnings revisions to date ([Exhibit 10](#)) has provided strong support for this thesis such that rolling forward through time with current estimates is enough to help support equities broadly.

Exhibit 10: Earnings Revisions Breadth Has Rebounded Sharply



Source: FactSet, Morgan Stanley Research.

Predicting multiples is much more difficult than forecasting earnings, but we think that higher rates and modestly lower equity risk premiums make valuation a modest headwind for earnings growth to overcome. S&P 500 equity risk premium (ERP) has already made most of its expected recovery from the March highs back toward a reasonable range of 350-375bps. While we could see it fall further toward 325, we think that's unlikely in the near term with a close election, uncertainty around the next round of still much needed fiscal stimulus and a potential second wave of Covid-19 beginning this fall. As such, we'll assume the ERP stays in the 325-375 range over the next 3-4 months with a bias toward the upper bound in the very near term.

Exhibit 11: Equity Risk Premium Following 2009 GFC Recession and Recovery Pattern Perfectly

Higher rates should bring multiples lower. We made the case a [few weeks ago](#) for higher back end rates over the next three months and have a more bearish bond view than most equity strategists and even our rates team, which is looking for a modest rise toward 1% by year on 10 year nominal yields. We think the combination of fiscal stimulus, progress on vaccine/herd immunity and avoiding further shutdowns are potential catalysts. However the big change was the Fed's recent guidance that they are now embarking on average inflation targeting without yield caps. This alone should be enough to spark a material move in 10 year yields given the overwhelmingly strong economic data capped by Friday's jobs report. [Exhibit 12](#) illustrates what this could mean for P/Es and the S&P 500 over the next four months.

Exhibit 12: P/E Multiples and S&P Targets Depend on 10 Year Yield Assumptions More than Ever

S&P 500 P/E Under Various 10 Year Yields and ERPs

		10 Year Treasury Yields				
		0.50%	0.75%	1%	1.25%	1.50%
Equity	300	28.6	26.7	25.0	23.5	22.2
Risk	325	26.7	25.0	23.5	22.2	21.1
Premium	350	25.0	23.5	22.2	21.1	20.0
(bps)	375	23.5	22.2	21.1	20.0	19.0
	400	22.2	21.1	20.0	19.0	18.2

S&P 500 Price at Year End Assuming \$166 NTM EPS

		10 Year Treasury Yields				
		0.50%	0.75%	1%	1.25%	1.50%
Equity	300	4743	4427	4150	3906	3689
Risk	325	4427	4150	3906	3689	3495
Premium	350	4150	3906	3689	3495	3320
(bps)	375	3906	3689	3495	3320	3162
	400	3689	3495	3320	3162	3018

Source: Bloomberg, Morgan Stanley Research.

The tables above are meant to be a guide in helping assess what's priced into the headline index. **With ERPs likely stuck between 325-375bps over the next four months and NTM EPS likely to grind higher by another 8 percent, the index value is likely to be determined primarily by the level of 10 year Nominal Treasury yields. Our view is highlighted by the gray shaded boxes and suggests a range of 3162-3689 for the S&P 500 by year end with a midpoint of approximately 3425 which is near current levels.** The key observation using our assumptions is that P/E's are unlikely to rise from here and are more likely to decline by 5-10%. Historically speaking, this is normal once NTM EPS forecasts have risen by 10% from the trough. As such, we suspect the rest of the year for equity investors will be about stock picking and getting the style shifts correct.

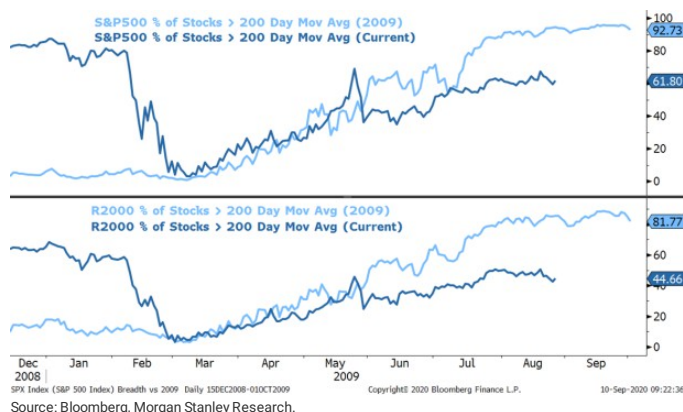
A Bull Market Means Better Breadth & Cyclical Outperformance

While the previous section may not seem overly bullish, we remain quite constructive on this new bull market. However, it will likely be harder to make money from here if one is simply long SPX or NDX futures as we don't see a lot of upside or downside over the next three months for the S&P 500 or Nasdaq 100 indices based on valuation. To us, a bull market is when breadth is good and many stocks are making new highs and leading the way. **While breadth has been narrower this summer, breadth since this new bull market began has been expanding nicely and participation has been very broad. Notably the best performance has been from classic cyclicals with Tech as the 8th best sector on an equal weighted basis behind even financials and underperforming the S&P 500 (Exhibit 13 and Exhibit 14) by 600bps.** Cyclicals are dominating, right in line with our Recession Playbook. Nevertheless, the breadth is not as robust as what we experienced in 2009 which was one of our concerns back in August. We think the recent correction is the beginning of the correction we thought would come last month but will ultimately lead to expanding breadth once it's over.

Exhibit 13: Broad Returns Led by Cyclical

S&P 500 Total Return Since March 23, 2020 Low			
Cap Weight		Equal Weight	
Consumer Discretionary	68%	Consumer Discretionary	80%
Materials	66%	Materials	67%
Information Technology	61%	Industrials	64%
Industrials	58%	S&P 500	53%
S&P 500	50%	Energy	51%
Communication Services	46%	Financials	49%
Energy	42%	Health Care	49%
Real Estate	41%	Communication Services	48%
Financials	41%	Information Technology	47%
Health Care	40%	Real Estate	40%
Utilities	33%	Consumer Staples	33%
Consumer Staples	33%	Utilities	32%

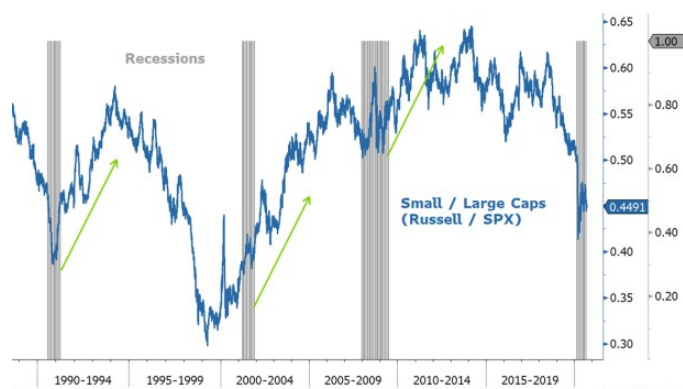
Source: FactSet, Morgan Stanley Research.

Exhibit 14: Breadth Improved But Stalled Out This Summer

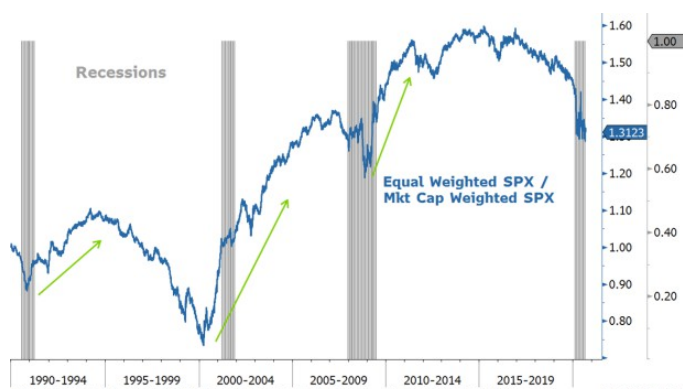
Source: Bloomberg, Morgan Stanley Research.

This very much fits with our view that Small Caps should outperform large caps over the next 12 months while the average stock should do better than the major averages.

Exhibit 15 and Exhibit 16 show how small versus large and S&P equal weight vs market cap weight typically trade coming out of recession. The picture is quite compelling and we see a great opportunity to still leg into both of these ideas as the big relative outperformance is still to come. This also aligns with our view that NTM EPS revisions for the average company should have a better chance than the broader index of offsetting the modest valuation compression we expect.

Exhibit 15: Small/Large Typically Does Well Coming Out of Recessions....

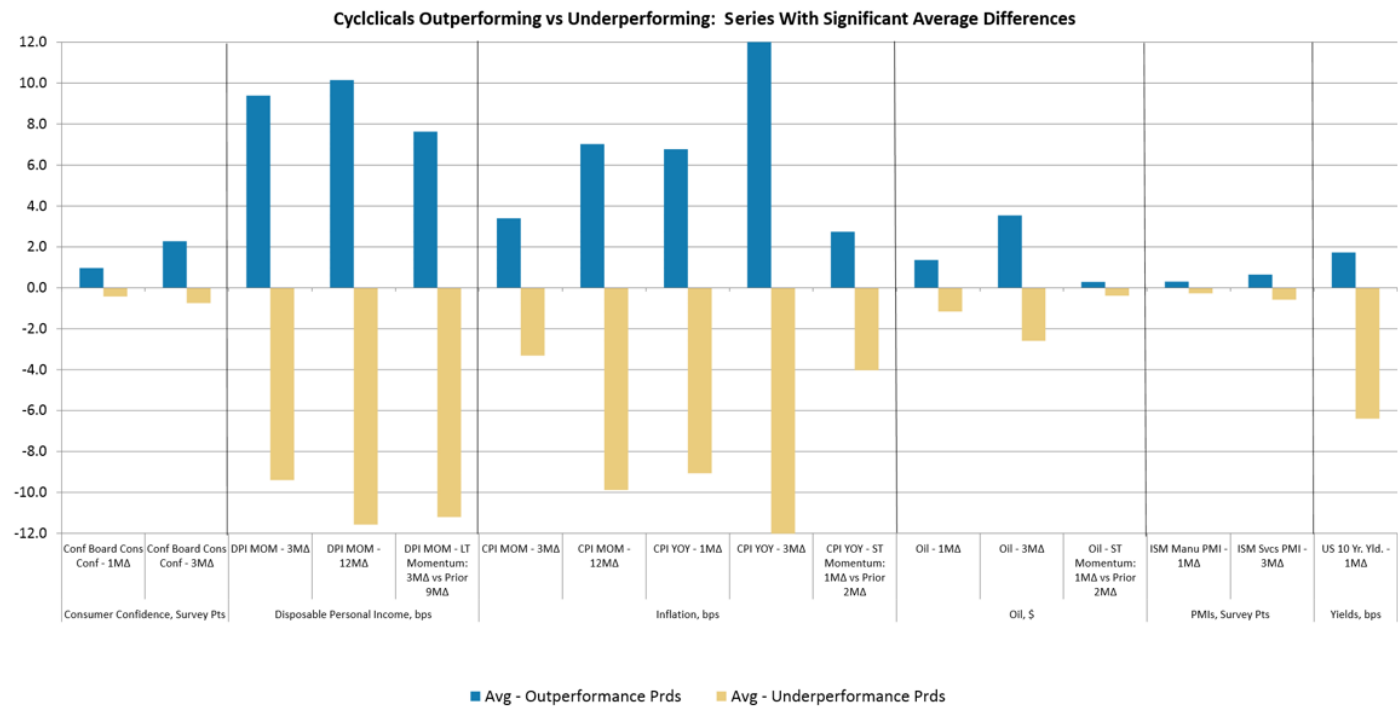
Source: Bloomberg, Morgan Stanley Research.

Exhibit 16: ... As Does the S&P Equal Weighted vs Mkt Cap Weighted Index

Source: Bloomberg, Morgan Stanley Research.

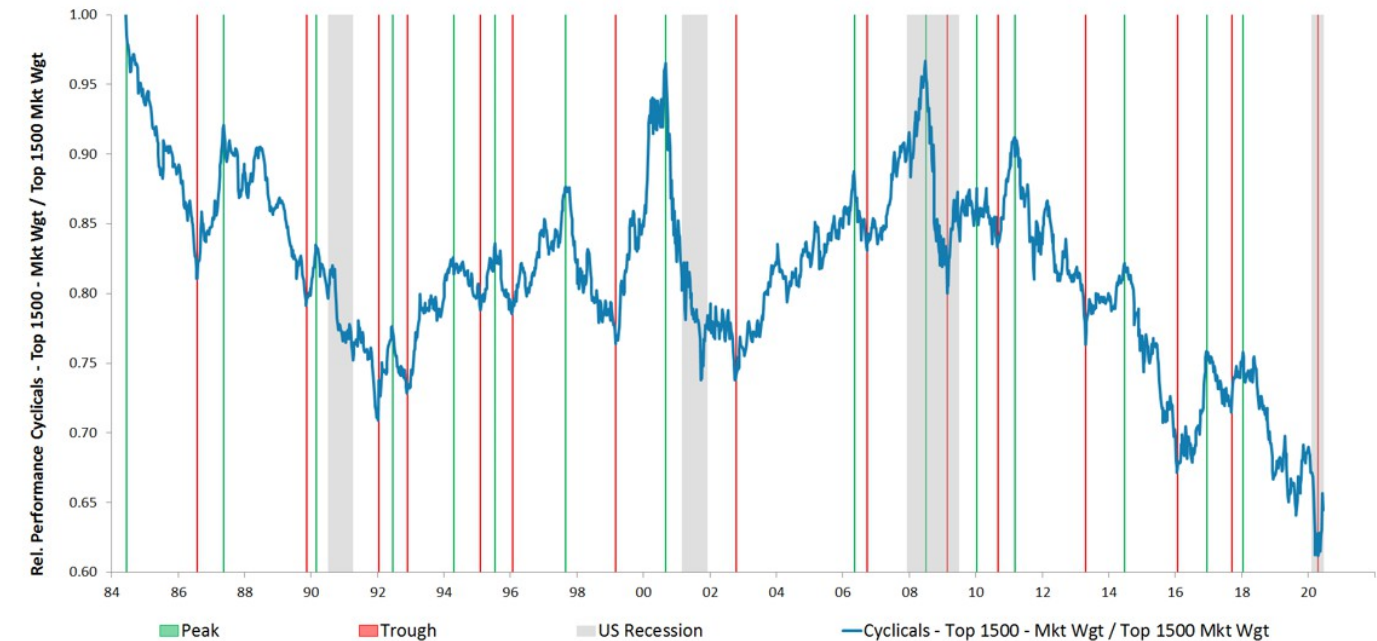
The case for cyclicals. Our work in [Embracing Cyclical](#) shows that there are statistically significant differences in how certain macro economic variables behave in periods of cyclical outperformance vs underperformance. Specifically, we noted that *sustained acceleration* in (1) inflation, (2) personal income growth, and (3) GDP growth along with continued moves higher in (4) PMIs, (5) consumer sentiment, and (6) rates tend to support periods of cyclical outperformance (Exhibit 17). In line with the views laid out above, we expect these variables to all be trending in the right direction to support the longer term outperformance of stocks with higher GDP sensitivity over the coming year. While we've had a substantial rebound in performance to date, long term relative performance still sits at near multi-generational lows (Exhibit 18) and we think GDP sensitive stocks with earnings upside are likely to be the most fertile ground for stock picking going forward.

Exhibit 17: Key Variables for Cyclical Underperformance



Source: Clarifi, Bloomberg, FactSet, Morgan Stanley Research

Exhibit 18: Cyclicals Relative Performance Is Rebounding From Multi-Generational Lows



Source: Clarifi, Bloomberg, FactSet, Morgan Stanley Research.

Part II: Health Care Specific Views

While we have a broadly pro-cyclical stance, we maintain an overweight rating on the Health Care sector for some defensive exposure that is less correlated to rates than other defensives. We also see upside from continued strength in earnings, historically low relative valuations, and potential abatement of political risk following the election.

Remain Overweight As Political Risks Are Quickly Becoming Priced and Relative Fundamentals Remain Strong

Political risk has outweighed improving relative fundamentals and defensive growth characteristics as the Health Care sector has underperformed the broader market by 15% since April 2020. History suggests the sector has a tendency to derate relative to the market until policy uncertainty is diminished. With the sector already trading in the 1st percentile on a relative forward P/E basis back to 2010 and only two months until the election, **we think a good deal of political risk has already been priced. This should allow for a catch up in the near term especially since relative earnings expectations for the sector remain strong.**

Relative Valuation Is Historically Depressed

The Health Care sector's relative forward P/E ratio is depressed versus history—1st percentile back to 2010. Exhibit 19 shows absolute and relative forward P/E for the S&P 500 Health Care sector and industry groups. Relative valuation levels for Pharma, Health Care Providers & Services, Biotech and Health Care Technology are particularly depressed—all in the 2nd percentile of relative levels or lower back to 2010. Health Care Equipment & Supplies is the only group that appears expensive on a relative forward P/E basis—84th percentile since 2010.

Exhibit 19: Pharma, Providers & Services, Biotech/HC Tech Valuation Lowest; Equipment & Supplies Highest

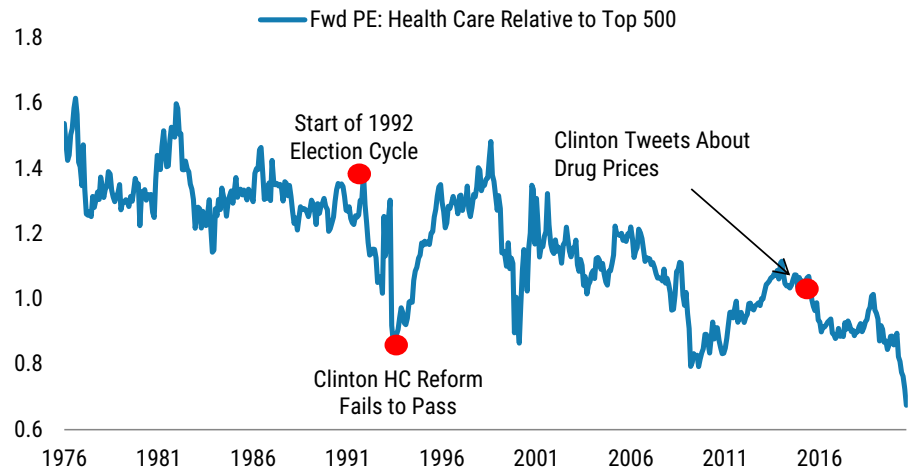
Healthcare Sector and Industry Valuation Table						
	S&P 500 Healthcare Sector	Pharma	Health Care Equipment & Supplies	Health Care Providers & Services	Biotech	Health Care Technology
Current Absolute Forward P/E Ratio	16.0	14.1	29.5	12.3	11.0	22.6
Current Relative Forward P/E Ratio	0.7	0.7	1.4	0.6	0.5	1.0
Current Relative Forward P/E Ratio % Rank (2010+)	1%	1%	84%	1%	0%	2%

Source: FactSet, Morgan Stanley Research as of September 10, 2020.

Relative multiple compression, fueled by uncertainty around drug pricing and health care reform, has been the primary trend for the sector since December of 2018. Exhibit 20 shows that this is not a new dynamic. In 1993, the sector's relative forward P/E ratio dropped 37% when the Clinton administration's health care reform package was on the

table. It then surged by 70% once the package failed to pass. In 2015, the sector's multiple fell by 12% after Hilary Clinton tweeted about drug pricing. Political concerns reemerged in late 2018 and have accelerated into the 2020 election, putting further pressure on the sector's relative forward P/E ratio— 1st percentile vs. the last 44 years. Health Care is one of the sectors that could be most impacted by policy coming out of the upcoming election. That said, with the relative sector multiple already quite low and Covid dynamics now potentially removing some of the focus on drug pricing, we see the case for a potential rerating, though recognize the full benefit of this may not accrue until after the election.

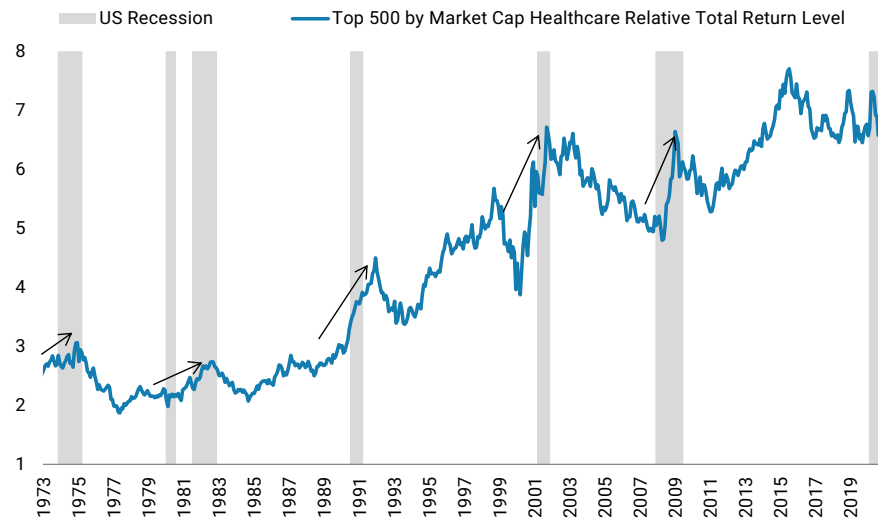
Exhibit 20: The Health Care Sector Is Trading At Historically Depressed Relative Valuation Levels; Its Relative Multiple Has A History of Reacting to Political Events



Source: Morgan Stanley Research as of September 9, 2020.

While Health Care is typically a late cycle outperformer, the proximity of this recession to the upcoming election likely weighed on the sector's relative performance during the broader market's selloff. [Exhibit 21](#) shows that the sector experienced a relatively modest period of outperformance going into this recession, but then gave that relative performance back quickly. Political risk coupled with the quick shift to pro-cyclical leadership following the market's late March trough has likely kept a lid on Health Care's relative performance over the past couple of months.

Exhibit 21: Health Care Is Typically A Late Cycle Outperformer, but Relative Outperformance at the Onset of a Recession Was Limited this Cycle

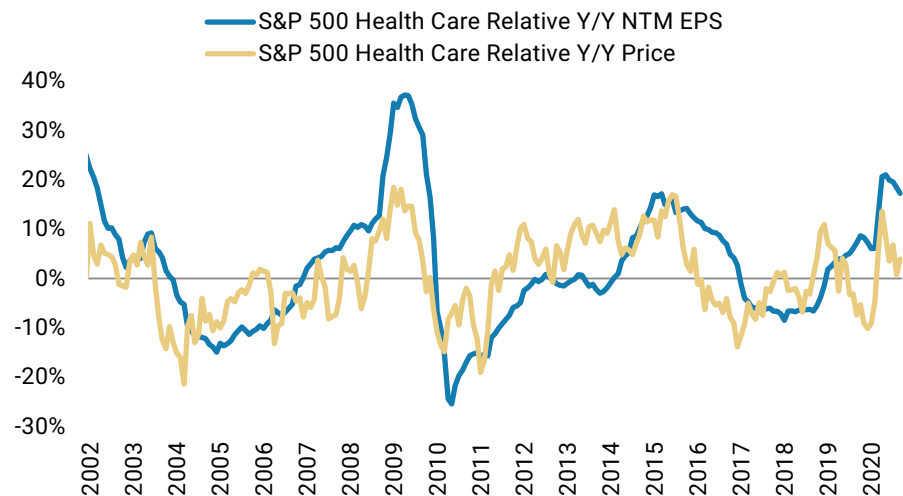


Source: Morgan Stanley Research as of September 10, 2020.

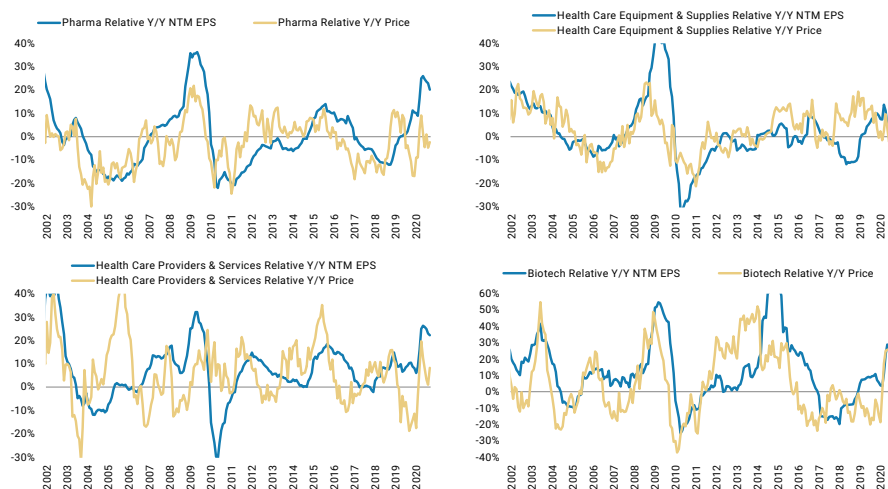
Health Care Relative Earnings Expectations Remain Resilient

Exhibit 22 shows that while relative performance for the Health Care sector has turned lower, relative forward earnings growth has remained elevated. **Exhibit 23** shows that this is largely being driven by Pharma, but that relative forward earnings growth is outpacing relative performance for all subgroups within the sector. We believe this dynamic speaks to the defensiveness and earnings durability of the sector. As the election passes, we believe investors will return more of their focus to the fundamentals of the Health Care sector which remain strong on a relative basis. This could prompt a catch up trade in the cohort. On a related note, while Health Care has been a relative underperformer since the market trough on March 23rd, it is one of only two sectors that has not seen forward EPS decline over that period (Tech is the other sector). **Exhibit 24** shows this dynamic—change in EPS has been a positive contributor to the sector's absolute performance since the market trough in March.

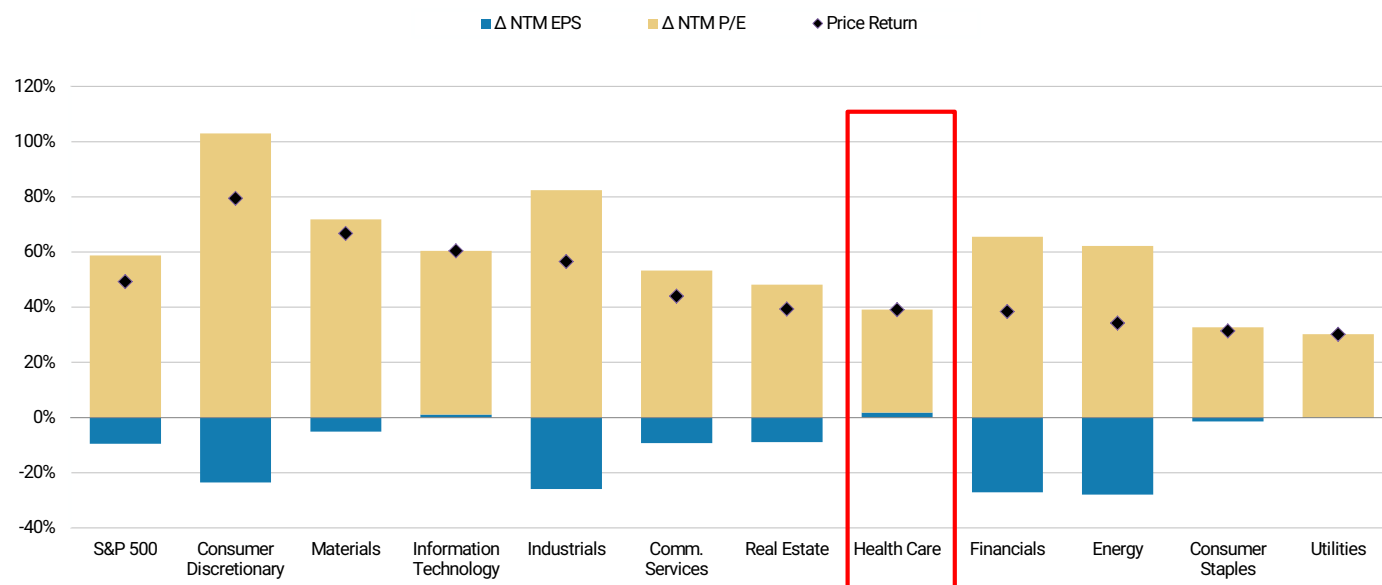
Exhibit 22: Relative Forward Earnings Expectations Are Outpacing Relative Performance...



Source: FactSet, Morgan Stanley Research as of September 10, 2020.

Exhibit 23: ...Driven Largely by Pharma, but Dynamic Is Present for All Industry Groups within Health Care

Source: FactSet, Morgan Stanley Research as of September 10, 2020.

Exhibit 24: Health Care Is One of Two Sectors That Has Seen Forward Earnings Expansion Since the March 23rd Market Trough**S&P 500 Sector Price Returns: March 23, 2020–Present**

Source: FactSet, Morgan Stanley Research as of September 10, 2020.

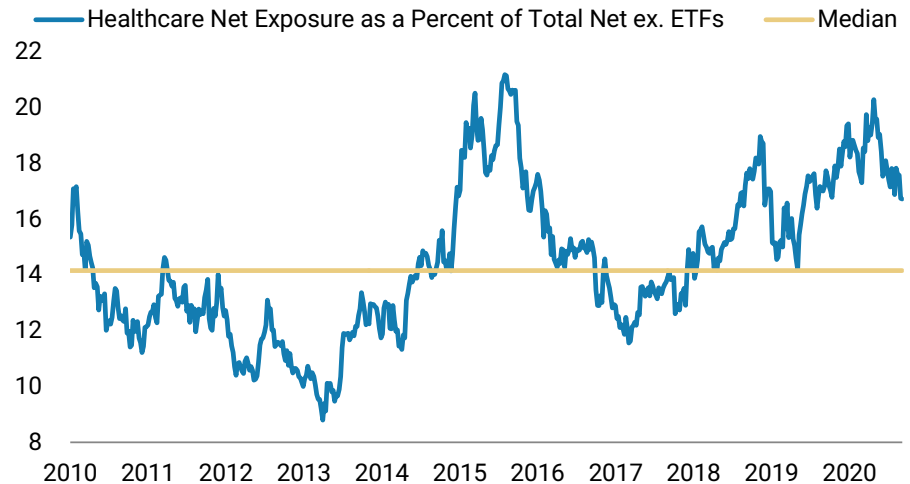
* Return attribution above is an approximation. The explicit value of a fourth return factor, the product of the % change in earnings and the % change in the multiple, has been allocated into returns attributed to the earnings and multiple respectively. Attribution was made using a weighting of the absolute value of the % change in that source of return over the sum of the absolute values of the % changes of both sources of return.

A Look at Sector Positioning and Breadth

Positioning is still not depressed despite risks. Sector breadth remains resilient. We leverage data from Morgan Stanley Prime Brokerage as a means of evaluating hedge fund positioning levels. [Exhibit 25](#) shows hedge fund net exposure to the Health Care sector (ex ETF exposure). This measure is elevated compared to its cycle median but has moderated in the last six months—75th percentile since 2010. From this data, we infer that positioning in the cohort is somewhat elevated vs. history, but not enough as to make an investment decision on. In general, sentiment/positioning indicators are valuable for tactical decision making when they are at extremes.

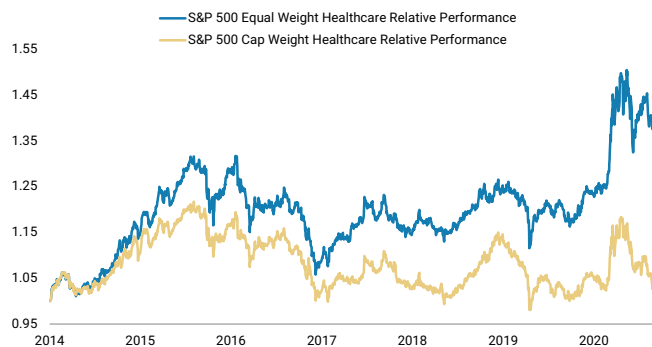
On the performance breadth front, [Exhibit 26](#) and [Exhibit 27](#) show that S&P 500 Health Care equal weighted vs. cap weighted relative performance accelerated off of the March 2020 market lows—which is a healthy sign overall.

Exhibit 25: Hedge Fund Net Exposure to Health Care Remains Moderately Elevated Vs. History



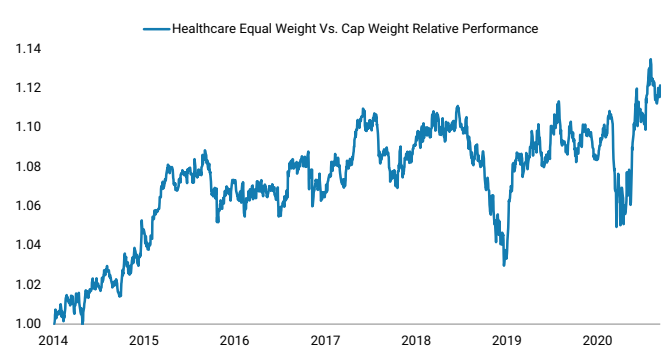
Source: Morgan Stanley Prime Brokerage as of September 4, 2020.

Exhibit 26: Breadth in the Sector Had Been Strong This Cycle...



Source: Bloomberg, Morgan Stanley Research as of September 10, 2020.

Exhibit 27: ...And Has Accelerated Since March of 2020



Source: Bloomberg, Morgan Stanley Research as of September 10, 2020.

Key Trends to Watch into the Election

Many of the comments below are excerpts from [A Revised Guide to Economic Policy Paths & Market Impacts](#). See the "Sector Impact: Healthcare" section authored by Ricky Goldwasser, Alexa Desai, David Risinger, Charlie Yang, David Lewis, and Marissa Bych for more.

Healthcare Services & Technology

- Incremental details on Joe Biden's healthcare task force policy agenda.
- Intra-COVID ACA enrollment statistics and potential policy changes to expand consumer access to individual markets.

Pharmaceuticals

- Action to encourage drug manufacturing in the US. We expect significant political discourse on the topic of encouraging greater US manufacturing. But given high US manufacturing costs, we think that repatriation of manufacturing to the US will represent a small percentage of the supply chain and focus will likely be on ensuring access to select medicines that are in the national security interest.
- Drug pricing scrutiny. We anticipate political rhetoric regarding high US drug prices to take a back seat to encouraging development of COVID-19 drug treatments and vaccines in the near term. After the majority of the US population is vaccinated (hopefully in 2021), we expect renewed drug pricing scrutiny (particularly if there is a Democratic sweep in November 2020).
- November 2020 election outcomes. A Republican sweep would be positive for investor perception. Divided government would be status quo. A Democratic sweep could drive investor concern about drug pricing regulation.

Med Tech

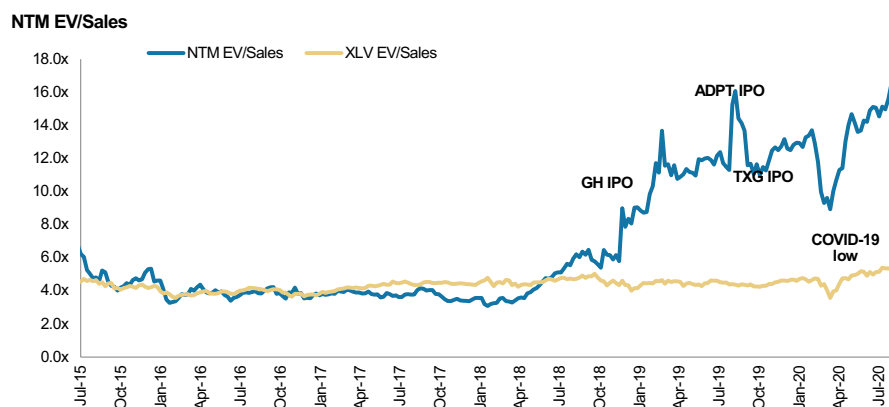
- We continue to view Medical Devices as more insulated to potential election dynamics, as hospital payment committees (VACs) have put deflationary pressure on medical device pricing for years, vs. pharma/ biotech or providers where new policies could drive more significant changes to the existing pricing/ coverage paradigms.
- Markets seem to understand this dynamic, as historical precedent suggests Device outperformance leading up to Election Day ([see further thoughts here: Medical Technology: August Device Download: Growth at Any Price and HC Policy Dynamics in Focus, 4 Sep 2020](#)).

10x Genomics (TXG): Overweight, \$135 Price Target

Tejas Savant, Life Science Tools & Diagnostics

Industry View: While we have an “In-Line” view on the broader Life Sciences industry (due to a mixed macro picture, a near-term visibility overhang due to COVID-19 disruptions that some are weathering better than others, and relatively full valuations), we have a favorable outlook on the Sequencing and Genetic Analysis group due to a series of secular tailwinds that are only beginning to ramp (see [All in the Same Storm, But Not in the Same Boat: Initiating Coverage of Sequencing Tools and Genetic Analysis](#)). On a relative basis, following a clear re-rating since late 2018 driven by an acceleration in existing use cases and emergence of new ones (we forecast consolidated sales across these stocks to grow at a 5-year CAGR of ~22%), the group trades at a significantly higher EV/Sales multiple than the rest of Healthcare. We believe the premium valuation is justified by large (and growing) addressable markets, differentiated technology-enabled platforms, low levels of penetration, lack of “binary catalyst” volatility, ongoing industry consolidation (that provides downside support to valuations), and the potential for material upward revisions in medium to long term estimates.

Exhibit 28: Average NTM EV/Sales multiple for our coverage



Source: Thomson Reuters, Morgan Stanley Research. Data as of 9/4/20.

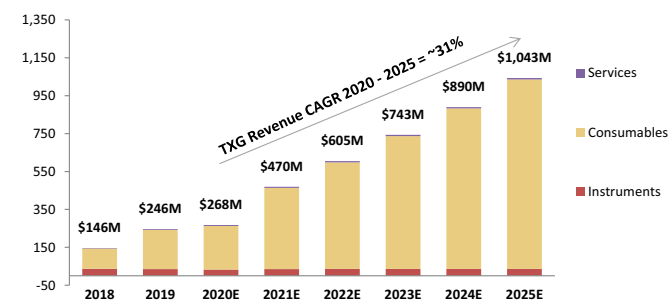
Investment Thesis: TXG’s highly differentiated (and affordable) Chromium and Visium platforms facilitate the analysis of complex biological systems at both higher resolution and scale compared to legacy approaches, enabling cell characterization at the single cell level to understand how variation in DNA, RNA and proteins coupled with differences in spatial arrangement patterns can affect function, cause disease and impact treatment. Chromium, and more recently, Visium have both generated robust customer traction post launch, with a long runway for growth. Moreover, TXG’s closed ecosystem coupled with a mix shift towards consumables lends stability to the top-line while expanding margins (with the BIO litigation royalty impact also set to wind down by 4Q20). While TXG has outperformed the XLV post IPO last September, we continue to see room for material upside from current levels, driven by a more attractive growth and margin profile relative to peers.

TXG's flagship Chromium single cell analysis platform has generated strong customer traction following launch, with a long runway for future growth. TXG's differentiated and proprietary platform is ideally positioned to penetrate its ~\$13B TAM across the high growth single cell and spatial analysis verticals which are both in the early phases of their ramp. TXG had placed 1,666 Chromium units across >1K customer sites as of YE19. Comparing this to the PCR installed base of >50K (despite including only research customers) implies ample runway for future growth. We see the breadth of adoption as being suggestive of strong early traction – customers include >90% of the top 100 global research institutions and 19 out of the top 20 global pharma companies. The Chromium Connect, an automated high throughput version aimed at biopharma labs, began shipping in March 2020 and management has pointed to a healthy order funnel with customer on-boarding set to restart once labs reopen following the pandemic. Furthermore, Chromium capability enhancements and new applications in the pipeline should further drive TXG's market penetration for the Chromium platform and help drive consumable utilization.

Visium enables TXG's entry into the high growth spatial biology market, with early customer demand suggestive of robust uptake initially within discovery customers, and FFPE compatibility a key catalyst in 1H21. Spatial analysis can provide valuable information on localization of DNA, RNA, and proteins within a single cell using simultaneous tagging of multiple targets at a massive scale. This information can be used for drug discovery and translational research, to help identify more efficacious drugs or patients most likely to respond to treatment. Without the need for an upfront instrument purchase, TXG's Visium provides its customers an affordable option to explore spatial biology. Early customer demand (>600 labs are using the solution since launch in November 2019) is suggestive of robust uptake within discovery customers, and upcoming FFPE compatibility (and other enhancements) is poised to drive further traction among translational researchers in 2021 and beyond.

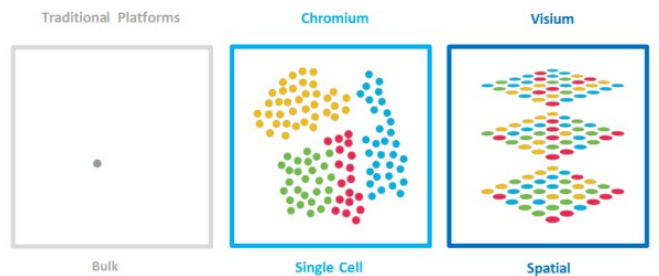
A closed ecosystem to enforce the razor/blade model is driving a mix shift towards consumables, leading to superior top-line visibility and margin expansion over time. By driving a mix shift towards higher margin consumables, TXG's closed ecosystem leads to superior top-line growth (we expect a 5-year CAGR of ~31% through 2025 despite no credit for a potential Chromium clinical launch) and margin expansion (we model GMs >80% with operating profit breakeven by 2022), with the latter also poised to benefit from the wind-down of royalty payments to BIO come 4Q20.

Exhibit 29: TXG revenue forecast



Source: Company Data, Morgan Stanley Research

Exhibit 30: Traditional cell analysis platform vs. TXG's Chromium and Visium



Source: Company Data

Risk Reward – 10X Genomics Inc (TXG.O)

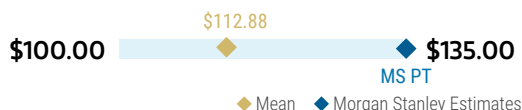
Driving the Single Cell Revolution; Spatial Biology Upside Coming Into Focus

PRICE TARGET \$135.00

Our primary valuation metric is a discounted cash flow analysis based off our base-case scenario assumptions, which we then compare to a secondary multiple-based relative valuation versus a group of high growth diagnostics peers. We use a DCF analysis as our primary valuation methodology assuming a WACC discount rate of 5% and terminal growth rate of 3.0%.

Consensus Price Target Distribution

Source: Thomson Reuters, Morgan Stanley Research



RISK REWARD CHART



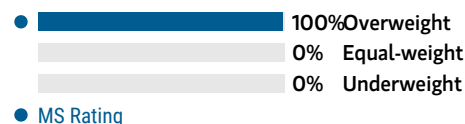
Key: — Historical Stock Performance ● Current Stock Price ◆ Price Target

Source: Thomson Reuters, Morgan Stanley Research

OVERWEIGHT THESIS

TXG's highly differentiated Chromium and Visium platforms facilitate the analysis of complex biological systems at both higher resolution and scale compared to legacy approaches, enabling cell characterization at the single cell level to understand diseases and impact treatment. Chromium and Visium have both generated strong customer traction with a long runway for growth. Moreover, TXG's closed ecosystem and mix shift towards consumables lends stability to the top-line while expanding margins. TXG has outperformed the XLV post IPO last September but we continue to see room for material upside from current levels, driven by a significantly more attractive growth and margin profile vs. peers.

Consensus Rating Distribution



Source: Thomson Reuters, Morgan Stanley Research

Risk Reward Themes

Alphawise - Primary *Positive*
 Research: *Positive*
 Disruption: *Positive*
 Share Gain: *Positive*

View descriptions of Risk Rewards Themes, [here](#)

BULL CASE

\$169.00

Stronger Chromium and Visium traction

TXG sees robust growth in the Chromium installed base driven by strong demand for single cell analysis, with consumable pull through seeing upside from faster than expected uptake of Visium and Chromium Connect, in addition to menu expansions, together driving a top line CAGR of ~33% through 2025 and margins expand faster to ~22%.

BASE CASE

\$135.00

Healthy growth in Chromium and Visium

TXG's platforms continues to drive adoption for single cell based applications at current rates. Visium enhancements develop at expected pace driving gradual consumables mix shift resulting in TXG top-line growing at ~31% 5-year CAGR through 2025 while margins expand to ~21%.

BEAR CASE

\$83.00

Slower Chromium installs , Visium traction soft

TXG fails to launch any incremental menu expansions resulting in only modest growth in the Chromium installed base. Development of additional Visium features progress slower than expected impacting its ability to penetrate the spatial biology market and allowing competitors to gain share, hurting consumable revenue growth. Taken together, we assume TXG's top-line growth slows to ~28% 5-year CAGR through 2025 and margin expands more slowly to ~16%.

Risk Reward – 10X Genomics Inc (TXG.O)

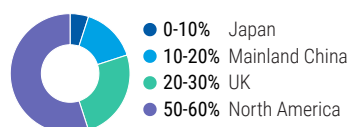
KEY EARNINGS INPUTS

Drivers	2019	2020e	2021e	2022e
Total revenue (\$, mm)	246	268	470	605
Instrument revenue (\$, mm)	35	33	35	36
Consumables revenue (\$, mm)	207	230	428	563
Chromium instrument placements in the quarter	645.0	636.0	668.0	682.0

INVESTMENT DRIVERS

- Chromium and Visium have generated strong traction post-launch, with a long runway for future growth
- Closed ecosystem driving mix shift towards consumables leading to top-line visibility and margin expansion over time

GLOBAL REVENUE EXPOSURE



Source: Morgan Stanley Research Estimate
View explanation of regional hierarchies, [here](#)

MS ALPHA MODELS

3/5 BEST	24 Month Horizon	4/5 MOST	3 Month Horizon
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Source: Thomson Reuters, FactSet, Morgan Stanley Research; 1 is the highest favored Quintile and 5 is the least favored Quintile

RISKS TO PT/RATING

RISKS TO UPSIDE

- Instrument demand increases with expanded applications and softer than expected COVID related closures
- Better research funding environment
- Visium enhancements results in market share gains

RISKS TO DOWNSIDE

- Instrument installation delays caused by COVID related lab shutdowns
- Slowdown in academic funding and budget cuts among biopharma customers
- Visium's uptake impacted by competition

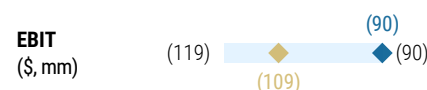
OWNERSHIP POSITIONING

Inst. Owners, % Active	87.6%				
HF Sector Long/Short Ratio	2.3x				
HF Sector Net Exposure	16.7%				

Thomson Reuters; MSPB Content. Includes certain hedge fund exposures held with MSPB. Information may be inconsistent with or may not reflect broader market trends. Long/Short Ratio = Long Exposure / Short exposure. Sector % of Total Net Exposure = (For a particular sector: Long Exposure - Short Exposure) / (Across all sectors: Long Exposure - Short Exposure).

MS ESTIMATES VS. CONSENSUS

FY Dec 2020e



◆ Mean ◆ Morgan Stanley Estimates

Source: Thomson Reuters, Morgan Stanley Research

Biogen (BIIB): Overweight, \$357 Price Target

Matthew Harrison, Biotechnology

Industry View: The biotech industry has seen mixed results in recent years. The BTK outperformed the S&P by 18% in 2017 and 6% in 2018, while lagging the broader market by 8% in 2019 and 3% through 2020. Despite these trends relative to the S&P, from a P/E and EV/EBITDA perspective, biotech valuation remains roughly in line with the broader healthcare industry multiples. Additionally, US Large Cap Biotech has the highest average margins which are driven by low COGS and SG&A as % of sales. Conscious of broader macroeconomic themes, current valuations may offer a favorable long-term entry point into the biotech industry, and we believe near-term drug development catalysts have the potential to drive growth. Following a volatile 1H20 driven by COVID-19 pressures, key investor debates include the potential impact of the election on the industry and drug pricing concerns, potential for M&A, continuation of R&D spend and potential clinical trial delays. With these factors in mind, we remain focused on single names with an In-Line industry view given the high volatility in the category.

Investment Thesis: Our Overweight thesis on Biogen is driven by investors beginning to price in higher odds of success for aducanumab, which is the first potential disease modifying therapy for Alzheimer's disease. We expect the market to price in at least 50% probability of success (compared to 25% currently) as we get closer to a potential Advisory Committee Meeting in early-2021. We do recognize the downside pressure of multiple multiple sclerosis generic launches for Tecfidera (30% of current product sales), but we expect these events to be offset by the building narrative around aducanumab. We believe both the aducanumab panel and potential approval could be +/- 20-30% events.

Near-term pressure... We expect multiple additional at-risk generic launches for the multiple sclerosis drug Tecfidera in the near-term representing a downside risk. Tecfidera makes up ~30% of current product sales and we project peak revenues of ~\$4.4B in 2020, followed by \$1B in 2024. Mylan has already launched at-risk its generic version of Tecfidera, and the upcoming decision from the Delaware district court on whether to collateral estoppel (see our [CDI](#) and [most recent note](#)) could pave the way for additional generics to try to launch at-risk in the coming weeks. Specifically, 12 generics in the Delaware case have tentative approvals and could potentially try to launch if the Delaware court applies collateral estoppel to find Biogen's patent invalid with respect to them. These events represent downside risk that we believe is partially priced-in, but could represent 10%+ in downside pressure in the near-term.

...Followed by an upside catalyst: We expect investors to look past the Tecfidera downside risk in the near-term, and begin pricing in higher odds of success for aducanumab. Aducanumab is an IgG1 monoclonal antibody that binds to aggregated forms of amyloid beta and represents the first potential disease modifying therapy for Alzheimer's disease. The FDA accepted the aducanumab BLA with Priority Review on 8/7/20 (PDUFA: March 7, 2021) and management noted that the application included PhIII EMERGE/ENGAGE data and PhIb PRIME data. We note that high dose aducanumab

slowed the decline from baseline in Clinical Dementia Rating-Sum of the Boxes (CDR-SB) at 78 weeks (p-value = 0.01) in the EMERGE trial (n=1,638), but fell short of statistical significance in the ENGAGE trial (n=1,647). We believe the stock currently reflects less than 25% probability of success for aducanumab, but expect the market to price in at least 50% as we get closer to a potential advisory committee meeting in early-2021. We project total sales of ~\$3B in 2025 and peak sales of ~\$7B by 2030.

Beyond Aducanumab: Investors remain focused on potential BD activities to diversify the pipeline and offset potential Spinraza competition. In response to these concerns, Biogen recently signed a deal with Denali to collaborate on LRRK2 inhibitors for Parkinson's disease and potentially four additional assets from the transport vehicle (TV) technology (BBB) platform. We note that one asset is from the Antibody Transport Vehicle (ATV) enabled anti-amyloid beta program. This collaboration adds a mid/late-stage program to the pipeline which we believe has a high probability of success. Additionally, and perhaps more importantly, management is gaining access to Denali's blood-brain-barrier platform. We cannot underscore how important this is for Biogen. Biogen has many interesting biologics, but many do not get into the brain in sufficient quantities. Access to this platform could potentially allow (as an example) for an IM Spinraza (not a named target, but we believe it makes clear sense), dramatically enhancing the commercial potential of this important drug. And for Alzheimer's (a named target), where there is some level of mechanistic validation, we would expect higher brain penetration to lead to much more significant disease modification. Thus, we believe this deal dramatically improves the long-term potential of key assets in the Biogen portfolio, while partially offsetting investor concerns related to mature commercial assets.

Key catalysts ahead: The major catalysts ahead include: (1) Anti-LINGO data in MS is expected by YE20 and represents a forgotten catalyst (and for good reason since the prior results were not positive), but the risk/reward is skewed significantly to the positive with as much as 10-20% potential upside; (2) In early-2021, we expect the FDA to convene a highly anticipated Advisory Committee Meeting on aducanumab. We expect a contentious AdCom with clear arguments from both sides; (3) The FDA's ultimate approval decision by March 7, 2021 will be the key driver for BIIB.

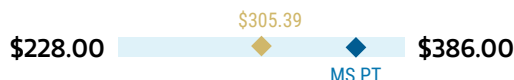
Risk Reward – Biogen Inc (BIIB.O)

Aducanumab, Tecfidera, CD20 royalties, and pipeline drive risk-reward

PRICE TARGET \$357.00

We Derive Our Price Target From A Discounted Cash Flow Analysis That Uses A WACC Of 10%. The Main Drivers Are Tecfidera, Spinraza, Ocrevus, and Alzheimer's disease pipeline candidate aducanumab.

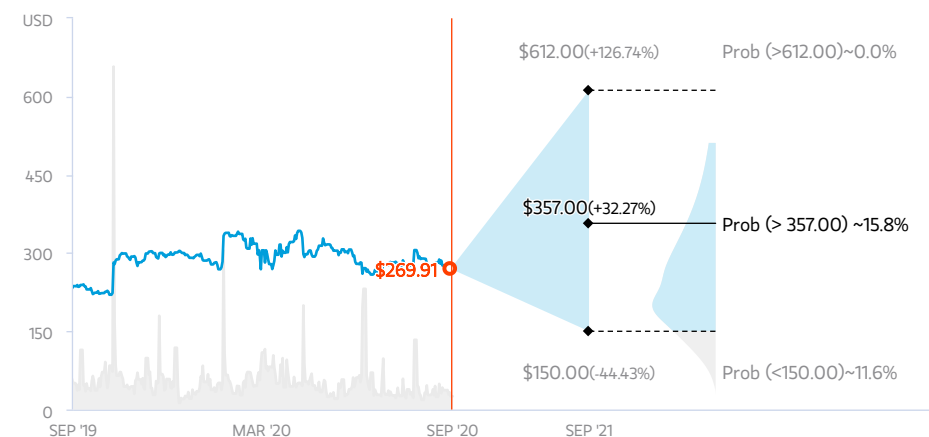
Consensus Price Target Distribution



Source: Thomson Reuters, Morgan Stanley Research

◆ Mean ◆ Morgan Stanley Estimates

RISK REWARD CHART AND OPTIONS IMPLIED PROBABILITIES (12M)



Key: — Historical Stock Performance ● Current Stock Price ◆ Price Target

Source: Thomson Reuters, Morgan Stanley Research, Morgan Stanley Institutional Equities Division. The probabilities of our Bull, Base, and Bear case scenarios playing out were estimated with implied volatility data from the options market as of 11 Sep, 2020. All figures are approximate risk-neutral probabilities of the stock reaching beyond the scenario price in either three-months' or one-years' time. View explanation of Options Probabilities methodology, [here](#)

OVERWEIGHT THESIS

- Our OW rating is based on our view that investors will likely price in ~50% probability of success of aducanumab ahead of an FDA panel and approval decision in mid-2020
- While we expect near-term downside risk from Tecfidera generics, we expect a generic launch to represent the bottom in BIIB
- Management has significant optionality in terms of accretive M&A as well as pipeline catalysts which are not valued currently by investors.

Consensus Rating Distribution



● MS Rating

Source: Thomson Reuters, Morgan Stanley Research

Risk Reward Themes

Disruption: *Positive*
Earnings Quality: *Negative*
Self-help: *Positive*

View descriptions of Risk Rewards Themes, [here](#)

BULL CASE

\$612.00

DCF

Aducanumab is approved and becomes a \$10B drug, core MS business erodes more slowly than base case and Spinraza is stable. We assume: 1) ~\$4.8B in peak Tecfidera sales with a slower generic erosion in both the US and EU, 2) Limited declines in the Plegridy/Avonex franchise to ~\$1.6B by 2025E, 3) Continued Tysabri growth to \$3.5B in peak sales by 2030, 4) Peak Aducanumab sales at ~\$9B in 2030, 5) Peak Spinraza sales at ~\$2.3B in 2020 and limited impact to Rituxan/Gazyva from biosimilars.

BASE CASE

\$357.00

DCF

Tecfidera generics in 2020, declining Avonex/Plegridy, stable Spinraza and 50% probability of aducanumab approval. We assume: 1) ~\$4.4B in peak 2020E Tecfidera sales with generics entering in late 2020E, 2) Declining Plegridy/Avonex sales through 2030E to ~\$740M with stable Tysabri sales at ~\$2.4B (2030), 3) Peak Aducanumab sales at ~\$7B in 2030 with 50% probability of success, and 4) Biosimilar Rituxan impact starting in 2020E, mainly offset by growing Ocrevus royalties.

BEAR CASE

\$150.00

DCF

Tecfidera underperforms, declining Avonex/Plegridy, significant biosimilar impact and no pipeline. We assume: 1) ~\$1.5B in global Tecfidera sales in 2021E with a loss of patent protection in 2020E, 2) Declining Plegridy/Avonex sales to ~\$900M by 2023E on greater competition and a more significant negative pricing environment, 3) Biosimilar Rituxan impact starting in 2020E. Aducanumab is not approved or receives a refuse to file letter.

Risk Reward – Biogen Inc (BIIB.O)

KEY EARNINGS INPUTS

Drivers	2019	2020e	2021e	2022e
Peak Sales (\$, mm)	14,378	14,378	14,378	14,378
Topline 3-Year CAGR (%)	(7.3)	(7.3)	(5.5)	(3.3)
Bottom line 3-Year CAGR (%)	(12.3)	(15.2)	(13.1)	(9.6)

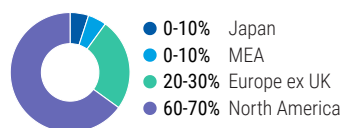
CATALYST CALENDAR

Date	Event	Source: Thomson Reuters, Morgan Stanley
H2 2020	Opicinumab (anti-LINGO): PhIIb data for AFFINITY trial in remitting-relapsing MS	
14 Sep 2020	Biogen Inc at Morgan Stanley Global Healthcare Conference (Virtual)	
01 Oct 2020 - 31 Mar 2021	Potential Aducanumab Adcom	
H1 2021	BIIB111 (NSR-REP1): PhIII data in Choroideremia	
H1 2021	BIIB092 (gosuranemab): PhII data in Alzheimer's disease	

INVESTMENT DRIVERS

- Aducanumab filing decision (3Q20), potential panel (we assume 4Q20) and its potential PDUFA data (we assume 1Q21)
- Updates to the current legal cases regarding Tecfidera (District Court decision by 3Q20)
- Anti-LINGO PhIIb data (2H20)

GLOBAL REVENUE EXPOSURE



Source: Morgan Stanley Research Estimate
View explanation of regional hierarchies, [here](#)

MS ALPHA MODELS

1/5 BEST	24 Month Horizon	2/5 MOST	3 Month Horizon
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Source: Thomson Reuters, FactSet, Morgan Stanley Research; 1 is the highest favored Quintile and 5 is the least favored Quintile

RISKS TO PT/RATING

RISKS TO UPSIDE

- Aducanumab is approved with strong sales
- Spinraza competitors fail to make it to the market
- Pipeline success for stroke, pain or follow-on multiple sclerosis compounds

RISKS TO DOWNSIDE

- Aducanumab is not approved
- Rituxan biosimilars take share quickly and Ocrevus loses share to ofatumumab
- Management does not use its cash effectively

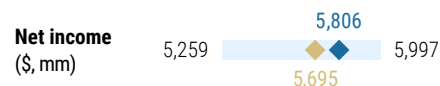
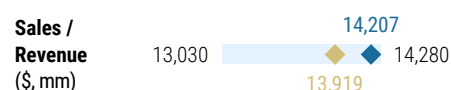
OWNERSHIP POSITIONING

Inst. Owners, % Active	59.2%	
HF Sector Long/Short Ratio	2.3x	
HF Sector Net Exposure	16.7%	

Thomson Reuters; MSPB Content. Includes certain hedge fund exposures held with MSPB. Information may be inconsistent with or may not reflect broader market trends. Long/Short Ratio = Long Exposure / Short exposure. Sector % of Total Net Exposure = (For a particular sector: Long Exposure - Short Exposure) / (Across all sectors: Long Exposure - Short Exposure).

MS ESTIMATES VS. CONSENSUS

FY Dec 2020e



◆ Mean ◆ Morgan Stanley Estimates

Source: Thomson Reuters, Morgan Stanley Research

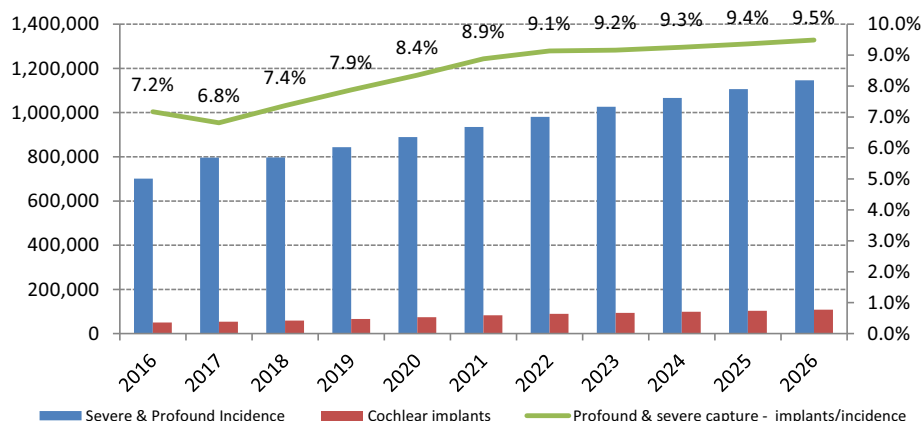
Cochlear (COH.AX): Overweight, A\$229 Price Target

Sean Laaman, Megan Kirby-Lewis, Australia Healthcare

Industry View: We have an In-Line view on the Australian Healthcare industry. While the industry still offers good growth relative to the broader Australian market, valuations remain stretched. In our coverage universe, we prefer COH, ANN and SHL.

Investment Thesis: Cochlear is a medical device company and is the global market leader in cochlear implant technology. The company also sells devices to treat conductive hearing loss. Cochlear has a global market share of around 55% for new implants and accessories with operations in the US, Europe, and Asia/Pacific. The cochlear implant market is ~5% penetrated with more people going profoundly deaf each year in developed markets than there are implant recipients being fitted - making long duration growth possible as the channel evolves to improve patient capture. The stock looks attractive relative to other large-cap Australian healthcare plays and putting aside potential delayed surgery risk, we see accelerating unit growth, as FY20 demonstrated, with market share momentum against a generally recovering market. We feel this will correct the underperformance over the last 12 months compared to CSL and RMD.

Exhibit 31: Incidence of severe/profound hearing loss vs annual cochlear implant procedures (capture of annual incidence)



Source: Company data, Morgan Stanley Research, E = Morgan Stanley Research estimates

Post COVID-19 play: Additionally we see COH emerging as a COVID-19 beneficiary as the US FDA approved COH's remote patient servicing tool - Remote Check. We see this as: 1) de-bottlenecking clinics; 2) Accelerating new patient growth; and 3) COH gaining further market share in a ~A\$1.9bn market, growing at ~8%pa. Post the FY20 result, we have greater confidence that COH will approach our pre-COVID-19 FY22 implant estimates and our long-term unit growth forecast of 10%. Given benefits provided by Remote Check to clinicians and patients, we see ongoing share gains as likely (we are unaware of any competitive response).

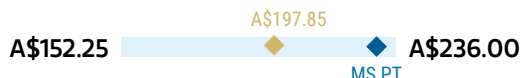
Risk Reward – Cochlear (COH.AX)

Removing clinic bottlenecks and enhancing patient access = market share gains

PRICE TARGET A\$229.00

A\$229: Given better unit momentum toward pre-COVID levels and relatively muted cost growth in FY21, we think the Street will value COH closer to our bull case. As such, we employ a probability-weighted approach to derive our price target, applying weightings of 40% bull, 50% base, and 10% bear to our DCF-based scenario values. Key assumptions: WACC 7.2%, long-term growth 3.5%.

Consensus Price Target Distribution



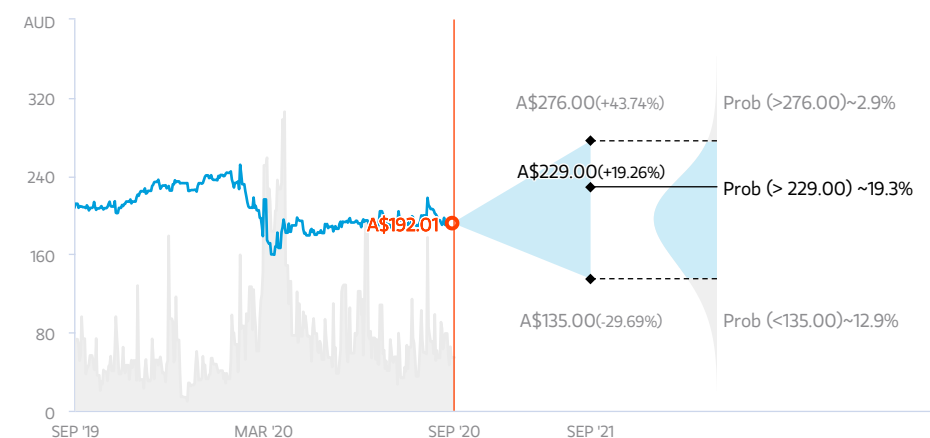
Source: Thomson Reuters, Morgan Stanley Research

◆ Mean ◆ Morgan Stanley Estimates

OVERWEIGHT THESIS

- Trajectory in developed markets is back to pre-COVID-19 levels, helped by surgery catch-up and share gains. COH's suite of connected solutions may prove share gains to be sticky.
- We assume business momentum returns from FY21, aided by the Nucleus Profile Plus launch and competitor recall.
- We also see upside risk over the long term as COH's Remote Check adoption and Sycle acquisition improve referral rates from the hearing aid channels and may remove bottlenecks at the clinic.
- We see greater sustainability of unit growth and market position thanks to strategies such as Cochlear Link and Sycle.
- The stock looks attractive relative to other large-cap Australian healthcare plays.

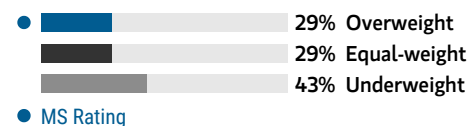
RISK REWARD CHART AND OPTIONS IMPLIED PROBABILITIES (12M)



Key: — Historical Stock Performance ● Current Stock Price ◆ Price Target

Source: Thomson Reuters, Morgan Stanley Research, Morgan Stanley Institutional Equities Division. The probabilities of our Bull, Base, and Bear case scenarios playing out were estimated with implied volatility data from the options market as of 11 Sep, 2020. All figures are approximate risk-neutral probabilities of the stock reaching beyond the scenario price in either three-months' or one-years' time. View explanation of Options Probabilities methodology, [here](#)

Consensus Rating Distribution



Source: Thomson Reuters, Morgan Stanley Research

Risk Reward Themes

Earnings Quality: *Positive*
Secular Growth: *Positive*

View descriptions of Risk Rewards Themes, [here](#)

BULL CASE

A\$276.00

44x FY22e EPS

Through its hearing aid practice management software, Sycle, COH evolves the referral pathway. This results in faster market growth and capture of ~3% of CI candidates directly from hearing aid dispensers. COVID-19 bull case scenario.

BASE CASE

A\$209.00

38x FY22e EPS

The launch of the Nucleus Profile Plus and patient connectivity tools help COH continue unit momentum. Market growth 8% p.a. Increasing contribution from processor upgrades as installed base grows.

BEAR CASE

A\$135.00

20x FY22e EPS

Advent of OTC hearing aids reduces the number of patients visiting formal hearing aid clinics and impedes the funnel for cochlear implant referrals. COVID-19 bear case scenario.

Risk Reward – Cochlear (COH.AX)

KEY EARNINGS INPUTS

Drivers	2019	2020e	2021e	2022e
Cochlear implant unit growth (%)	(3.3)	(7.1)	19.5	14.6
Upgrade sales (A\$, mn)	427	395	481	535
Cochlear implant sales	845.1	817.9	973.7	1,112.2
Baha sales (A\$, mn)	174	139	165	205
Cochlear implant units	34,083.0	31,662.0	37,838.1	43,381.3

INVESTMENT DRIVERS

- COH benefits from falling AUDUSD. A 2% reduction increases our DCF by A\$3/sh.
- Product launches every four to five years drive a revenue opportunity that grows with the installed base.

GLOBAL REVENUE EXPOSURE



- 10-20% APAC, ex Japan, Mainland China and India
- 30-40% UK
- 40-50% North America

Source: Morgan Stanley Research Estimate
View explanation of regional hierarchies, [here](#)

MS ALPHA MODELS

5/5
MOST

3 Month
Horizon

Source: Thomson Reuters, FactSet, Morgan Stanley Research; 1 is the highest favored Quintile and 5 is the least favored Quintile

RISKS TO PT/RATING

RISKS TO UPSIDE

- Post-Nucleus 7 sales and backwards-compatible processors.
- Weakening of the A\$.
- Next-generation implant launch.

RISKS TO DOWNSIDE

- Reimbursement restrictions in the US or developed EU.
- Strengthening of the A\$.
- Disappointing uptake of new products.
- COVID-19 impact on surgeries.

OWNERSHIP POSITIONING

Inst. Owners, % Active 73.5%

Source: Thomson Reuters, Morgan Stanley Research

MS ESTIMATES VS. CONSENSUS

FY Jun 2020e

EPS (A\$) 1.40 **2.58** 4.74
2.58

EBIT (A\$, mn) (214) **207** 411
165

Sales / Revenue (A\$, mn) 1,166 **1,321** 1,607
1,291

ROE (%) (21.0) **21.2** 30.2
11.4

◆ Mean ◆ Morgan Stanley Estimates

Source: Thomson Reuters, Morgan Stanley Research

Denali (DNLI): Overweight, \$45 Price Target

Matthew Harrison, Biotechnology

Industry View: The biotech industry has seen mixed results in recent years. The BTK outperformed the S&P by 18% in 2017 and 6% in 2018, while lagging the broader market by 8% in 2019 and 3% through 2020. Despite these trends relative to the S&P, from a P/E and EV/EBITDA perspective, biotech valuation remains roughly in line with the broader healthcare industry multiples. Additionally, US Large Cap Biotech has the highest average margins which are driven by low COGS and SG&A as % of sales. Conscious of broader macroeconomic themes, current valuations may offer a favorable long-term entry point into the biotech industry, and we believe near-term drug development catalysts have the potential to drive growth. Following a volatile 1H20 driven by COVID-19 pressures, key investor debates include the potential impact of the election on the industry and drug pricing concerns, potential for M&A, continuation of R&D spend and potential clinical trial delays. With these factors in mind, we remain focused on single names with an In-Line industry view given the high volatility in the category.

Investment Thesis: Our Overweight thesis on Denali is driven by a clear path forward for the small molecule LRRK2 program and near-term biomarker PoC data for DNL1310 (EVT:IDS) that has the potential to derisk the blood-brain barrier (BBB) platform. Our view is supported by the recent agreement with Biogen to collaborate on LRRK2 and potentially four assets utilizing Denali's BBB platform. We view the risk/reward profile skewed to the upside going into the PhI/II trial readout testing DNL310 (EVT:IDS) in Hunter syndrome expected in late-2020.

BBB Platform: Management recently announced that the first Hunter syndrome patient had been dosed in the PhI/II trial testing the ETV:IDS technology, representing the most advanced drug candidate from the BBB platform. DNL310 is a large molecule that is designed to carry a recombinant Iduronate 2-sulfatase enzyme (IDS) across the BBB to treat neuropathic and systemic forms of the disease and interim data is anticipated in late-2020. These data are expected to include safety and CSF GAGs levels, which correlate to neuroprotection. Even though Hunter syndrome is a very rare, inherited genetic disorder, these data represent a key derisking event for the BBB platform designed to increase penetration of drug into the brain by ~20x from 0.1% for natural antibodies to ~2% for their engineered antibodies. We project that the BBB platform generates ~\$1.1B in revenue by 2033, making up ~30% of Denali's global revenues.

LRRK2 Program: Denali previously reported positive PhI data testing DNL151 in 150 healthy volunteers. These data included evidence of target and pathway engagement of >50% and up to 50% dose-dependent reduction in BMP in the urine. DNL151 was well tolerated and demonstrated dosing flexibility. The IND was accepted in July and the PhII/III trials testing DNL151 in Parkinson's disease are expected to start in 2021. One trial will be in LRRK2 mutation carriers and the other will be in sporadic disease, which we believe has a lower probability of success (PoS) but a larger potential patient population. Our base case assumes a 60% PoS for LRRK2 with risk-adjusted revenues of ~\$300M in 2030.

What about RIPK1? Denali decided to advance development of DNL788, a backup RIPK1 molecule for the treatment of Alzheimer's disease, based on the limited therapeutic window of DNL747. This decision was based on the assumption that >95% inhibition is necessary to achieve therapeutic efficacy and DNL747 achieved 83% target inhibition at trough in Alzheimer's disease patients. Additionally, DNL747 reduced one of two CSF biomarkers and management believes a higher dose is necessary to impact the second biomarker, but cited dose- and duration-dependent adverse events at higher exposures in NHP studies. We were encouraged by the relative increase in target inhibition and manageable safety profile compared to DNL104, which was a first generation inhibitor that was discontinued due to liver toxicity issues. Management plans to initiate a PhI trial testing DNL788 in healthy volunteers in early-2021. Management emphasized that there is no evidence of preclinical immune-related hematology issues with DNL788 compared to DNL747 and noted that Sanofi is responsible for the near-term development costs associated with both DNL788 and DNL758. Overall, we are encouraged by a clear path forward and target engagement data to date. We project risk-adjusted revenue of ~\$1.5B in 2030 and peak revenues of ~\$2B in 2033.

Key catalysts ahead: The major catalysts ahead include: (1) Interim DNL310 biomarker data from the PhI/II trial expected in late-2020; (2) Initiation of the PhII/III testing DNL151 in LRRK2 mutation carriers and sporadic Parkinson's disease patients in 2021.

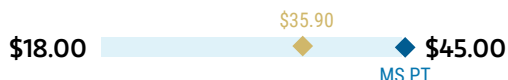
Risk Reward – Denali Therapeutics Inc (DNLI.O)

Programs in ALS, Alzheimer's, Parkinson's and a BBB platform drive risk/reward

PRICE TARGET \$45.00

Our PT is based on a DCF of our base case forecasts for LRRK2 for Parkinson's, RIPK1 for ALS and Alzheimer's, and the BBB platform at a 15% discount rate. We assume 2% terminal growth on 2033 cash flows.

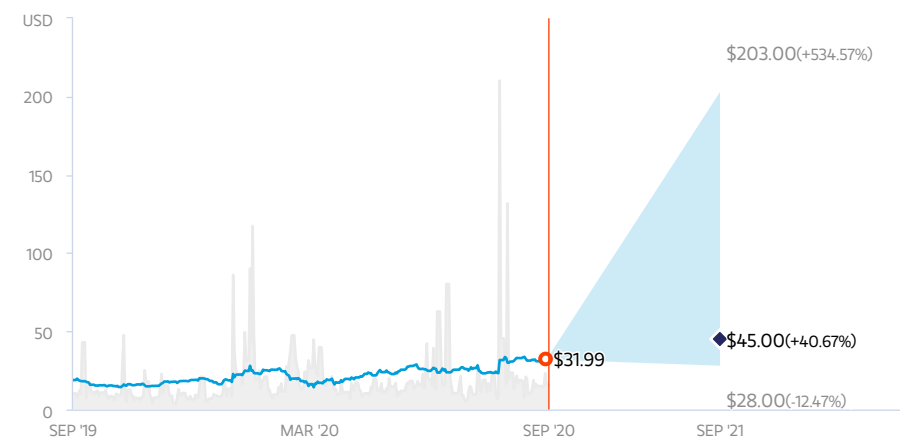
Consensus Price Target Distribution



Source: Thomson Reuters, Morgan Stanley Research

◆ Mean ◆ Morgan Stanley Estimates

RISK REWARD CHART

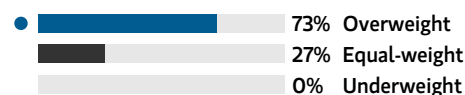


Source: Thomson Reuters, Morgan Stanley Research

OVERWEIGHT THESIS

- Our Overweight thesis is based on confidence in management and their ability to inflect R&D productivity in the historically difficult to treat area of neuroscience.
- We believe management has the right process to inflect R&D success by using genetic targets, biomarkers for target engagement and parallel investment to improve success. Initial targets RIPK1 and LRRK2 represent the initial yardstick to measure success.
- The BBB platform provides a long-term opportunity to greatly expand treatments for many neurological disorders.

Consensus Rating Distribution



● MS Rating

Source: Thomson Reuters, Morgan Stanley Research

BULL CASE

\$203.00

DCF

Greater Alzheimer's market share and LRRK2 success in idiopathic Parkinson's. Our bull case assumes a ~60% market share in ALS, a ~30% market share in Alzheimer's, and an ~18% share in the total Parkinson's population. Alzheimer's is risk-adjusted to 50%.

BASE CASE

\$45.00

DCF

Risk-adjusted success in Alzheimer's (10%), good probability of success in mutated LRRK2 (60%) and value for BBB program. Our base case assumes ~30% market share in ALS, ~24% market share in Alzheimer's, and ~55% share LRRK2 mutated Parkinson's. BBB program represents ~31% of total peak revenues.

BEAR CASE

\$28.00

DCF

No Alzheimer's success, LRRK2 in mutated Parkinson's and some value for BBB program. RIPK1 approved for ALS, but not Alzheimer's and LRRK2 approved in Parkinson's. BBB program represents ~50% of peak revenues.

Risk Reward – Denali Therapeutics Inc (DNLI.O)

KEY EARNINGS INPUTS

Drivers	2019	2020e	2021e	2022e
Peak Sales (\$, mm)	18,937	18,937	18,937	18,937
Topline 3-Year CAGR (%)	28.0	8.3	70.4	101.3
Bottom line 3-Year CAGR (%)	(2.1)	2.6	(21.1)	(56.9)

CATALYST CALENDAR

Date	Event	Source: Thomson Reuters, Morgan Stanley
2020	ATV:aSyn: IND Submission	
2020	ATV:Tau: IND Submission	
2020	ATV:TREM2: IND Submission	
Q4 2020	DNL343: PhI data in healthy volunteers (COVID Delay)	
Q4 2020	DNL310 (ETV:IDS) : PhI/II biomarker PoC data in Hunter Syndrome	

INVESTMENT DRIVERS

- Interim DNL310 biomarker data from the PhI/II trial (YE20)
- Initiate PhI/II trial testing DNL151 (2021)

GLOBAL REVENUE EXPOSURE



100% North America

Source: Morgan Stanley Research Estimate
View explanation of regional hierarchies, [here](#)

MS ALPHA MODELS

4/5 BEST	24 Month Horizon	5/5 MOST	3 Month Horizon
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Source: Thomson Reuters, FactSet, Morgan Stanley Research; 1 is the highest favored Quintile and 5 is the least favored Quintile

RISKS TO PT/RATING

RISKS TO UPSIDE

- DNL788 demonstrates target engagement (RIPK1 inhibitor)
- DNL151 (LRRK2 programs) demonstrate efficacy beyond LRRK2 carriers
- BBB program achieves efficacy in several indications

RISKS TO DOWNSIDE

- Preclinical and clinical safety signals in any of the programs.
- The inability to advance any of the programs through clinical testing due to poor efficacy or concerning safety signals.
- Failure of the BBB program

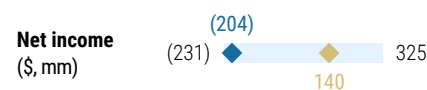
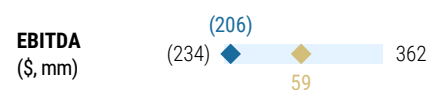
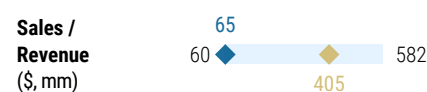
OWNERSHIP POSITIONING

Inst. Owners, % Active	78.5%	<div><div></div><div></div><div></div><div></div><div></div></div>
HF Sector Long/Short Ratio	2.3x	<div><div></div><div></div><div></div><div></div><div></div></div>
HF Sector Net Exposure	16.7%	<div><div></div><div></div><div></div><div></div><div></div></div>

Thomson Reuters; MSPB Content. Includes certain hedge fund exposures held with MSPB. Information may be inconsistent with or may not reflect broader market trends. Long/Short Ratio = Long Exposure / Short exposure. Sector % of Total Net Exposure = (For a particular sector: Long Exposure - Short Exposure) / (Across all sectors: Long Exposure - Short Exposure).

MS ESTIMATES VS. CONSENSUS

FY Dec 2020e



◆ Mean ◆ Morgan Stanley Estimates

Source: Thomson Reuters, Morgan Stanley Research

Elanco Animal Health (ELAN): Overweight, \$31 Price Target

David Risinger, Major and Specialty Pharmaceuticals

Industry View: We have an Attractive industry view on US Major Pharmaceuticals. We project 5% revenue growth and 10% EPS growth over the next three years, driven by new products and margin expansion. The industry's P/E appears attractive because it is currently trading at a significant discount relative to the S&P 500 and near historical lows. Concerns about US drug pricing and political risks are a key factor in discounted multiples. That said, a Democratic election sweep in November 2020 could cause further underperformance. Key drivers of individual stock performance are likely to include revenue growth relative to expectations, R&D progress, and potential M&A.

Investment Thesis: We highlight ELAN as a top stock pick because we expect Elanco to execute well on the Bayer acquisition, generate significant cost savings, de-lever the balance sheet, and introduce important pipeline products. We believe moderate revenue growth can translate to significant EBITDA and EPS growth and the pipeline could have a favorable impact on valuation over time. Our Base Case PT is \$31, and our Bull Case valuation of \$38 reflects the potential for greater Bayer acquisition accretion, faster margin expansion, and further P/E expansion.

Financials appear set to rebound. Elanco's potential to rebound in 2021 following inventory workdowns and COVID headwinds in 2020 plus Bayer's recent financial results leads us to forecast 2021e combined company EBITDA of \$1.15B. We estimate net debt of \$6.2B at deal close (August 3, 2020), which represents 5.2x '21e EBITDA of \$1.15B. Compelling combined company margin expansion and de-leveraging should drive very strong EPS growth (est 23% 2-yr CAGR in '21-'23).

Exhibit 32: We project 3% and 23% revenue and EPS CAGR ('21-23e), respectively

	2020E	2021E	2022E	2023E	CAGR ('21e-23e)	CAGR ('20e-23e)
Revenue (\$M)	3,298	4,716	4,840	5,001	3%	15%
<i>Growth</i>		43%	3%	3%		
EPS	\$0.57	\$1.23	\$1.54	\$1.85	23%	48%
<i>Growth</i>		114%	25%	21%		

Source: Morgan Stanley Research

Pipeline should start to contribute over medium-long term. After underwhelming in recent years, Elanco's pipeline newsflow should improve over time. Including Bayer's candidates, Elanco expects to launch 25 new products by 2024. If the company can introduce high-potential new products over the next 3-4 years, it could drive upward pressure on our long-term revenue CAGR of 3% and benefit the stock multiple. Note that we expect Elanco to provide additional perspective on its pipeline at its investor day in December 2020.

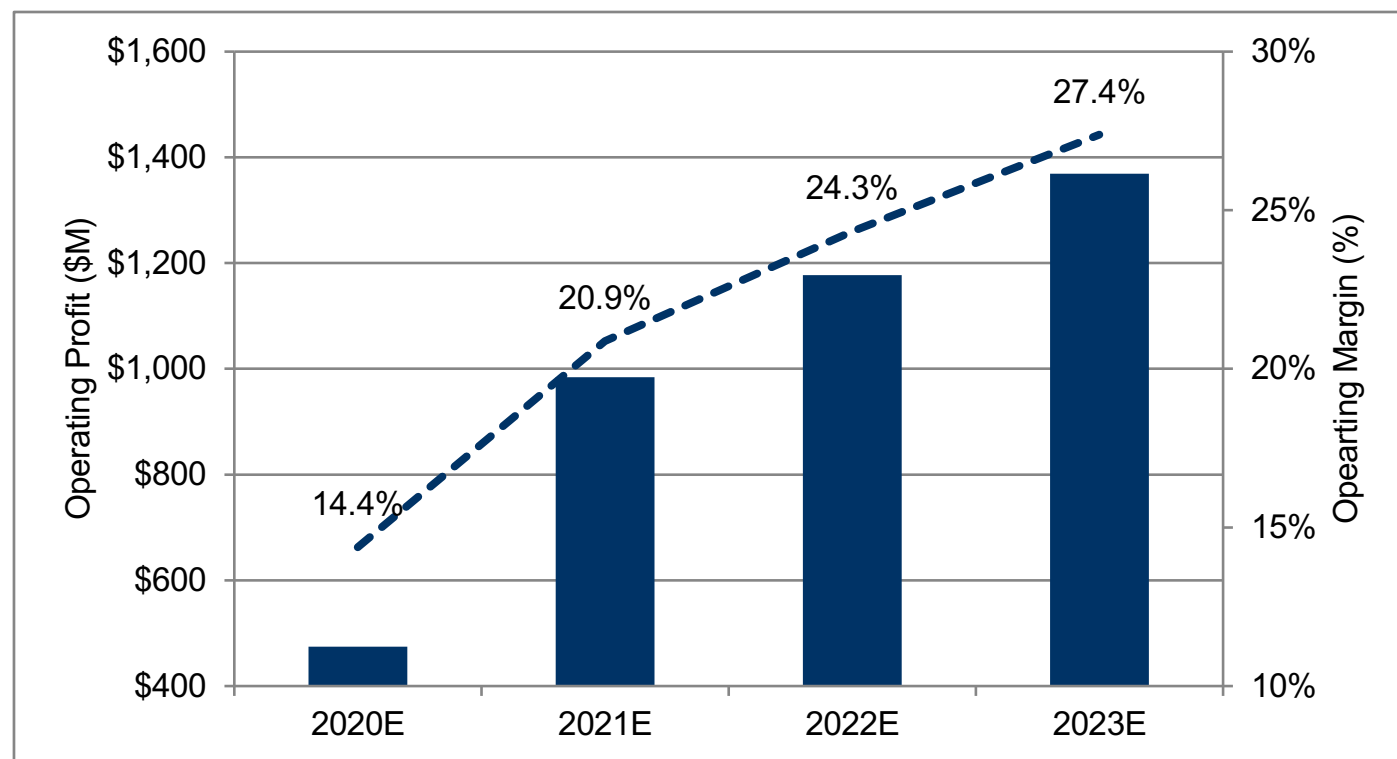
EV/EBITDA valuation appears increasingly attractive in out-years. We calculate Elanco's

EV/EBITDA is ~17.2x, calculated as follows: EV of \$19.7B, including current market cap of \$13.8B and net debt as of \$5.9B, represents ~17.2x '21e EBITDA of \$1.1B. Looking ahead two years, we estimate EV/EBITDA of ~12.6x, calculated as follows: EV of \$19.2B (including current market cap of \$13.8B plus year-end '22 net debt of \$5.4B) divided by '23e EBITDA of \$1.5B.

We project 2-yr (2021-23e) pro forma revenue CAGR of 3%. Elanco's revenue growth in coming years should be driven by the growth categories: Companion Animal Disease Prevention, Companion Animal Therapeutics and Food Animal Future Proteins & Health. These three segments account for ~65% of Elanco's 2020e standalone total company revenue and should grow mid-single digits. Ruminants & Swine revenue will likely struggle to grow. As for Bayer's revenues between 2020 to 2023e, we model the Advantage flea/tick line to decline low single digits, Baytil and Drontal product family to be flat (note that Drontal EU/UK rights were divested), and Seresto to grow mid-high single digits, and the rest of the portfolio (including new products) to grow 5%.

We project operating margin expanding from 20.9% in 2021e to 27.4% in 2023e. We consolidated Bayer revenues and costs and assume 2021-23 annual synergies of \$73M, \$174M, and \$261M, respectively (guidance: \$275-300M total synergies over five years). Ultimately, combined operating margin of ~27.4% in 2023e is higher than our stand-alone Elanco margin in the low-20s because Bayer is more profitable and offers synergies.

Exhibit 33: We project significant margin acceleration, reaching 27.4% in 2023e



Source: Morgan Stanley Research

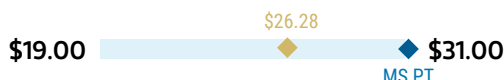
Risk Reward – Elanco Animal Health Inc (ELAN.N)

Risk reward skewed upward

PRICE TARGET \$31.00

Our PT is based on 25x pro forma 2021e EPS, which represents a PEG ratio of 1.1x 2-yr ('21-'23E) combined company EPS CAGR of 23%. We note that market leader trades at close to 40x 2021e EPS with a low-double digit EPS growth outlook, but it has higher value franchises and much less debt.

Consensus Price Target Distribution



Source: Thomson Reuters, Morgan Stanley Research

◆ Mean ◆ Morgan Stanley Estimates

RISK REWARD CHART AND OPTIONS IMPLIED PROBABILITIES (12M)



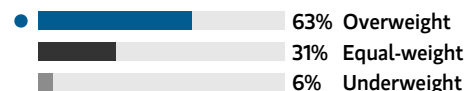
Key: — Historical Stock Performance ● Current Stock Price ◆ Price Target

Source: Thomson Reuters, Morgan Stanley Research, Morgan Stanley Institutional Equities Division. The probabilities of our Bull, Base, and Bear case scenarios playing out were estimated with implied volatility data from the options market as of 11 Sep, 2020. All figures are approximate risk-neutral probabilities of the stock reaching beyond the scenario price in either three-months' or one-years' time. View explanation of Options Probabilities methodology, [here](#)

OVERWEIGHT THESIS

- We are Overweight Elanco shares because we anticipate improving prospects in 2021, Bayer transaction benefits, and compelling long-term EPS growth.
- Compelling combined company margin expansion, driven by efficiencies and Bayer merger synergies plus deleveraging, should drive very strong EPS growth (est 23% 2-yr CAGR between '21-'23).
- The pipeline should progress over the long term and add new growth drivers. If pipeline contributions are greater-than-anticipated, it could accelerate company sales growth above our 3% long-term projection.

Consensus Rating Distribution



● MS Rating

Source: Thomson Reuters, Morgan Stanley Research

Risk Reward Themes

Earnings Quality: *Positive*
 Secular Growth: *Positive*
 Special Situation: *Positive*

View descriptions of Risk Rewards Themes, [here](#)

BULL CASE

\$38.00

28x combined '21e bull case EPS

Results are above forecast due to rebound post-COVID and Bayer AH synergy upside; pipeline comes into focus. Revenue upside is driven by rebound as COVID-19 pressures abate. Bayer transaction synergies are realized faster than expected, boosting margins. EPS is 10% above projection. Elanco discloses compelling pipeline candidates which can launch in the next few years.

BASE CASE

\$31.00

25x combined '21e base case EPS

We project compelling growth, Bayer AH transaction benefits, and rising pipeline expectations over time. We anticipate significant earnings growth, driven by cost efficiencies and Bayer merger synergies. Combined company margin expansion and deleveraging, which should drive strong EPS growth (est 23% 2-yr CAGR from '21-'23). Bayer AH boosts exposure to high-value Companion Animal markets. Pipeline expectations should rise over time as visibility increases for future high-value candidates.

BEAR CASE

\$22.00

20x combined '21e bear case EPS

COVID-19 causes financial downside, competitive pressures intensify, and Bayer AH deal disappoints. Financials are below due worse COVID-19 hits, Bayer sales disappointments, and competitive pressures. Bayer merger disappoints. New SAP IT system causes problems. EPS is below by 12%. FDA approves another triple combo parasiticide competitor (beyond ZTS' Simparica Trio) and second gRumensin launches. Cash flow disappoints. Government actions pressure sales of Livestock antibiotics.

Risk Reward – Elanco Animal Health Inc (ELAN.N)

KEY EARNINGS INPUTS

Drivers	2019	2020e	2021e	2022e
Net revenues growth (%)	0.1	7.4	43.0	2.6
Companion Animal growth (%)	4.4	(11.8)	9.6	4.4
Food Animal growth (%)	(1.6)	(13.4)	7.4	2.7
Gross profit growth (%)	4.6	4.1	49.2	7.0
Adj. EBITDA growth (%)	3.1	(8.3)	88.8	16.2

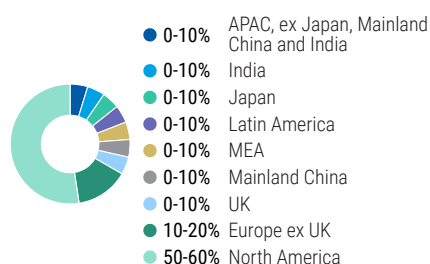
CATALYST CALENDAR

Date	Event	Source: Thomson Reuters, Morgan Stanley
01 Nov 2020 - 30 Nov 2020	3Q Results and 4Q Guidance (expected to be weak due to Bayer seasonality)	
01 Dec 2020 - 31 Dec 2020	Company Analyst Day and 2021 Guidance	
TBD	Updated 2020 guidance	

INVESTMENT DRIVERS

- Global livestock and companion animal market developments
- Financial results relative to expectations
- Cost savings execution
- Competitive developments
- Pipeline newsflow

GLOBAL REVENUE EXPOSURE



Source: Morgan Stanley Research Estimate
View explanation of regional hierarchies, [here](#)

MS ALPHA MODELS

4/5 BEST	24 Month Horizon	3/5 MOST	3 Month Horizon
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Source: Thomson Reuters, FactSet, Morgan Stanley Research; 1 is the highest favored Quintile and 5 is the least favored Quintile

RISKS TO PT/RATING

RISKS TO UPSIDE

- COVID-19 impacts are brief. Elanco results are above, and Bayer cost synergies are bigger/faster than expected. Compelling pipeline candidates come into focus.

RISKS TO DOWNSIDE

- Disappointing financial results. Competitive pressure hurts financials. Additional competitive threats emerge. Potential share issuance after Bayer lockup period ends (Bayer owns ~73M shares). Regulatory action against MFAs.

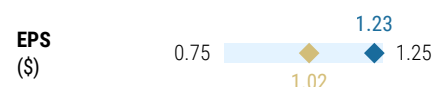
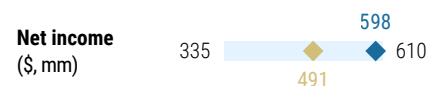
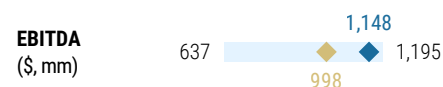
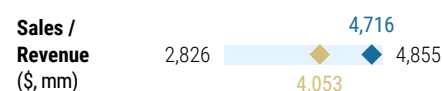
OWNERSHIP POSITIONING

Inst. Owners, % Active	71.3%	
HF Sector Long/Short Ratio	2.3x	
HF Sector Net Exposure	16.7%	

Thomson Reuters; MSPB Content. Includes certain hedge fund exposures held with MSPB. Information may be inconsistent with or may not reflect broader market trends. Long/Short Ratio = Long Exposure / Short exposure. Sector % of Total Net Exposure = (For a particular sector: Long Exposure - Short Exposure) / (Across all sectors: Long Exposure - Short Exposure).

MS ESTIMATES VS. CONSENSUS

FY Dec 2021e



◆ Mean ◆ Morgan Stanley Estimates

Source: Thomson Reuters, Morgan Stanley Research

Eli Lilly (LLY): Overweight, \$176 Price Target

David Risinger, Major and Specialty Pharmaceuticals

Industry View: We have an Attractive industry view on US Major Pharmaceuticals. We project 5% revenue growth and 10% EPS growth over the next three years, driven by new products and margin expansion. The industry's P/E appears attractive because it is currently trading at a significant discount relative to the S&P 500 and near historical lows. Concerns about US drug pricing and political risks are a key factor in discounted multiples. That said, a Democratic election sweep in November 2020 could cause further underperformance. Key drivers of individual stock performance are likely to include revenue growth relative to expectations, R&D progress, and potential M&A.

Investment Thesis: We highlight LLY as a top stock pick because we expect outperformance to be driven by upward pressure on long-term growth prospects, positive Phase 3 tirzepatide results starting in 4Q20, and rising enthusiasm for Lilly's Alzheimer's pipeline.

We believe consensus under-appreciates Lilly's long-term revenue and EPS growth potential; our 2025e revenue and EPS are both 7% above consensus. We project 5-yr 2020e-2025e CAGR revenue of 9% and EPS of 14%. Our 2025e revenue of \$36.2B is 7% above consensus' \$34.0B and EPS of \$14.20 is 7% above consensus' \$13.27. Our 2025e operating margin of 40.0% compares to consensus' 40.6%; we are slightly below based upon our assumption for greater reinvestment spending. Among Global Pharma, Lilly ranks among the fastest growers and has the least patent expirations over the next five years.

Pipeline candidate trifecta opportunity underappreciated: tirzepatide could be best-in-class for glucose lowering, weight loss, and cardiovascular risk; we see potential for peak sales to approach \$10B. Tirzepatide is one molecule with two agonistic mechanisms – GLP1 and GIP, the latter of which is a new mechanism. It could be the most effective HbA1c (measure of blood sugar level) lowering agent for diabetes, offer the most weight loss of any prescription drug, and reduce CV risk more than Lilly's #1 drug Trulicity. Although titration (increasing dose to target) could be up to five months, we believe it will be relatively seamless rather than onerous as bears believe. The biggest wildcard risk (although low odds given encouraging Phase 2 results, in our view) is potential side effects associated with the novel GIP mechanism. We project 2025e tirzepatide sales of \$3.7B, 124% above consensus' \$1.7B, and we expect positive Phase 3 results to drive consensus closer to our projections.

Beyond diabetes, tirzepatide could become a leading prescription drug for obesity. In Phase 2, tirzepatide 15 mg showed 13% weight loss (25 pounds from baseline of 196 pounds) at six months. We expect greater weight loss to be demonstrated in Phase 3 due to longer treatment duration (12 months) plus a higher percentage of patients reaching the highest dose (15 mg) given the slower titration (gradual increase in dosing). The current best selling prescription drug for obesity is Novo's Saxenda, which generated 2019A global sales of ~\$900M.

Early-stage diabetes pipeline set to deliver four proof of concept results in 2021. Lilly has three different novel incretin (hormones that stimulate insulin secretion) candidates scheduled to report Phase 1 results in 2021. This includes an oral GLP-1 small molecule that does not require fasting like competitor Novo's Rybelsus, an oral GIP/GLP-1 coagonist peptide, and a GGG tri-agonist (GIP/GLP-1/Glucagon). In addition, Lilly's once-weekly basal insulin is set to report three Phase 2 trials in 2021.

Exhibit 34: Key diabetes trial readouts ahead

Product (MOA)	Event	Timing
* Tirzepatide (GIP/GLP-1)	Novo Victoza (GLP-1) Phase 1/2 Alzheimer's readout, prim endpt cerebral glucose metabolic rate (ELAD; NCT01843075)	3Q20
Trulicity (GLP-1)	Novo Ozempic Phase 2 combo (GILD's cilofexor and firsocostat) NASH readout (NCT03987074); primary compl May '20	2H20
Trulicity (GLP-1)	PDUFA for high dose (AWARD-11)	4Q20
* Tirzepatide (GIP/GLP-1)	Novo high dose Ozempic Phase 3 SUSTAIN FORTE (NCT03989232); prim compl Sept '20	4Q20
* Tirzepatide (GIP/GLP-1)	Phase 3 readout in diabetes (SURPASS-1; NCT03954834) prim compl in Oct '20; topline expected in 4Q20	4Q20
OWL833 / LY3502970 (oral GLP-1R NPA)	Phase 1 data (licensed from Chugai) (NCT03929744 and NCT04426474); primary/study compl Dec '20 and Apr '21, respectively	1H21
LY3493269 (GIP/GLP Coagonist peptide)	Phase 1 data in diabetes (NCT04178733); prim/study compl May '20	1H21
LY3437943 GGG Tri-Agonist (GIP/GLP-1/Glucagon)	Phase 1 data in diabetes (NCT04143802); prim/study compl Dec '20	1H21
Tirzepatide (GIP/GLP-1)	Phase 3 readout in diabetes vs. Tresiba (SURPASS-3; NCT03882970) prim compl in Dec '20	1H21
Tirzepatide (GIP/GLP-1)	Phase 3 readout in diabetes inadequately controlled on Lantus (SURPASS-5; NCT04039503) prim compl in Jan '21	1H21
* Tirzepatide (GIP/GLP-1)	Phase 3 readout in diabetes vs. Trulicity (SURPASS J-mono; NCT03861052) prim compl Mar '21	mid '21
* Tirzepatide (GIP/GLP-1)	Phase 3 readout in diabetes vs. Ozempic (SURPASS-2; NCT03987919); prim compl Jan '21	mid '21
Tirzepatide (GIP/GLP-1)	Phase 3 readout in diabetes vs. Lantus (SURPASS-4; NCT03730662) prim compl May '21	mid '21
Trulicity (GLP-1)	Pfizer oral PF-06882961 (GLP-1) Phase 2 readout in type 2 diabetes (NCT03985293); prim compl Apr '21	mid '21
Trulicity (GLP-1)	Novo Victoza Phase 1/2 Parkinson's readout, prim endpt cerebral function (NCT02953665); prim compl Sept '21	2H21
Basal insulin-FC (once weekly)	Phase 2 in type 2 diabetes (NCT03736785 completed in Feb '20 and NCT04450394 with prim/study in Sept '21) and type 1 diabetes (NCT04450407 with primary/study completion in Sept '21) readouts are expected in 2021	2021
Tirzepatide (GIP/GLP-1)	Phase 3 readout in diabetes with or without sulfonylurea (SURPASS-AP-Combo; NCT04093752) prim compl in Feb '22	1H22
* Tirzepatide (GIP/GLP-1)	Phase 3 readout in obesity (SURMOUNT-1; NCT04184622) prim compl in Feb '22	1H22
* Tirzepatide (GIP/GLP-1)	Phase 2 readout in NASH (SYNERGY-NASH; NCT04166773) prim compl in Mar '22	1H22
Trulicity (GLP-1)	Novo Ozempic Phase 3 obese patients CV outcomes readout (SELECT; NCT03574597); prim compl Sept '23	4Q23
Trulicity (GLP-1)	Novo Ozempic Phase 3 diabetes CV outcomes readout (SOUL; NCT03914326); prim compl Jul '24	2H24
Trulicity (GLP-1)	Novo Ozempic Phase 3 diabetes CKD readout (FLOW; NCT03819153); prim compl Aug '24	2H24
* Tirzepatide (GIP/GLP-1)	Phase 3 readout vs. Trulicity in diabetes with CV diseases (SURPASS-CVOT; NCT04255433); prim/study completion in Oct '24	2H24
Trulicity (GLP-1)	Novo Ozempic Phase 3 diabetes retinopathy readout (FOCUS; NCT03811561); prim compl Feb '25	1H25

Source: Morgan Stanley Research, Company presentation

Lilly's Alzheimer's pipeline represents an inexpensive call option, in our view. We project only \$725M in risk-adjusted Alzheimer's pipeline sales in 2025e. If FDA approves competitor Biogen's aducanumab early next year, it could be a perception positive for Lilly given its leading Alzheimer's pipeline. Recall that aducanumab is highly controversial and an FDA approval could suggest a low regulatory bar for Alzheimer's. Hence, approval of aducanumab would boost expectations for the potential for other Alzheimer's candidates. Lilly has two Alzheimer's candidates (N3PG and tau antibody) set to report Phase 2 data in 2021. We assume only 5% odds of success for each, which implies risk-reward is skewed to the upside. **Separately**, Lilly is set to report Phase 2 data for mevidalen (D1 PAM) in Lewy body dementia (the second most common type of progressive dementia after Alzheimer's) in 2H20; we assume 5% odds of success.

Exhibit 35: Key Alzheimer's catalysts ahead

Product (MOA)	Event	Timing
* D1-PAM	Phase 2 Lewy body dementia; prim endpt CDR-CCB (PRESENCE; NCT03305809); prim compl July '20	3Q20
* Zagotenemab (Tau antibody)	Phase 2 readout for Roche's semorinemab (anti-tau) in prodromal-early Alzheimer's (TAURIEL; NCT03289143); prim endpt/compl - CDR-SB / Jun '20	3Q20
* Solanezumab	Biogen aducanumab (β-amyloid antibody) AdCom review expected in 4Q20 with PDUFA date of March 7, 2021	4Q20
* Donanemab (N3PG antibody)	Phase 2 early Alzheimer's screened for low-medium tau level, prim endpt is iADRS (TRAILBLAZER-ALZ; NCT03367403); readout expected in 1H21	1H21
* Zagotenemab (Tau antibody)	ABBV's ABBV-8E12 Phase 2 interim readout in early Alzheimer's CDR-SB prim endpt (NCT02880956); prim compl Apr '21	2Q21
D1-PAM II	Dementia treatment Phase 1 in healthy participants (NCT04014361); prim compl Jan '21	1H21
* Zagotenemab (Tau antibody)	Roche's semorinemab Phase 2 readout in moderate Alzheimer's (LAURIET; NCT03828747); prim endpt/compl - ADAS-COG11, ADCS-ADL / Aug '21	2H21
* Zagotenemab (Tau antibody)	Phase 2 early Alzheimer's readout, prim endpt is iADRS (NCT03518073); prim compl Aug '21	2H21
* Zagotenemab (Tau antibody)	Biogen's gosuranemab (BIIB092) Phase 2 trial in early Alzheimer's Disease (TANGO) readout is expected by YE21; prim endpt is AEs; secondary endpt is CDR-SB	YE21
* Donanemab (N3PG antibody)	Phase 2 early Alzheimer's readout, prim endpt is CDR-SB (TRAILBLAZER-ALZ 2; NCT04437511); prim compl Mar '23	2023
Solanezumab	Phase 3 high dose (4x) in early Alzheimer's readout; primary endpt is PACC (A4; NCT02008357); prim compl Jan '23	2023

Source: Morgan Stanley Research, Company presentation

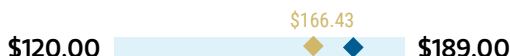
Risk Reward – Eli Lilly & Co. (LLY.N)

Positive Risk-Reward Skew

PRICE TARGET \$176.00

22x base case 2021e EPS, which is a significant premium to the US Pharma average of 13x, due to Lilly's better growth prospects (5-yr EPS CAGR 14% vs. group avg. 8%) and lower exposure to patent expirations.

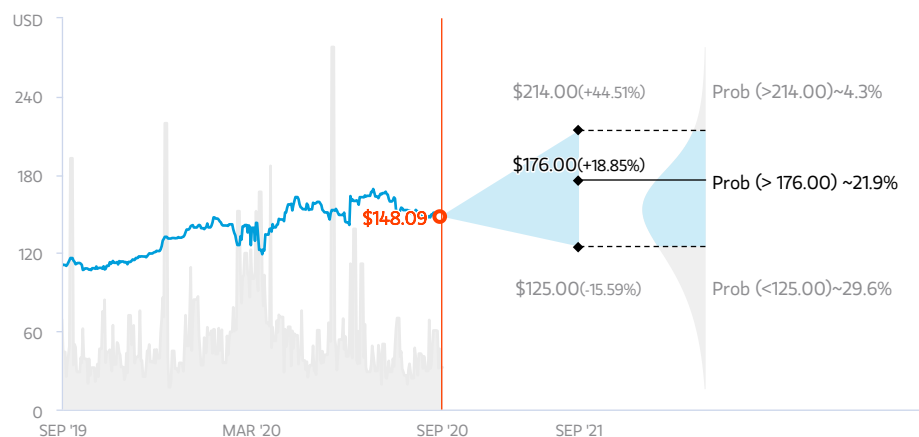
Consensus Price Target Distribution

\$120.00  \$189.00

Source: Thomson Reuters, Morgan Stanley Research

\$166.43
MS PT
◆ Mean ◆ Morgan Stanley Estimates

RISK REWARD CHART AND OPTIONS IMPLIED PROBABILITIES (12M)



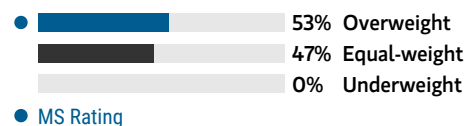
Key: — Historical Stock Performance ● Current Stock Price ◆ Price Target

Source: Thomson Reuters, Morgan Stanley Research, Morgan Stanley Institutional Equities Division. The probabilities of our Bull, Base, and Bear case scenarios playing out were estimated with implied volatility data from the options market as of 11 Sep, 2020. All figures are approximate risk-neutral probabilities of the stock reaching beyond the scenario price in either three-months' or one-years' time. View explanation of Options Probabilities methodology, [here](#)

OVERWEIGHT THESIS

- We are Overweight LLY shares as we believe consensus underappreciates Lilly's long-term revenue and EPS growth potential.
- We project 2020e-2025e CAGR rev +9% and EPS +14%.
- We see upside potential for pipeline candidate tirzepatide's "trifecta" opportunity in diabetes, obesity, and cardiovascular health.
- Pipeline newsflow on diabetes and Alzheimer's candidates could drive stock upside/downside, but we view LLY's Alzheimer's pipeline as an inexpensive call option.
- Lilly could pursue additional tuck-in transactions to enhance long-term growth prospects.

Consensus Rating Distribution



● MS Rating

Source: Thomson Reuters, Morgan Stanley Research

Risk Reward Themes

Earnings Quality: *Positive*
Out of consensus: *Positive*
Secular Growth: *Positive*

View descriptions of Risk Rewards Themes, [here](#)

BULL CASE

\$214.00

25x 2021e bull case EPS

Earnings are above forecast, tirzepatide data is highly compelling, and Alzheimer's newsflow surprises on the upside. Revenue upside yields EPS 7% above forecast. Tirzepatide Ph 3 data is stellar. A Lilly Alzheimer's Ph 2 trial surprisingly succeeds. External transactions add compelling new growth drivers.

BASE CASE

\$176.00

22x 2021e base case EPS

Upward financial pressure plus pipeline newsflow should drive outperformance. We forecast robust 5-yr CAGR revenue (9%) and EPS (14%) growth, including OM expansion as sales growth drives operating leverage. We expect positive newsflow on tirzepatide (Ph 3 diabetes candidate) and some early diabetes candidates. Expectations could rise for Alzheimer's candidates, which are high-risk, high reward opportunities.

BEAR CASE

\$125.00

17x 2021e bear case EPS

Financials and key pipeline agents disappoint. Revenue growth misses due to competitive pressures and COVID-related factors, driving earnings 8% below expectations. Major clinical trial readout disappointments (e.g. tirzepatide safety issues because it includes a novel mechanism -- GIP). Government action on drug prices hurts financial prospects. Competitors generate better-than-expected data (e.g. Novo's high-dose Ozempic in Sustain-Forte).

Risk Reward – Eli Lilly & Co. (LLY.N)

KEY EARNINGS INPUTS

Drivers	2019	2020e	2021e	2022e
Total revenues growth (%)	3.8	7.0	9.6	6.8
Trulicity growth (%)	29.0	30.1	23.5	15.2
Taltz growth (%)	45.7	34.4	24.1	15.7
Gross profit growth (%)	4.2	7.3	10.1	7.2
Operating income, EBITA growth (%)	(0.9)	20.8	16.8	10.5

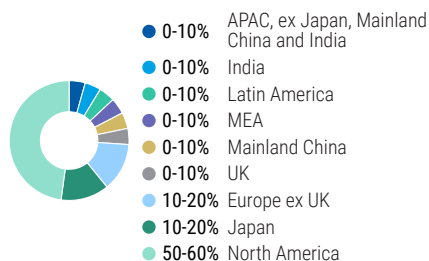
CATALYST CALENDAR

Date	Event	Source: Thomson Reuters, Morgan Stanley
Q3 2020	LY-CoV555 (COVID antibody) (w/ AbCellera) Ph 1 in hospitalized patients (NCT04411628) data expected to be	
Q3 2020	Tirzepatide (GIP/GLP-1): Competitor Novo Victoza (GLP-1) Phase 1/2 Alzheimer's readout, prim endpt cerebral glucose	
Q3 2020	D1-PAM Phase 2 Lewy body dementia (PRESENCE; NCT03305809); prim compl July 2020	
Q3 2020	Olumiant (JAK) + remdesivir NIAID's Adaptive COVID-19 Treatment Trial (ACTT-2; NCT04401579) in hospitalized	
18 Sep 2020	Verzenio (CDK 4/6) Phase 3 HR+/HER2-, high risk adjuvant breast cancer (MonarchE; NCT03155997) detailed results at	

INVESTMENT DRIVERS

- Quarterly results and financial guidance updates
- Key product developments, including Trulicity, Jardiance, Taltz, and Verzenio.
- Pipeline newsflow, including diabetes, oncology, and Alzheimer's
- Competitive developments
- Potential M&A

GLOBAL REVENUE EXPOSURE



Source: Morgan Stanley Research Estimate
View explanation of regional hierarchies, [here](#)

MS ALPHA MODELS

2/5 BEST	24 Month Horizon	2/5 MOST	3 Month Horizon
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Source: Thomson Reuters, FactSet, Morgan Stanley Research; 1 is the highest favored Quintile and 5 is the least favored Quintile

RISKS TO PT/RATING

RISKS TO UPSIDE

Upside risks are financial results above expectations, positive pipeline news (e.g. tirzepatide for diabetes and Alzheimer's-related newsflow), competing products disappoint, and compelling external action.

RISKS TO DOWNSIDE

Financials miss, pipeline disappoints (e.g. tirzepatide), negative Alzheimer's newsflow, competing drugs surprise on the upside, and Democratic election sweep causes drug pricing concerns.

OWNERSHIP POSITIONING

Inst. Owners, % Active	52.6%	
HF Sector Long/Short Ratio	2.3x	
HF Sector Net Exposure	16.7%	

Thomson Reuters; MSPB Content. Includes certain hedge fund exposures held with MSPB. Information may be inconsistent with or may not reflect broader market trends. Long/Short Ratio = Long Exposure / Short exposure. Sector % of Total Net Exposure = (For a particular sector: Long Exposure - Short Exposure) / (Across all sectors: Long Exposure - Short Exposure).

MS ESTIMATES VS. CONSENSUS

FY Dec 2021e

Sales / Revenue (\$, mm)	25,180	26,163	26,640
		25,960	

EBIT (\$, mm)	8,066	8,581	9,003
		8,563	

Net income (\$, mm)	6,697	7,233	7,696
		7,243	

EPS (\$)	7.32	8.01	8.45
		8.00	

◆ Mean ◆ Morgan Stanley Estimates

Source: Thomson Reuters, Morgan Stanley Research

iRhythm Technologies (IRTC): Overweight, \$259 Price Target

David Lewis, Medical Technology

Industry View: We continue to hold an Attractive view of the Medical Device industry, following a multi-year move into Medtech. Devices have outperformed healthcare by >50 points over approximately four years, fueled by improving organic growth (which has roughly doubled across our industry over the past five years) and structural drug supply chain concerns. Today, our large-cap coverage trades at just a <5% NTM P/E premium to the S&P 500 (down from ~25-30% in late 2019) as market valuation has expanded to multi-year highs on expectations for further monetary and fiscal stimulus (\$20T+ to date), upside surprises across recent economic data, and broadly stronger 2Q earnings vs. Street expectations. We hold the view that outperformance over the intermediate term will be dependent on the relative pace of organic growth re-acceleration from 2Q troughs into 2H and 2021, while longer-term fundamental drivers remain intact. See our recent [Device Download](#) for further thoughts.

Investment Thesis: iRhythm's Zio is a disruptive technology in a large, growing market for ambulatory electrocardiogram monitoring in the US with better diagnostic yield and cost effectiveness versus incumbent monitoring modalities. iRhythm can successfully penetrate the existing ECG monitoring market and has multiple catalysts for total addressable market expansion from new product launches and indication expansion efforts.

Recent reimbursement update drives numbers higher. Earlier this month, CMS released its proposed 2021 Physician Fee Schedule (PFS), updating payment policies and rates for Medicare services beginning January 1, 2021. Key iRhythm CPT codes received a ~30% payment increase (see our [full analysis here](#)), representing a significant positive development in the most important debate around iRhythm shares. We predicted a positive outcome in connection with the PFS in our June reimbursement note (see [Reimbursement on Deck; Risk/Reward Still Skews Positive](#)). Bears argued for a negative outcome with rates potentially cut by as much as 50%, a view that hinged on reimbursement outcomes being similar to existing Holter or event monitors. We disagreed and saw the outcome skewing positive with an up to 15% uplift to 2021 revenue in our Bull case, which compares to the 11% uplift in our new base case here following the release. We see multiple dynamics: **(1)** payor renegotiations, **(2)** the PFS Conversion Factor, **(3)** GPCI mix, **(4)** reduction in commercial channel friction, **(5)** growth reinvestment, **(6)** home use reimbursement, and **(7)** Medicaid, which could bring our new Bull case scenario (revenue +20%) into view, driving numbers and the multiple much higher.

IRTC has a robust catalyst path ahead. Key upcoming catalysts include: **(1)** Continued sales momentum from XT, as well as AT rollout driving cross-selling into XT accounts; note AT remains well below 10% of Zio's revenue mix to date; **(2)** mSToPS 3-year data remains on track for AHA 2020, which if successful could expand the core TAM into silent AF, which includes 10+mn patients and is 2x the size of the symptomatic TAM; **(3)** it's still possible that we see SCREEN-AF data later this year, potentially at the ESO-WSO conference which was postponed from May to November; and **(4)** the Verily

commercialization, which we still see as on track save a 1-2 quarter COVID-19-related delay relative to the expected 2H21 approval / commercialization.

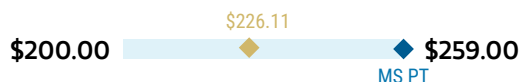
Risk Reward – IRHYTHM TECHNOLOGIES INC (IRTC.O)

Disruptive technology in a growing end market with TAM expansion potential

PRICE TARGET \$259.00

Our price target of \$259 is supported by DCF assuming a ~3% perpetuity growth and a ~7% WACC, and reflects a ~17x multiple off of our base case 2021e sales, at a premium to High Growth SMID peers. We assume sales growth to be driven by continued ZIO penetration of the ambulatory ECG market.

Consensus Price Target Distribution



Source: Thomson Reuters, Morgan Stanley Research

RISK REWARD CHART



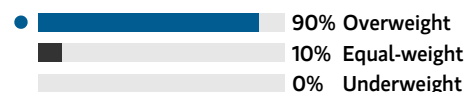
Key: — Historical Stock Performance ● Current Stock Price ◆ Price Target

Source: Thomson Reuters, Morgan Stanley Research

OVERWEIGHT THESIS

- iRhythm's Zio is poised to be a disruptive technology in a large, growing market for ambulatory electrocardiogram monitoring in the US with better diagnostic yield and cost effectiveness versus current monitoring modalities
- iRhythm can successfully penetrate the existing ECG monitoring market and has multiple catalysts for total addressable market expansion from new product launches and indication expansion efforts

Consensus Rating Distribution



● MS Rating

Source: Thomson Reuters, Morgan Stanley Research

Risk Reward Themes

Disruption: Positive
Regulation: Positive
Share Gain: Positive

View descriptions of Risk Rewards Themes, [here](#)

BULL CASE

\$303.00

~18.5x EV/'21e Sales

iRhythm sees faster market penetration and additional upside from new indication and ex US expansion. Reimbursement rate negotiation and geographic volume shifts move more pronounced than our expectations, with partial or full reversal of PFS Conversion Factor cut. Stronger ZIO traction due to increasing sales force efficiency and robust insurance coverage and reimbursement pushes investors to value the business on a higher multiple, in line with the peer group median/mean.

BASE CASE

\$259.00

DCF based; reflect ~17x '21e EV/Sales

COVID-19 impact less severe than peers with heavier elective procedure mixes given focus on online enrollment and registration. Reimbursement rate negotiation and geographic volume shifts move in line with our expectations. iRhythm is able to reach low double digit penetration of the US ambulatory ECG market by 2020, driving sales of ~\$250mn.

BEAR CASE

\$157.00

~12.5x EV/'21e Sales

COVID-19 impacts ZIO volume more materially than expected. Commercial payor reimbursement rates come in lower than expected. iRhythm faces a slower launch with tougher competition. In this scenario, US market share reaches only high single digits by the end of 2020. Valuation multiples contract as investors apply multiples at a discount to the peer group.

Risk Reward – IRHYTHM TECHNOLOGIES INC (IRTC.O)

KEY EARNINGS INPUTS

Drivers	2019	2020e	2021e	2022e
Revenue (\$, mm)	214.6	261.9	412.0	559.6
Revenue Growth (%)	45.7	22.1	57.3	35.8
Gross Margin (%)	75.5	72.8	79.7	80.9
Operating Expenses (\$, mm)	216.8	246.6	287.4	317.6

INVESTMENT DRIVERS

- iRhythm's current penetration of the US ambulatory ECG monitoring market is ~6-7%, and physician diligence suggests potential for utilization to double
- Extensive database of ECG data and curation abilities provide data quality and cost advantages

GLOBAL REVENUE EXPOSURE



● 100% North America

Source: Morgan Stanley Research Estimate
View explanation of regional hierarchies, [here](#)

MS ALPHA MODELS

2/5 BEST	24 Month Horizon	3/5 MOST	3 Month Horizon
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Source: Thomson Reuters, FactSet, Morgan Stanley Research; 1 is the highest favored Quintile and 5 is the least favored Quintile

RISKS TO PT/RATING

RISKS TO UPSIDE

- Faster than expected scaled ZIO AT rollout driving meaningful share gains in the near term
- Faster than expected profitability breakeven

RISKS TO DOWNSIDE

- Competitors' ongoing efforts to develop product solutions
- Limited visibility into management's efforts to drive TAM expansion via new product introductions and indication expansion efforts.
- Ongoing investment may lead to a future capital raise given negative FCF.

OWNERSHIP POSITIONING

Inst. Owners, % Active	74.8%	<div><div></div><div></div><div></div><div></div><div></div></div>
HF Sector Long/Short Ratio	2.3x	<div><div></div><div></div><div></div><div></div><div></div></div>
HF Sector Net Exposure	16.7%	<div><div></div><div></div><div></div><div></div><div></div></div>

Thomson Reuters; MSPB Content. Includes certain hedge fund exposures held with MSPB. Information may be inconsistent with or may not reflect broader market trends. Long/Short Ratio = Long Exposure / Short exposure. Sector % of Total Net Exposure = (For a particular sector: Long Exposure - Short Exposure) / (Across all sectors: Long Exposure - Short Exposure).

MS ESTIMATES VS. CONSENSUS

FY Dec 2020e

Sales / Revenue (\$, mm)	241	<div><div></div><div></div><div></div><div></div><div></div></div>	262
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EBIT (\$, mm)	(74)	<div><div></div><div></div><div></div><div></div><div></div></div>	(48)
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EPS (\$)	(2.67)	<div><div></div><div></div><div></div><div></div><div></div></div>	(1.54)
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◆ Mean ◆ Morgan Stanley Estimates

Source: Thomson Reuters, Morgan Stanley Research

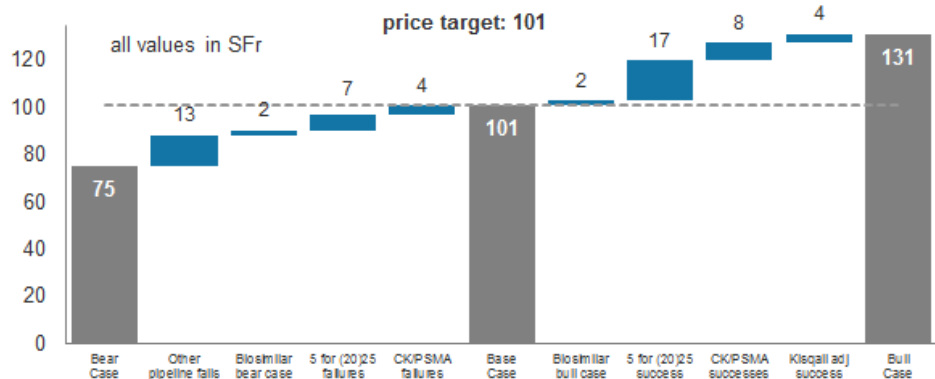
Novartis (NOVN.S): Overweight, CHF101 Price Target

Mark Purcell, European Pharmaceuticals

Industry View: We have an In-line industry view on Europe Pharmaceuticals. We expect innovation and pricing power initiatives to evolve hand in glove for the EU biopharma industry, increasing the onus on companies to deliver innovation in order to retain pricing power. We argue geographical and therapeutic diversification will be rewarded over a period of uncertainty for the industry, alongside relatively low exposure to potential post-election policy change in the US. We also expect strategic optionality from the COVID-19 pandemic, an emerging innovation narrative and compelling valuation as opposed to momentum arguments will be supportive. We believe that new drug pricing initiatives will likely emerge in 2021, as governments seek to rebuild balance sheets impacted by the COVID-19 pandemic. Our European Equity Strategists are Underweight Pharmaceuticals, favouring cyclical sectors in a more reflationary environment and viewing Pharmaceuticals as an "anti re-opening trade" with more exposure to US election risk than other European sectors.

Investment Thesis: Our Overweight thesis on Novartis is anchored on a shift from an execution risk to an execution reward story, with the emergence of hidden pipeline assets in 2021 not reflected in the current valuation. Despite a strong operating performance, investor sentiment has fallen sharply following negative sales revisions to key product launches and rising concerns that Novartis is "running to stand still" without acquiring innovation to offset a steady cadence of patent expiries. This narrative ignores the pipeline, where we forecast risk-adjusted peak sales of just \$11.0bn across 30 pipeline assets, with an implied 36% probability of success reflecting high innovation risk ahead of 15+ pivotal and proof-of-concept read-outs in 2021. The set up is reminiscent of the Roche equity story in 2018.

Exhibit 36: Novartis is trading near our pipeline base case, highlighting the deterioration in sentiment



Source: Morgan Stanley Research estimates. Note: adj=adjuvant breast cancer; CK=canakinumab; PSMA=PSMA-617

Deep-dive analysis of the pipeline has revealed 5 for (20)25: We have identified five "hidden" pipeline assets expected to be launched by 2025, with high innovation risk / low commercial risk across a spectrum of specialist settings and combined sales potential of

\$12bn. Two of these - ligelizumab for hives and MBG453 for blood cancers - could be launched as early as 2022. We expect pivotal data for wild-card canakinumab in lung cancer and for PSMA-617 in prostate cancer 1H21.

The underappreciated growth story within Sandoz: We argue that the global transformation of Novartis' manufacturing network will disproportionately benefit Sandoz and that the biosimilars business, led by the blockbuster launch of biosimilar denosumab, will see the division deliver double-digit bottom-line growth from 2024-onwards, thereby opening up strategic optionality.

Valued as a patent-cliff story, pipeline "for free": We think Novartis is valued as a company on the edge of a prolonged patent cliff as opposed to a 8% EPS CAGR story, trading on 12x 2021 earnings, a -23% discount to its large-cap pharma peers. We argue the valuation now fully reflects both execution risks and "running to stand still" growth concerns. What is missing is an appreciation of the execution rewards and pipeline optionality: stripping out 29 pre-registration pipeline assets, our fair-value is CHF75/share. Recognising that investors will view this as a "show me" story, our Novartis price-target of CHF101/share is equivalent to a -12% P/E discount to its peers on 2021 earnings. Novartis looks well placed entering 2021 and greater pipeline recognition should drive a positive re-rating.

Risk Reward – Novartis AG (NOVN.S)

Moving from Execution risk to reward

PRICE TARGET SFr 101.00

Our price target is derived from a DCF analysis, with product-by-product sales forecasts up to 2028. We assume a WACC of 6.6%, +1% terminal growth rate and a reversion of ROCE to the cost of capital in the long term.

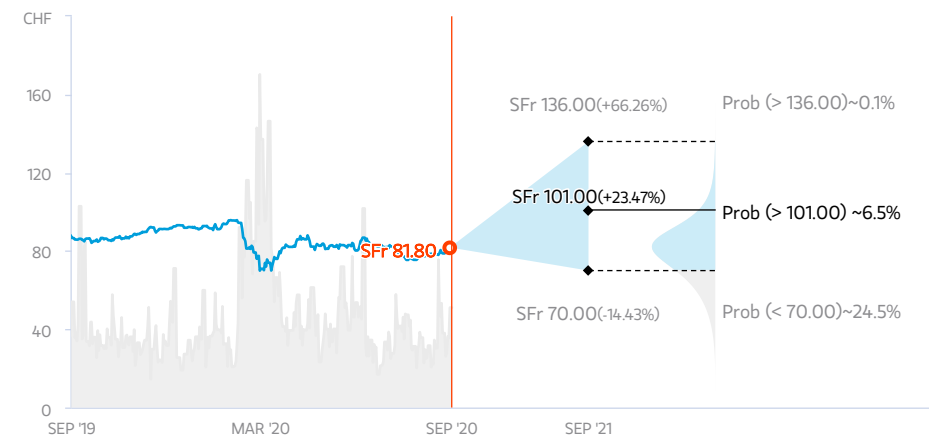
Consensus Price Target Distribution

SFr 74.70 SFr 97.18 SFr 109.55

Source: Thomson Reuters, Morgan Stanley Research



RISK REWARD CHART AND OPTIONS IMPLIED PROBABILITIES (12M)



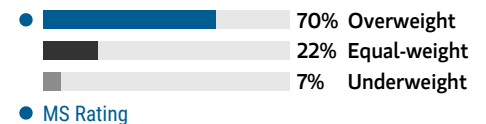
Key: — Historical Stock Performance ● Current Stock Price ◆ Price Target

Source: Thomson Reuters, Morgan Stanley Research, Morgan Stanley Institutional Equities Division. The probabilities of our Bull, Base, and Bear case scenarios playing out were estimated with implied volatility data from the options market as of 11 Sep, 2020. All figures are approximate risk-neutral probabilities of the stock reaching beyond the scenario price in either three-months' or one-years' time. View explanation of Options Probabilities methodology, [here](#)

OVERWEIGHT THESIS

- We argue 2021 will be an execution reward year. We have identified five "hidden" pipeline assets expected to be launched by 2025, with high innovation risk / low commercial risk across a spectrum of specialist settings and combined sales potential of \$12bn.
- We expect that the global transformation of Novartis' manufacturing network will disproportionately benefit Sandoz and that the biosimilars business will see the division deliver double-digit bottom-line growth from 2024-onwards.
- We believe the valuation now fully reflects both execution risks and "running to stand still" growth concerns. What is missing is an appreciation of the execution rewards and pipeline optionality.

Consensus Rating Distribution



Source: Thomson Reuters, Morgan Stanley Research

Risk Reward Themes

Secular Growth: *Positive*
Self-help: *Negative*

View descriptions of Risk Rewards Themes, [here](#)

BULL CASE SFr 136.00

24x bull case 2020e EPS

Assumes 5% revenue / 11% EPS CAGR over 2019-24e and \$12.1bn from the pipeline in 2025e. Implies an 37% P/E premium to the sector. Success in long term pipeline opportunities account for \$14 of upside.

BASE CASE SFr 101.00

19x base case 2020e EPS

Assumes 3% revenue / 8% EPS CAGR 2019-24 and \$5.1bn from the pipeline in 2025. Implies a 7% P/E premium to the sector.

BEAR CASE SFr 70.00

14x bear case 2020e EPS

Assumes 1% revenue / 4% EPS CAGR over 2019-24e and no contribution from the pipeline in 2025e. Negative US pricing impact EPS by -3%. Implies a -17% P/E discount to the sector. Failure in long term pipeline opportunities account for \$9 of downside.

Risk Reward – Novartis AG (NOVN.S)

KEY EARNINGS INPUTS

Drivers	2019	2020e	2021e	2022e
Group sales growth at CER (%)	9.0	6.6	7.0	5.0
Pharma sales growth at CER (%)	11.0	7.4	8.0	5.6
Core group gross margin (%)	78.7	79.9	80.5	81.2
Core group operating margin (%)	29.7	31.1	33.1	35.3
Core EPS growth at CER (%)	9.0	13.4	13.2	12.2

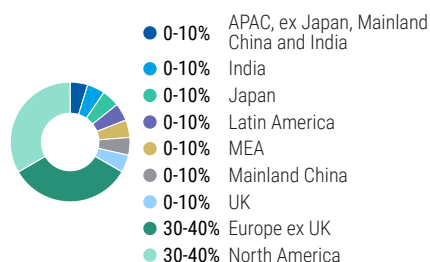
CATALYST CALENDAR

Date	Event	Source: Thomson Reuters, Morgan Stanley
27 Oct 2020	Q3 2020 Novartis AG Earnings Release	

INVESTMENT DRIVERS

- Key new drugs **Cosentyx, Entresto, Zolgensma, Kisqali, Kesimpta**
- Pipeline drugs (**incisiran, canikinumab, PSMA-617, ligelizumab** in CSU, **MBG453, LNPO23, iscalimab, TQJ230** in various indications)
- Continued **margin expansion**

GLOBAL REVENUE EXPOSURE



Source: Morgan Stanley Research Estimate
View explanation of regional hierarchies, [here](#)

MS ALPHA MODELS

1/5
MOST

3 Month
Horizon

Source: Thomson Reuters, FactSet, Morgan Stanley Research; 1 is the highest favored Quintile and 5 is the least favored Quintile

RISKS TO PT/RATING

RISKS TO UPSIDE

Pipeline delivers above expectations, Zolgensma becomes standard of care in SMA, strong uptake of Kesimpta, and Cosentyx leadership in immunology remains undisturbed despite rising competition.

RISKS TO DOWNSIDE

Pipeline failures, execution risk for Zolgensma, slow launches of new products (Kesimpta, incisiran, Beovu, Mayzent, Adakveo).

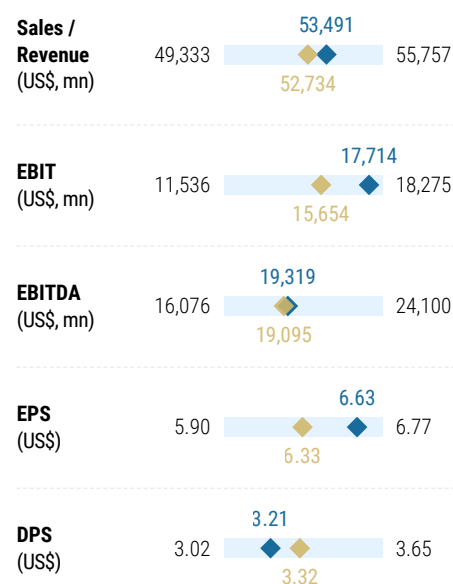
OWNERSHIP POSITIONING

Inst. Owners, % Active	70.8%	
HF Sector Long/Short Ratio	2.4x	
HF Sector Net Exposure	14%	

Thomson Reuters; MSPB Content. Includes certain hedge fund exposures held with MSPB. Information may be inconsistent with or may not reflect broader market trends. Long/Short Ratio = Long Exposure / Short exposure. Sector % of Total Net Exposure = (For a particular sector: Long Exposure - Short Exposure) / (Across all sectors: Long Exposure - Short Exposure).

MS ESTIMATES VS. CONSENSUS

FY Dec 2021e



◆ Mean ◆ Morgan Stanley Estimates

Source: Thomson Reuters, Morgan Stanley Research

Sun Pharmaceuticals (SUN.NS): Overweight, Rs 611 Price Target

Sameer Baisiwala, India Healthcare

Industry View: Indian pharma industry is up 40% YTD versus Nifty down 5%, implying a strong 45% outperformance. We have an In-Line view of the India's pharmaceutical industry which balances strong generic drug demand with reasonable industry valuations at 25x and 21x F21 and F22 EPSe, respectively. Overall, the industry has sound fundamentals in terms of relatively stable global generic demand, now moderated US generic price erosion, steady growth in domestic market, progression towards Model SV.0 (specialty and biosimilar model) and strong balance sheets.

The segment should continue to reinforce its position as a "proxy on global generics", and benefit from relatively stable global demand. Breadth in the product portfolio and country markets, expansion of manufacturing capacities (US\$2bn in capex in three years) and a thick pipeline of regulatory filings underline our conviction. In addition, Indian generic companies are targeting complex products, including modified release forms, inhalers, injectables and controlled substances. Biosims and specialty are two new emerging themes.

We continue to profess bottom-up stock picking. Our framework for investing is: strong branded EM business, preparedness to launch high value products in the US market, low regulatory overhang, strong IP visibility at reasonable valuation.

Investment Thesis: We expect Sun to benefit from positive operating leverage over the next 12-18 months as high up-front costs pertaining to specialty and low manufacturing utilization gets absorbed with sales growth. We estimate 12% sales CAGR and 6-7% expense CAGR over next two years, which should translate into 18-20% earnings CAGR. Potential scale up of US specialty business over next couple of year (F22-23), should be re-rating catalysts. Stock is trading at 24x F21 and 21x F22 EPSe, which appears in line with industry valuations.

Upcoming Catalysts: We view the following events as potential near-term catalysts: 1) Ilumya – monthly prescriptions ramp-up; faster conversion from Early Access Program (EAP) to commercial plans; 2) Cequa ramp up; 3) prescription shift to the new improved Absorica LD; 4) better cost control; 5) Value-accretive potential M&A; 6) FCF generation leading to de-leveraging; and 6) potential Halol remediation (OAI status).

Key risks: New generic competition for Absorica in Dec-20 seems to be the key near-term risk to earnings. Ongoing US price fixing investigation and generic exclusivity court case are risks to our call. Other risks include 1) Fx headwinds - INR:USD appreciation; 2) prolonged COVID-19 spread in the US can delay specialty and derma recovery; and 3) US FDA issues at Halol site.

Risk Reward – Sun Pharmaceutical Industries (SUN.NS)

Steady earnings growth, specialty optionality and valuations supports our OW.

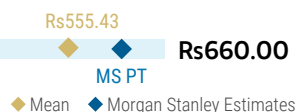
PRICE TARGET Rs611.00

Our price target is based on 24x our March 2022 EPS estimate. Our P/E is 5% higher than the large-cap industry average P/E. We think this is justified as Sun has new growth engines – specialty, leadership in the domestic market and sizeable and growing businesses in ROW and EMs.

Consensus Price Target Distribution

Rs380.00 Rs555.43 Rs660.00

Source: Thomson Reuters, Morgan Stanley Research



RISK REWARD CHART



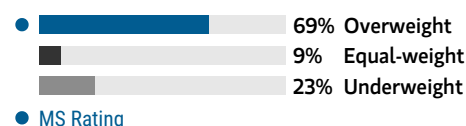
Key: — Historical Stock Performance ● Current Stock Price ◆ Price Target

Source: Thomson Reuters, Morgan Stanley Research

OVERWEIGHT THESIS

- Sun Pharma has a fully integrated business model. Its foray into the specialty segment supplements its generic business.
- Over the next two years (F21-F22), we expect CAGRs of 10.4% in sales and 27.5% in EPS, driven by steady growth in the US, India, and ROW along with margin expansion due to operating leverage.
- Valuation looks attractive at P/E of 21.1x for F22e.
- Globally aging population, pressure to contain costs, significant patent expiries, and new markets (such as Japan) define global opportunities.

Consensus Rating Distribution



Source: Thomson Reuters, Morgan Stanley Research

Risk Reward Themes

Earnings Quality: *Positive*
Out of consensus: *Negative*
Secular Growth: *Positive*

View descriptions of Risk Rewards Themes, [here](#)

BULL CASE

Rs757.00

Faster growth from new launches

We assume a strong base business (Rs61 per share), rerating on filing of complex generics (Rs61 per share) and a value-accretive acquisition (Rs23 per share).

BASE CASE

Rs611.00

Our base case implies 24x Mar'22 EPS

Revenue growth and operating leverage to drive earnings growth: In F21-22, we estimate 10.4% revenue CAGR, 390bps operating margin expansion, and 27.5% EPS CAGR.

BEAR CASE

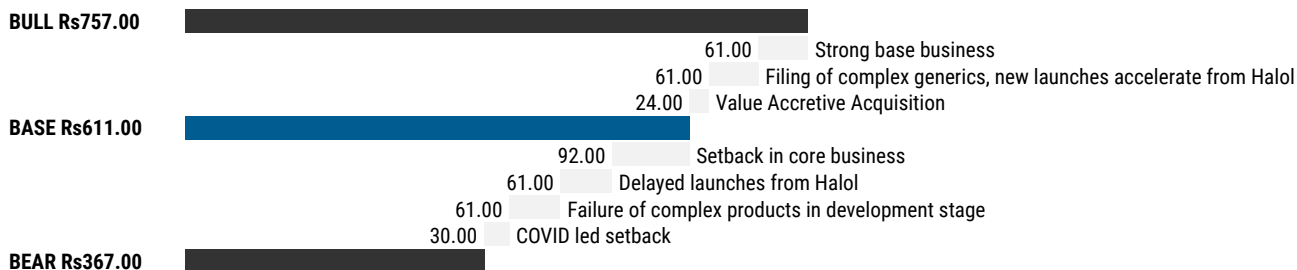
Rs367.00

Deterioration in the base business

A setback in core business (Rs92 per share), failure of complex products in the development stage (Rs61 per share), delayed launches from Halol (Rs61 per share) and COVID led setback (Rs30 per share).

Risk Reward – Sun Pharmaceutical Industries (SUN.NS)

BULL BASE BEAR DRIVERS



KEY EARNINGS INPUTS

Drivers	2019	2020e	2021e	2022e
Domestic growth (%)	(8.5)	32.2	8.0	13.0
Ilumya sales (US\$mn)	0	30	110	250
US Sales (US\$mn)	1,526	1,488	1,666	1,814
R&D as a % of sales (%)	6.8	6.0	6.3	6.2
Operating profit margins (%)	21.7	21.3	24.3	25.2

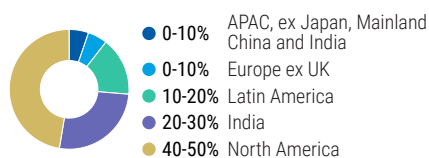
CATALYST CALENDAR

Date	Event	Source: Thomson Reuters, Morgan Stanley
05 Nov 2020 - 09 Nov 2020	Q2 2021 Sun Pharmaceutical Industries Ltd Earnings Release	
01 Dec 2020 - 31 Dec 2020	Absorica generic competition	
04 Feb 2021 - 08 Feb 2021	Q3 2021 Sun Pharmaceutical Industries Ltd Earnings Release	

INVESTMENT DRIVERS

- Momentum in the base business driven by several geographies
- New launches and market share gains in existing portfolio, especially specialty products
- Progression of technically complex products on the regulatory pathway

GLOBAL REVENUE EXPOSURE



Source: Morgan Stanley Research Estimate
View explanation of regional hierarchies, [here](#)

MS ALPHA MODELS

2/5
MOST

3 Month
Horizon

Source: Thomson Reuters, FactSet, Morgan Stanley Research; 1 is the highest favored Quintile and 5 is the least favored Quintile

RISKS TO PT/RATING

RISKS TO UPSIDE

- Ramp-up of Ilumya (tildrakizumab) and Cequa in the US
- Cost rationalization
- Domestic growth accelerating
- Value-accretive M&A

RISKS TO DOWNSIDE

- Pricing pressure increasing in the US; slowdown in the domestic market
- Ilumya's Early Access Program becoming prolonged and cost increases from DTC (Direct To Consumer) marketing
- Corporate governance issues intensifying
- Halol OAI being extended to WL
- COVID-19 related setbacks

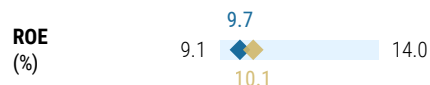
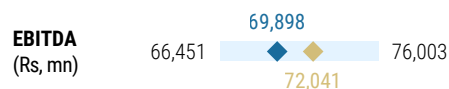
OWNERSHIP POSITIONING

Inst. Owners, % Active 86.1%

Source: Thomson Reuters, Morgan Stanley Research

MS ESTIMATES VS. CONSENSUS

FY Mar 2020e



◆ Mean ◆ Morgan Stanley Estimates

Source: Thomson Reuters, Morgan Stanley Research

UnitedHealth Group (UNH): Overweight, \$371 Price Target

Ricky Goldwasser, Healthcare Services and Managed Care

Industry View: While near term volatility across the managed care group is likely to continue heading into the election, we think group multiples should expand under status quo and a Biden victory/split government outcomes. While a Blue sweep could lead to increased uncertainty around a public option – see our report [What A Unified Government Could Mean to MCO Multiples](#) – we compare the uncertainty of a public option as akin to the 2013/2014 time period just before the ACA was launched when managed care traded an average ~4 turn discount to the S&P versus today's ~9.5 turn discount, suggesting room for multiple expansion post elections (see [Exhibit 37](#)).

Investment Thesis: With its leading Medicare Advantage (MA) market share (~26%) and more limited exposure to Exchange (<5% share) and Medicaid (<10% share) markets, United is well positioned to outperform post-election regardless of the outcome as it can benefit from Medicare expansion (a potential outcome under a Biden win scenario) and has limited exposure to Medicaid cuts (a potential outcome under a status quo scenario). United's model is further enhanced via vertical integration with its OptumRx PBM platform, which is one of the three largest pharmacy benefit managers (PBMs) in the country, as well as its OptumHealth clinics and OptumInsight data analytics platform. With a large lead in breadth of service offerings and considerable government exposure, we believe UnitedHealth is well positioned to weather any potential changes in the US healthcare system while also being at the forefront of innovation in the managed care space. A strong balance sheet and continued solid cash generation support M&A strategy.

Exhibit 37: Base Case Scenarios for MCOs: Multiple Risk

	Status quo No risk to private insurers	ACA expansion No risk to private insurers	Public Option NT risk to private insurers w/ LT opp. for share gain	Medicare expansion Headline risk to private insurers
Earnings Exposure				
<i>Positive</i>		CNC/WCG, MOH	CNC, MOH, ANTM, UNH, HUM, CVS	HUM, UNH, CVS
<i>Neutral (>-1% or <1%)</i>	ANTM, UNH, HUM, CVS, CI, CNC, MOH	ANTM, UNH, HUM, CVS, CI	CI	CI, ANTM
<i>Negative (>-1%)</i>				MOH, CNC
Implied Multiple				
Discount to S&P500	1.0x	1.6x	3.6x	1.4x
Discount rationale				
	1.4x is the 5-year average MCO discount to S&P 500, we adjusted up by 0.4x to reflect HIF repeal	2.0x was the average MCO discount to S&P 500 in 2016 when investors expected Hillary to win, we adjusted up by 0.4x to reflect HIF repeal	4.0x was the average MCO discount to S&P 500 in 2013-2014 prior to ACA implementation (but when there was more clarity around impact), we adjusted up by 0.4x to reflect HIF repeal.	1.8x was the average MCO discount to S&P 500 in 2014/2015/2016 a period of reimbursement rate cuts, we adjusted up by 0.4x to reflect HIF repeal
Industry Outlook				
	Stable industry fundamentals Limited regulatory uncertainty	Medicaid expansion Limited uncertainty as it relates to healthcare agenda	Level of uncertainty akin to when ACA was initially implemented	Medicare rate cuts through CMS / Increased scrutiny of minimum MLR rule Regulatory uncertainty but low legislative probability

Source: Morgan Stanley Research, Thomson Reuters, and Company Data

Medicare and D-SNPs provide a long runway for growth as United looks to expand on its already leading share. While the dual special needs or D-SNP population represents only ~20% of the Medicare population, it is associated with ~34% of Medicare expenditures (see [here](#)), highlighting the significant opportunity United has to improve cost control and lower MLR. Already a market leader in both Medicare Advantage (26% share) and D-SNPs (36% share), we see an opportunity for United to combine its MA tools with its long standing Medicaid capabilities to continue to grow above market in the D-SNP market (growing ~9% per year).

Optum is at the epicenter of transforming healthcare. As the importance of primary care comes more into focus due to ongoing effects of COVID-19, United's OptumCare platform has significant opportunity to create strong, sticky relationships with members and become core to helping them navigate their healthcare journey to high performing specialists and lower cost sites of care. United is leveraging several platforms across a wide spectrum to help put the patient at the center of care including Navigate4Me (personalized concierge like customer service platform for MA patients), HouseCalls (in-home visits by nurse practitioners), Vivify (digital signaling and monitoring capabilities), Rally (patient engagement tools), AI-enabled individual health records, pharmacy e-commerce (OptumRx), and proprietary telemedicine platforms. The company's recent acquisition of AbleTo provides virtual behavioral healthcare, further augmenting Optum's existing capabilities in the digital psychiatry space. Longer term, we expect tele/digital health to be a key component of lowering medical costs.

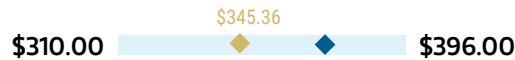
Risk Reward – UnitedHealth Group Inc (UNH.N)

Returning to Historical MA Growth, Optum at Epicenter of Earnings Potential

PRICE TARGET \$371.00

We calculate our price target by applying a 20.5x P/E multiple to our base case FY21E EPS of \$18.14. Multiple reflects 0.8 turn premium to S&P500 multiple of 19.6x. Premium in-line with UNH 5 year average premium UNH has historically traded at adjusted repeal of HIF (+0.4x) and for periods in 2019 where fears over M4A weighed on multiple (we don't believe this outcome is likely).

Consensus Price Target Distribution



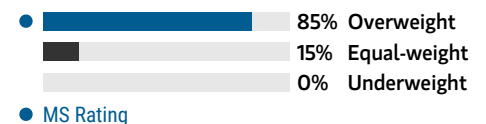
Source: Thomson Reuters, Morgan Stanley Research

◆ Mean ◆ Morgan Stanley Estimates

OVERWEIGHT THESIS

- UnitedHealth Group is the number one Medicare Advantage player with ~28% market share, the number two Medicare PDP player with ~20% market share, and the number two commercial player with ~15% market share.
- United's model is enhanced via vertical integration with its OptumRx PBM platform, which is one of the three largest PBMs in the country.
- With a large lead in breadth of services offerings and considerable exposure to government businesses, UnitedHealth is well positioned for any potential changes in the US healthcare system.
- A strong balance sheet and continued solid cash generation give flexibility for continued M&A.

Consensus Rating Distribution



● MS Rating

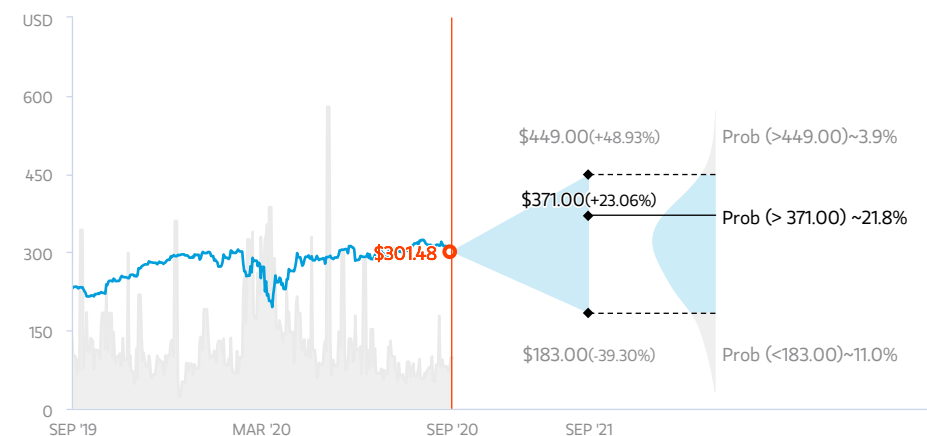
Source: Thomson Reuters, Morgan Stanley Research

Risk Reward Themes

Earnings Quality: Positive
Regulation: Positive
Secular Growth: Positive

View descriptions of Risk Rewards Themes, [here](#)

RISK REWARD CHART AND OPTIONS IMPLIED PROBABILITIES (12M)



Key: — Historical Stock Performance ● Current Stock Price ◆ Price Target

Source: Thomson Reuters, Morgan Stanley Research, Morgan Stanley Institutional Equities Division. The probabilities of our Bull, Base, and Bear case scenarios playing out were estimated with implied volatility data from the options market as of 11 Sep, 2020. All figures are approximate risk-neutral probabilities of the stock reaching beyond the scenario price in either three-months' or one-years' time. View explanation of Options Probabilities methodology, [here](#)

BULL CASE

\$449.00

23.1x FY21E EPS of \$19.41

Bull case multiple reflects 3.5x premium to S&P500 multiple of 19.6x. Premium is in-line with five year average peak and we adjust discount for repeal of HIF (+0.4x).

BASE CASE

\$371.00

20.5x FY21E EPS of \$18.14

Base case multiple reflects 0.8 turn premium to S&P500 multiple of 19.6x. Premium is in-line with UNH 5 year average premium UNH has historically traded at adjusted repeal of HIF (+0.4x) and for periods in 2019 where fears over M4A weighed on multiple (we don't believe this outcome is likely).

BEAR CASE

\$183.00

10.5x FY21E EPS of \$17.48

Bear case multiple reflects 9.2 turn discount to S&P500 multiple of 19.6x. Discount is in-line with where the stock traded at trough in 2009 during the last pricing cycle and we adj. for HIF repeal (+0.4x).

Risk Reward – UnitedHealth Group Inc (UNH.N)

KEY EARNINGS INPUTS

Drivers	2019	2020e	2021e	2022e
Medical Care Ratio (MCR) (%)	82.5	80.2	82.5	82.4
Medicare Membership Growth (%)	6.6	8.7	9.0	8.2
OptumRx Ebit Margin (%)	5.3	4.8	4.8	4.8
OptumHealth Rev. per Customer (\$)	27	33	39	46
Adjusted EPS Growth (%)	17.3	8.5	12.9	14.7

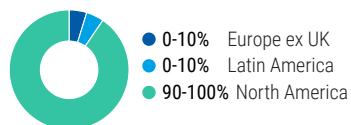
CATALYST CALENDAR

Date	Event	Source: Thomson Reuters, Morgan Stanley
13 Oct 2020 - 19 Oct 2020	Q3 2020 UnitedHealth Group Inc Earnings Release	

INVESTMENT DRIVERS

- Medicare Advantage growth
- MCR (MLR) performance
- Optum growth / Additional M&A
- Optum margins esp. OptumRx and OptumHealth

GLOBAL REVENUE EXPOSURE



Source: Morgan Stanley Research Estimate
View explanation of regional hierarchies, [here](#)

MS ALPHA MODELS

2/5 BEST	24 Month Horizon	2/5 MOST	3 Month Horizon
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Source: Thomson Reuters, FactSet, Morgan Stanley Research; 1 is the highest favored Quintile and 5 is the least favored Quintile

RISKS TO PT/RATING

RISKS TO UPSIDE

- MA growth above market
- Optum integration leads to industry leading MLR performance
- Medicaid margins improve to target 3%-5% range

RISKS TO DOWNSIDE

- Regulatory uncertainty
- Slower growth in core growth areas such as Medicare Advantage, commercial, and Medicaid with focus on services
- Optum growth slows as competitors become more reluctant to work with UnitedHealth

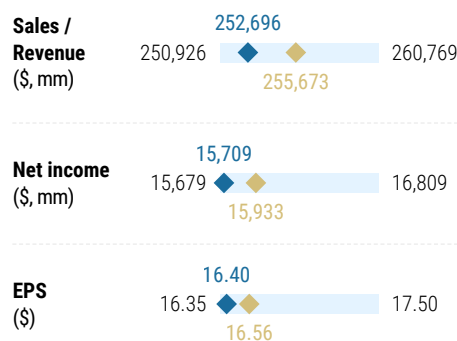
OWNERSHIP POSITIONING

Inst. Owners, % Active	67.6%	
HF Sector Long/Short Ratio	2.3x	
HF Sector Net Exposure	16.7%	

Thomson Reuters; MSPB Content. Includes certain hedge fund exposures held with MSPB. Information may be inconsistent with or may not reflect broader market trends. Long/Short Ratio = Long Exposure / Short exposure. Sector % of Total Net Exposure = (For a particular sector: Long Exposure - Short Exposure) / (Across all sectors: Long Exposure - Short Exposure).

MS ESTIMATES VS. CONSENSUS

FY Dec 2020e



◆ Mean ◆ Morgan Stanley Estimates

Source: Thomson Reuters, Morgan Stanley Research

Disclosure Section

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(as of August 31, 2020)

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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 MSC
Overweight/Buy	1282	39%	339	44%	26%	568	39%
Equal-weight/Hold	1426	44%	340	45%	24%	676	46%
Not-Rated/Hold	4	0%	1	0%	25%	3	0%
Underweight/Sell	555	17%	83	11%	15%	224	15%
TOTAL	3,267		763			1471	

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INDUSTRY COVERAGE: Medical Technology

COMPANY (TICKER)	RATING (AS OF)	PRICE* (09/11/2020)
David R. Lewis		
Abbott Laboratories (ABT.N)	O (01/02/2018)	\$104.70
Abiomed (ABMD.O)	U (02/11/2020)	\$269.77
Alcon Inc (ALC.N)	O (04/09/2019)	\$56.74
Avanos Medical Inc (AVNS.N)	U (10/12/2015)	\$31.04
Axionics Modulation Technologies Inc. (AXNX.O)	O (11/26/2018)	\$38.44
Baxter International (BAXN)	E (12/17/2019)	\$83.10
Becton Dickinson (BDX.N)	E (01/04/2016)	\$235.78
Boston Scientific (BSX.N)	O (10/16/2015)	\$40.29
DexCom Inc (DXCM.O)	E (01/03/2017)	\$383.46
Edwards Lifesciences (EW.N)	O (07/06/2015)	\$81.78
Envista Holdings Corporation (NVST.N)	E (10/14/2019)	\$24.99
Globus Medical Inc (GMED.N)	E (01/02/2019)	\$55.06
Haemonetics Corporation (HAE.N)	O (01/02/2018)	\$88.75
Hill-Rom Holdings Inc. (HRC.N)	O (12/17/2019)	\$87.46
Hologic, Inc. (HOLX.O)	E (03/27/2020)	\$62.04
Inari Medical Inc (NARI.O)	E (06/16/2020)	\$75.55
Insulet Corp. (PODD.O)	E (11/02/2015)	\$211.59
Intuitive Surgical Inc. (ISRG.O)	O (01/04/2016)	\$702.54
IRHYTHM TECHNOLOGIES INC (IRTC.O)	O (08/23/2020)	\$210.29
Johnson & Johnson (JNJ.N)	O (12/17/2019)	\$147.78
Medtronic PLC (MDT.N)	E (01/03/2017)	\$104.77
Nevro Corp (NVRO.N)	O (03/20/2019)	\$136.71
NuVasive Inc (NUVA.O)	E (09/14/2015)	\$53.94
Shockwave Medical Inc. (SWAV.O)	E (04/01/2019)	\$65.91
SI-BONE Inc. (SIBN.O)	O (11/12/2018)	\$21.90
Stryker Corporation (SYK.N)	O (01/08/2010)	\$202.02
Teleflex Inc. (TFX.N)	O (09/06/2017)	\$370.57
Transmedics Group Inc (TMDX.O)	E (05/28/2019)	\$16.61
ViewRay Inc (VRAY.O)	U (03/27/2020)	\$2.90
Zimmer Biomet Holdings Inc (ZBH.N)	O (01/05/2015)	\$139.21

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

* Historical prices are not split adjusted.

INDUSTRY COVERAGE: Specialty Pharmaceuticals

COMPANY (TICKER)	RATING (AS OF)	PRICE* (09/11/2020)
David Risinger		
Alkermes Plc. (ALKS.O)	E (09/05/2019)	\$17.40
Amneal Pharmaceuticals Inc (AMRX.N)	E (12/14/2018)	\$3.67
Bausch Health Companies Inc (BHC.N)	E (04/02/2020)	\$15.40
Elanco Animal Health Inc (ELAN.N)	O (08/20/2020)	\$27.08
Endo International plc (ENDP.O)	U (07/15/2019)	\$2.80
Horizon Therapeutics Plc (HZNP.O)	O (03/08/2019)	\$70.54
Jazz Pharmaceuticals PLC (JAZZ.O)	O (08/06/2020)	\$136.80
Mylan Inc. (MYL.O)	E (11/07/2019)	\$15.33
Perrigo Co. (PRGO.N)	E (12/03/2015)	\$48.62
Phibro Animal Health Corp (PAHC.O)	U (08/06/2020)	\$18.14
Royalty Pharma Plc (RPRX.O)	E (07/13/2020)	\$38.56
Teva Pharmaceutical Industries Ltd. (TEVAN)	U (07/15/2019)	\$8.79
Zoetis Inc. (ZTS.N)	E (03/19/2018)	\$158.59

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* Historical prices are not split adjusted.

INDUSTRY COVERAGE: Major Pharmaceuticals

COMPANY (TICKER)	RATING (AS OF)	PRICE* (09/11/2020)
David Risinger		
Abbvie Inc. (ABBV.N)	O (05/11/2020)	\$89.70
Bristol Myers Squibb Co (BMY.N)	O (04/02/2020)	\$58.99
Eli Lilly & Co. (LLY.N)	O (09/03/2020)	\$148.09
Merck & Co., Inc. (MRK.N)	O (04/17/2018)	\$84.48
Pfizer Inc (PFE.N)	E (07/30/2019)	\$36.07

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* Historical prices are not split adjusted.

INDUSTRY COVERAGE: Pharmaceuticals

COMPANY (TICKER)	RATING (AS OF)	PRICE* (09/11/2020)
James P Quigley		
Lonza Group AG (LONN.S)	O (06/24/2020)	SFr 547.40
Mark D Purcell		
AstraZeneca Plc (AZN.L)	E (12/14/2018)	8,429p
Bayer AG (BAYGn.DE)	O (12/14/2018)	€55.39
GlaxoSmithKline Plc (GSK.L)	U (06/17/2019)	1,524p
Merck KGaA (MRKG.DE)	E (05/17/2019)	€122.00
Novartis AG (NOVN.S)	O (09/01/2020)	SFr 81.80
Novo Nordisk A/S (NOVOB.CO)	E (12/14/2018)	DKr 418.20
Roche Holding AG (ROGS)	O (12/14/2018)	SFr 329.35
Sanofi SA (SASY.PA)	O (09/20/2019)	€87.54
Roy D Campbell		
Aspen Holdings (APNJ.J)	O (05/16/2019)	ZAc 12,720
Thibault Bouterin		
Hikma Pharmaceuticals Plc (HIK.L)	O (07/07/2020)	2,673p
Idorsia Ltd (IDIAS)	E (07/27/2020)	SFr 24.80
Ipsen SA (IPN.PA)	O (06/12/2019)	€89.90

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INDUSTRY COVERAGE: Australia Healthcare

COMPANY (TICKER)	RATING (AS OF)	PRICE* (09/11/2020)
Sean Laaman		
Ansell (ANN.AX)	O (06/13/2017)	A\$36.84
API (API.AX)	U (01/24/2019)	A\$1.05
Cochlear (COH.AX)	O (02/19/2020)	A\$192.01
CSL Ltd (CSL.AX)	E (02/19/2020)	A\$283.50
Healius Ltd. (HLS.AX)	++	A\$3.31
Integral Diagnostics (IDX.AX)	E (07/09/2018)	A\$4.12
Monash IVF (IMF.AX)	O (08/05/2014)	A\$0.59
Ramsay Health Care (RHC.AX)	U (04/30/2019)	A\$64.64
Resmed Inc. (RMD.AX)	E (08/07/2020)	A\$23.76
Resmed Inc. (RMD.N)	E (08/07/2020)	\$172.00
Sigma Pharmaceuticals (SIG.AX)	U (11/18/2016)	A\$0.64
Sonic Healthcare Limited (SHL.AX)	O (11/04/2016)	A\$32.53
Virtus Health Limited (VRT.AX)	E (08/21/2019)	A\$3.56

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INDUSTRY COVERAGE: India Healthcare

COMPANY (TICKER)	RATING (AS OF)	PRICE* (09/11/2020)
Sameer Baisiwala, CFA		
Apollo Hospitals Enterprise Ltd. (APLH.NS)	O (04/27/2017)	Rs1,611.80
Biocon Ltd (BION.NS)	E (07/23/2020)	Rs433.10
Cadila Healthcare Ltd. (CADI.NS)	O (01/29/2016)	Rs370.00
Cipla Ltd. (CIPL.NS)	O (04/02/2020)	Rs725.95
Dr. Lal PathLabs Ltd (DLPAN.S)	U (04/19/2017)	Rs1,839.05
Dr. Reddy's Lab (REDY.NS)	E (05/20/2019)	Rs4,401.60
GlaxoSmithKline Pharma (GLAX.NS)	U (02/28/2013)	Rs1,674.95
Glenmark Pharmaceuticals (GLEN.NS)	U (04/02/2020)	Rs485.15
IPCA Laboratories (IPCA.NS)	E (02/01/2020)	Rs2,013.40
Lupin Ltd. (LUPN.NS)	O (04/23/2019)	Rs967.65
Narayana Hrudayalaya Ltd (NARY.NS)	O (05/28/2019)	Rs320.30
Sun Pharmaceutical Industries (SUN.NS)	O (07/14/2019)	Rs505.55

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INDUSTRY COVERAGE: Biotechnology

COMPANY (TICKER)	RATING (AS OF)	PRICE* (09/11/2020)
David N Lebowitz, CFA, MPH		
Akebia Therapeutics Inc (AKBA.O)	E (09/07/2018)	\$2.53
Amylin Pharmaceuticals Inc (ALNY.O)	O (03/05/2019)	\$122.44
Ascendis Pharma A/S (ASND.O)	O (10/11/2019)	\$144.70
AVROBIO Inc (AVRO.O)	O (07/16/2018)	\$15.01
Blueprint Medicines Corporation (BPMC.O)	O (04/03/2019)	\$66.45
Epizyme Inc (EPZM.O)	O (12/05/2019)	\$12.00
Ionis Pharmaceuticals Inc (IONS.O)	U (11/07/2019)	\$51.97
Ironwood Pharmaceuticals, Inc. (IRWD.O)	E (03/27/2019)	\$9.73
Karyopharm Therapeutics Inc (KPTI.O)	O (07/01/2020)	\$14.20
MacroGenics Inc (MGNX.O)	U (11/21/2019)	\$26.87
Nabriva Therapeutics PLC (NBRV.O)	E (03/17/2020)	\$0.55
Rhythm Pharmaceuticals Inc (RYTM.O)	O (09/07/2018)	\$30.61
Schrodinger Inc. (SDGR.O)	E (03/02/2020)	\$53.96
Syndax Pharmaceuticals Inc (SNDX.O)	E (10/29/2018)	\$16.10
Y-mAbs Therapeutics Inc. (YMAB.O)	E (04/29/2020)	\$39.44
Zealand Pharma A/S (ZEAL.O)	O (09/12/2018)	\$31.62

Jeffrey Hung

Acadia Pharmaceuticals Inc (ACAD.O)	O (08/20/2020)	\$36.62
Accelaron Pharma Inc (XLRN.O)	O (02/03/2020)	\$90.39
Aprea Therapeutics Inc (APRE.O)	E (10/28/2019)	\$27.01
Cytokinetics Inc (CYTK.O)	O (04/09/2020)	\$22.49
Evoform Biosciences Inc (EVFM.O)	E (08/20/2020)	\$2.10
Exelixis Inc. (EXEL.O)	E (03/18/2019)	\$21.73
MyoKardia Inc (MYOK.O)	O (09/10/2018)	\$115.50
Neurocrine Biosciences Inc (NBIX.O)	O (09/10/2018)	\$100.39
NextCure Inc. (NXTC.O)	E (07/13/2020)	\$9.05
Prevail Therapeutics Inc (PRVL.O)	O (07/15/2019)	\$11.30
Repare Therapeutics Inc (RPTX.O)	O (07/14/2020)	\$30.02
Ultragenyx Pharmaceutical Inc (RARE.O)	O (03/27/2019)	\$73.83
Vela Bio (VE.O)	O (10/28/2019)	\$30.94
Voyager Therapeutics Inc (VYGR.O)	E (09/10/2018)	\$10.01

Matthew Harrison

ADC Therapeutics SA (ADCT.N)	O (06/09/2020)	\$38.68
Akero Therapeutics Inc (AKRO.O)	O (09/10/2020)	\$34.03
Alector Inc (ALEC.O)	O (03/04/2019)	\$13.00
Alexion Pharmaceuticals (ALXN.O)	E (12/17/2019)	\$105.36
AlloVir Inc (ALVR.O)	O (08/24/2020)	\$22.02
Amgen Inc. (AMGN.O)	O (12/17/2019)	\$243.21
argenx SE (ARGX.O)	O (01/04/2019)	\$219.29
BeiGene Ltd (6160.HK)	O (01/17/2020)	HK\$144.40
BeiGene Ltd (BGNE.O)	O (01/17/2020)	\$249.59
Biogen Inc (BIIB.O)	O (07/27/2020)	\$269.91
Biohaven Pharmaceutical Holding Company (BHMN.N)	E (04/09/2019)	\$59.04
Biomarin Pharmaceutical Inc (BMRN.O)	E (07/08/2020)	\$72.05
Bluebird Bio Inc (BLUE.O)	E (11/03/2017)	\$53.18
Cabaletta Bio Inc (CABAO)	O (11/19/2019)	\$10.65
Denali Therapeutics Inc (DNLI.O)	O (01/02/2018)	\$31.99
Editas Medicine (EDIT.O)	E (02/29/2016)	\$29.99
Evelo Biosciences Inc (EVL.O.O)	E (05/21/2020)	\$4.69
Freeline Therapeutics Holdings plc (FRLN.O)	O (09/01/2020)	\$17.02
Fulcrum Therapeutics Inc (FULC.O)	E (08/12/2020)	\$7.64
Fusion Pharmaceuticals Inc (FUSN.O)	O (07/21/2020)	\$12.45
Galapagos NV (GLPG.O)	E (12/17/2019)	\$136.85
Genmab A/S (GMAB.CO)	O (08/12/2019)	DKr 2,255.00
Genmab A/S (GMAB.O)	O (08/12/2019)	\$35.54
Gilead Sciences Inc. (GILD.O)	E (10/01/2015)	\$65.58
Global Blood Therapeutics Inc (GBT.O)	E (03/21/2018)	\$52.76
Imara Inc (IMRA.O)	O (04/06/2020)	\$21.84
Immunomedics Inc (IMMU.O)	E (01/22/2019)	\$42.25
Innoviva Inc (INVA.O)	U (08/14/2014)	\$11.47
Insmid Inc (INSM.O)	O (03/21/2018)	\$28.36
Kaleido Biosciences Inc. (KLDO.O)	E (05/21/2020)	\$5.32
Kodiak Sciences Inc (KOD.O)	O (10/29/2018)	\$49.06
Legend Biotech Corp (LEGN.O)	O (06/30/2020)	\$31.05
Moderna Inc (MRNA.O)	O (01/02/2019)	\$59.34
Regeneron Pharmaceuticals Inc. (REGN.O)	E (10/01/2015)	\$544.75
Regenxbio Inc (RGNX.O)	O (11/09/2017)	\$27.01
Rubius Therapeutics Inc. (RUBY.O)	E (03/13/2020)	\$4.90
SAGE Therapeutics Inc (SAGE.O)	O (02/26/2018)	\$55.73
Sarepta Therapeutics Inc (SRPT.O)	O (08/01/2018)	\$130.68
Seattle Genetics Inc. (SGEN.O)	E (12/10/2019)	\$149.97
Unity Biotechnology Inc. (UBX.O)	E (08/18/2020)	\$2.94
Vertex Pharmaceuticals (VRTX.O)	E (07/08/2020)	\$257.96
Zentalis Pharmaceuticals Inc (ZNTL.O)	O (04/28/2020)	\$29.10

Vikram Purohit

Axsome Therapeutics (AXSMO)	O (09/10/2020)	\$73.03
DBV Technologies SA (DBVT.O)	E (10/23/2017)	\$1.98
Incyte Corp (INCY.O)	E (04/29/2020)	\$88.00
Pandion Therapeutics (PAND.O)	O (08/11/2020)	\$15.76
Radius Health Inc (RDUS.O)	E (05/13/2020)	\$11.47
Theravance Biopharma Inc (TBPH.O)	E (06/15/2020)	\$16.87

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* Historical prices are not split adjusted.

INDUSTRY COVERAGE: Healthcare Services & Distribution

COMPANY (TICKER)	RATING (AS OF)	PRICE* (09/11/2020)
Ricky R Goldwasser		
1Life Healthcare Inc (ONEM.O)	O (02/25/2020)	\$27.57
Accolade Inc. (ACCD.O)	O (07/27/2020)	\$32.65
Allscripts Healthcare Solutions Inc. (MDRX.O)	U (12/13/2016)	\$8.67
AmerisourceBergen Corp. (ABC.N)	O (06/15/2020)	\$94.08
Cardinal Health Inc (CAH.N)	E (02/12/2020)	\$48.38
Catalent, Inc. (CTLT.N)	O (09/21/2017)	\$82.70
Cerner Corporation (CERN.O)	U (02/28/2019)	\$70.95
Charles River Laboratories International (CRL.N)	O (03/27/2020)	\$217.51
CVS Health Corp (CVS.N)	O (01/05/2018)	\$57.40
Inovalon Holdings Inc (INOV.O)	E (12/19/2018)	\$24.03
Iqvia Holdings Inc (IQV.N)	O (06/18/2013)	\$159.53
Laboratory Corp. of America Holdings (LH.N)	O (02/23/2015)	\$181.47
Livongo Health Inc (LVGO.O)	++	\$121.72
McKesson Corporation (MCK.N)	O (01/10/2020)	\$150.37
Nextgen Healthcare Inc (NXGN.O)	U (12/16/2019)	\$13.38
Oak Street Health Inc (OSH.N)	E (08/31/2020)	\$42.34
PPD Inc (PPD.O)	O (03/02/2020)	\$33.65
Quest Diagnostics Inc. (DGXN)	O (04/28/2020)	\$110.33
Walgreens Boots Alliance Inc (WBAO)	E (10/06/2017)	\$34.70

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

* Historical prices are not split adjusted.

INDUSTRY COVERAGE: Healthcare Facilities & Managed Care

COMPANY (TICKER)	RATING (AS OF)	PRICE* (09/11/2020)
Ricky R Goldwasser		
Anthem Inc (ANTM.N)	O (09/04/2018)	\$258.03
Centene Corp (CNC.N)	O (06/06/2017)	\$56.44
Cigna Corp (CI.N)	O (12/13/2018)	\$169.36
Humana Inc (HUM.N)	O (07/12/2018)	\$391.36
Molina Healthcare Inc (MOH.N)	O (08/17/2017)	\$168.84
UnitedHealth Group Inc (UNH.N)	O (06/06/2017)	\$301.48

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