



Myriad Genetics Inc.

## More Questions as New GeneSight Risks Emerge; Lower PT to \$23

**We have more questions related to GeneSight after Myriad's FY1Q19 earnings, as a number of new issues emerged which we believe confirm the concerns embedded in our Underweight thesis. To start, GeneSight revenue of \$29.3mm came in 11% below our forecast.** Management attributed the weakness to, "Changes requested by Medicare to obtain additional documentation and physician attestation." In addition, a higher portion of non-Medicare patients weighed on quarterly revenues. **Moreover, Myriad acknowledged that it has withdrawn the GeneSight RCT from the American Journal of Psychiatry (AJP) – and has submitted it to another journal. Given our critical view of the GeneSight data, we view the withdrawal of the study as a major concern.** Myriad said the study was withdrawn solely to protect its intellectual property around the GeneSight algorithm. That said, as we noted in our 11/1/2018 report, "*MYGN: The Wait Continues for the GeneSight RCT Publication*", we viewed the bar for publication as high, given the AJP has endorsed views critical of GeneSight twice over the last six months. **Finally, we continue to believe the FDA warning on pharmacogenetic testing in depression could raise risks for GeneSight coverage and volumes as well.** We believe given the profile of the announcement, it will likely be raised to CMS' attention – posing risks for non-coverage of the test.

**More broadly, the quality of quarterly revenues was weak.** Revenue of \$202mm was "only" at the upper end of \$200-\$202mm guidance, despite historical conservatism embedded in mgmt's outlook. **Most of the flagship molecular diagnostic tests missed our forecast.** Notably, the hereditary cancer testing (HCT) business declined 1% y/y despite the inclusion of Counsyl's HCT revenue. Counsyl prenatal revenues of \$18mm also came in below expectations, attributed to the UnitedHealth out-of-network decision – which we've known about since July 2018. There were no updates on the two HHS/OIG investigations, nor the material weakness over internal controls announced last quarter. **Given the new issues with GeneSight, Myriad is lowering its FY2019 revenue forecast 3% at the midpoint to a new range of \$855-\$865mm.** We position ourselves at the lower end of this range, and remain concerned about broader risks for GeneSight and the durability of HCT. **We lower our PT to \$23 (from \$25).**

### MYGN: Quarterly and Annual EPS (USD)

FY Jun	2018		2019		2020		Change y/y		
	Actual	Old	New	Cons	Old	New	Cons	2019	2020
Q1	0.30A	0.29E	0.43A	0.30E	0.32E	0.38E	0.42E	43%	-12%
Q2	0.36A	0.42E	0.37E	0.43E	0.46E	0.44E	0.47E	3%	19%
Q3	0.36A	0.44E	0.39E	0.46E	0.49E	0.48E	0.50E	8%	23%
Q4	0.45A	0.55E	0.51E	0.53E	0.58E	0.55E	0.53E	13%	8%
Year	1.47A	1.70E	1.70E	1.72E	1.85E	1.85E	1.95E	16%	9%
P/E	24.9		21.5			19.8			

Source: Barclays Research.

Consensus numbers are from Thomson Reuters received on 06-Nov-2018; 14:35 GMT

Barclays Capital Inc. and/or one of its affiliates does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

PLEASE SEE ANALYST CERTIFICATION(S) AND IMPORTANT DISCLOSURES BEGINNING ON PAGE 18.

Equity Research

Healthcare | U.S. Life Science Tools &

Diagnostics

7 November 2018

Stock Rating **UNDERWEIGHT**  
Unchanged

Industry View **NEUTRAL**  
Unchanged

Price Target **USD 23.00**  
lowered -8% from USD 25.00

Price (06-Nov-2018) USD 36.67  
Potential Upside/Downside -37.3%  
Tickers MYGN

Market Cap (USD mn) 2740  
Shares Outstanding (mn) 74.72  
Free Float (%) 99.00  
52 Wk Avg Daily Volume (mn) 0.8  
52 Wk Avg Daily Value (USD mn) N/A  
Dividend Yield (%) N/A  
Return on Equity TTM (%) 11.16  
Current BVPS (USD) 13.67

Source: Thomson Reuters

Price Performance Exchange-Nasdaq  
52 Week range USD 50.44-27.27



[Link to Barclays Live for interactive charting](#)

### U.S. Life Science Tools & Diagnostics

Jack Meehan, CFA

+1 212 526 3909

jack.meehan@barclays.com

BCI, US

Mitchell Petersen

+1 212 526 3367

mitchell.petersen@barclays.com

BCI, US

Andrew Wald

+1 212 526 9436

andrew.wald@barclays.com

BCI, US

## Myriad Genetics Inc. (MYGN)

Stock Rating: UNDERWEIGHT

Income statement (\$k)	2018A	2019E	2020E	2021E	CAGR	Price (06-Nov-2018)	USD 36.67
Revenue	740,300	855,565	913,633	955,745	8.9%	Price Target	USD 23.00
EBITDA (adj)	125,900	152,857	168,417	168,422	10.2%	<b>Why Underweight?</b> We believe several risks are being discounted and shares have an unfavorable risk/reward. Notably, we see several risks around the GeneSight RCT and IMPACT studies which present risks for payor coverage. Additionally, we are cautious around HCT pricing, see risks from Counsyl moving out-of-network with UNH, and note outstanding HHS/OIG investigations.	
EBIT (adj)	110,400	134,124	149,347	148,474	10.4%		
Pre-tax income (adj)	108,600	130,640	144,309	146,629	10.5%		
Net income (adj)	86,200	109,361	119,776	121,702	12.2%		
EPS (adj) (\$)	1.47	1.70	1.85	1.95	9.8%		
Diluted shares (k)	71,900.0	77,987.5	77,447.9	76,195.4	2.0%		
DPS (\$)	0.00	0.00	0.00	0.00	N/A		
<b>Margin and return data</b>					<b>Average</b>	<b>Upside case</b>	<b>USD 67.00</b>
Gross margin (%)	77.5	74.2	73.2	72.6	74.4	Our upside case of \$67 reflects a normalized 10x EBITDA multiple on our upside 2020 EBITDA forecast of \$526mm. Our upside EBITDA forecast assumes that GeneSight earns coverage from a majority of payors (60% of covered lives), and compares to FY18 EBITDA of \$125.9mm.	
EBITDA (adj) margin (%)	16.3	17.9	18.4	17.6	17.6		
EBIT (adj) margin (%)	14.3	15.7	16.3	15.5	15.5		
Pre-tax (adj) margin (%)	14.1	15.3	15.8	15.3	15.1		
Net (adj) margin (%)	11.2	12.8	13.1	12.7	12.4		
ROIC (%)	10.9	11.6	11.0	12.1	11.4		
ROA (%)	7.2	7.7	7.5	8.2	7.7		
ROE (%)	9.9	10.3	10.4	10.7	10.3		
<b>Balance sheet and cash flow (\$k)</b>					<b>CAGR</b>	<b>Downside case</b>	<b>USD 15.00</b>
Tangible fixed assets	N/A	N/A	N/A	N/A	N/A	The downside case of \$15 reflects a normalized 10x EBITDA multiple on our downside 2020 EBITDA forecast of \$122mm. Our downside EBITDA forecast assumes that GeneSight earns a non-coverage decision from CMS, and earnings contribution from the product is minimal.	
Intangible fixed assets	N/A	N/A	N/A	N/A	N/A		
Cash and equivalents	211,300	304,057	263,740	230,533	2.9%		
Total assets	1,174,100	1,649,725	1,541,212	1,435,920	6.9%		
Short and long-term debt	9,300	272,900	172,900	72,900	98.6%		
Other long-term liabilities	N/A	N/A	N/A	N/A	N/A		
Total liabilities	209,200	492,820	402,061	309,165	13.9%		
Net debt/(funds)	-202,000	-31,157	-90,840	-157,633	N/A		
Shareholders' equity	964,900	1,156,905	1,139,151	1,126,755	5.3%		
Change in working capital	-21,600	-18,664	-5,298	-3,985	N/A		
Cash flow from operations	113,800	126,974	169,218	176,767	15.8%		
Capital expenditure	-8,400	-8,116	-9,535	-9,974	N/A		
Free cash flow	105,400	118,857	159,683	166,792	16.5%		
<b>Valuation and leverage metrics</b>					<b>Average</b>	<b>Upside/Downside scenarios</b>	
P/E (adj) (x)	24.9	21.5	19.8	18.8	21.3	Price History Prior 12 months High	
EV/sales (x)	3.5	3.2	3.0	2.8	3.1	Price Target Next 12 months Upside	
EV/EBITDA (adj) (x)	20.6	18.0	16.0	15.6	17.6	67.00	
EV/EBIT (adj) (x)	23.4	20.6	18.1	17.7	20.0	Current 36.67	
FCF yield (%)	4.1	4.3	5.9	6.3	5.2	27.27	
Dividend yield (%)	0.0	0.0	0.0	0.0	0.0	Low	
Net debt/EBITDA (adj) (x)	-1.6	-0.2	-0.5	-0.9	-0.8	Downside	
<b>Selected operating metrics</b>					<b>Average</b>	Target 23.00	
SG&A/sales (%)	55.0	49.9	48.4	48.5	50.4	15.00	
R&D/sales (%)	8.3	8.7	8.6	8.6	8.6		
R&D growth (%)	-5.6	16.0	5.6	5.0	5.3		
SG&A growth (%)	-2.6	0.6	3.4	4.9	1.6		

Source: Company data, Barclays Research  
Note: FY End Jun

## Introduction

---

**We have more questions related to GeneSight after Myriad's FY1Q19 earnings, as a number of new issues emerged which we believe confirm the concerns embedded in our Underweight thesis. To start, GeneSight revenue of \$29.3mm came in 11% below our forecast.** Management attributed the weakness to, "Changes requested by Medicare to obtain additional documentation and physician attestation." In addition, a higher portion of non-Medicare patients weighed on quarterly revenues, which caused pressure given that is essentially the test's only payor at this time. **Moreover, Myriad acknowledged that it has withdrawn the GeneSight RCT from the American Journal of Psychiatry (AJP) – and has submitted it to another journal, with acceptance expected before year end. Given our critical view of the GeneSight data, we view the withdrawal of the study as a major concern.** Myriad said the study was withdrawn solely to protect its intellectual property around the GeneSight algorithm. That said, as we noted in our 11/1/2018 report, "*MYGN: The Wait Continues for the GeneSight RCT Publication*", we viewed the bar for publication as high. The AJP has endorsed views critical of GeneSight twice over the last six months, including on 7/19/2018 that, "*The GeneSight study fell short of statistical significance on its primary outcome—symptom improvement on the HAM-D test. Moreover... the remission rates for both treatment arms (10 and 15 percent) were unusually low even for treatment-resistant depression.*" **Finally, we continue to believe the FDA warning on pharmacogenetic testing in depression could raise risks for GeneSight coverage and volumes as well.** The FDA does not have regulatory oversight of LDTs today – that is reserved for CMS. We believe given the profile of the announcement, it will likely be raised to CMS' attention – posing risks for non-coverage of the test.

**More broadly, the quality of quarterly revenues was weak.** Revenue of \$202mm was "only" at the upper end of management's guidance of \$200-\$202mm, despite historical conservatism embedded in management's outlook. **Most of the flagship molecular diagnostic tests missed our forecast in the quarter.** Notably, the hereditary cancer testing (HCT) business declined 1% y/y despite the inclusion of Counsyl's HCT revenue in that business (we estimate would have declined 2-3% organic). Counsyl prenatal revenues of \$18.1mm also came in below expectations, which management attributed to the UnitedHealth out-of-network decision – which we've known about since July 2018. There were no updates on the two HHS/OIG investigations, nor the material weakness over internal controls announced last quarter. **Given the quarterly weakness and new issues with GeneSight, Myriad is lowering its FY2019 revenue forecast 3% at the midpoint to a new range of \$855-\$865mm.** We position ourselves at the lower end of this range, and remain concerned about broader risks for GeneSight coverage and the durability of the HCT franchise. **We reiterate our Underweight rating and lower our PT to \$23 (from \$25).**

### For More on our Myriad Genetics Thesis, Please See:

---

- **Our 9/5/2018** downgrade of Myriad Genetics to Underweight, pages 80-112 of our report, "*Dx Industry Update: Selective Views as Sentiment Surpasses Market Risks*"
- **9/11/2018**, "*Myriad Genetics: New Concerns on IMPACT, PT to \$25*"
- **9/27/2018**, "*Myriad Genetics: GeneSight Health Economics Not Optimal, Reiterate UW and \$25 PT*"
- **Our 10/8/2018** industry earnings preview, Myriad Genetics thoughts on page 47, "*3Q18 Preview: Reset Expectations Put Focus on Solid Fundamentals*"
- **10/14/2018**, "*Jack's Tool Kit - Vol. 4, Issue 39: Views on Competitive Environment for Myriad's GeneSight*"

- **10/18/2018**, “*Jack’s Tool Kit - Vol. 4, Issue 41: COUNSYL Financial Statements 8-K Thoughts for MYGN*”
- **11/01/2018**, “*MYGN: The Wait Continues for the GeneSight RCT Publication. Barclays Life Science Tools & Dx*”
- **11/01/2018**, “*MYGN: GeneSight Laterals from FDA Warning on Pharmacogenetics*”

## Actions

---

**We lower our price target to \$23 (from \$25), and are increasingly cautious on the potential for GeneSight to earn expanded reimbursement coverage. We continue to believe the most likely outcome for GeneSight coverage is the status quo – but have increased the chances of non-coverage to 15% (from 10%) based on our concerns about the quality of the test’s data.** In the chart below, we include a scenario analysis of Myriad’s valuation at varying levels of GeneSight reimbursement coverage. Given that the test’s ASP is \$2K, every 5% change in coverage adds \$100 to the ASP. **We only toggle the financial contribution from GeneSight to determine how payor coverage impacts revenue and earnings.** We assume a 100% flow-through of new revenue to EBITDA, but keep volume static with our FY2020 forecast of 437K tests. **The weighted average of all outcomes drives our \$23 price target for Myriad.**

- **Base Case:** Myriad currently has coverage from Medicare and CareFirst. Together with code stacking on non-covered lives, Myriad currently generates revenue at around 20% of its list price of \$2K (or \$400). At a normalized 2020 EV/EBITDA multiple of 10x for the entire business, this implies Myriad’s value is around \$22 per share at current GeneSight coverage. **With shares trading at \$37 as of 11/6/2018, this implies Myriad’s coverage expands to around 33% of the patient population.** Myriad touts the coverage of CareFirst BCBS as a sign of more to come following the RCT, but that coverage decision came out in April 2018 (before the RCT).
- **Downside Case:** **As we described above, we think it is unlikely that Myriad earns broader coverage. The ultimate downside case would be if Medicare issued a non-coverage determination for GeneSight – where we raise our probability to 15% (from 10%).** A Medicare non-coverage determination would drive GeneSight into a negative EBITDA contributor. We think Myriad would adjust costs and limit volumes at that point, so the likelihood of it actually flipping negative is unlikely. **Using the 10x multiple on EBITDA for the remaining business (\$116 million), this implies a downside case scenario of \$15.**

FIGURE 1

## Sensitivity Analysis to GeneSight Pricing Drives our New \$23 Price Target (FY2020)

Myriad Genetics Valuation Analysis Sensitivity to GeneSight													
GeneSight Coverage	0%	5%	10%	15%	20%	25%	30%	35%	40%	45%	50%	55%	60%
ASP	\$0	\$100	\$200	\$300	\$400	\$500	\$600	\$700	\$800	\$900	\$1,000	\$1,100	\$1,200
GeneSight Revs at Varying ASPs	\$0	\$44	\$87	\$131	\$175	\$218	\$262	\$306	\$349	\$393	\$437	\$480	\$524
GeneSight EBITDA at Varying ASPs				\$11	\$55	\$98	\$142	\$186	\$229	\$273	\$317	\$360	\$404
Revenue Forecast for All Other	\$748	\$748	\$748	\$748	\$748	\$748	\$748	\$748	\$748	\$748	\$748	\$748	\$748
EBITDA Forecast for All Other	\$122	\$122	\$122	\$122	\$122	\$122	\$122	\$122	\$122	\$122	\$122	\$122	\$122
<b>Total Revs</b>	<b>\$748</b>	<b>\$791</b>	<b>\$835</b>	<b>\$879</b>	<b>\$922</b>	<b>\$966</b>	<b>\$1,010</b>	<b>\$1,053</b>	<b>\$1,097</b>	<b>\$1,141</b>	<b>\$1,184</b>	<b>\$1,228</b>	<b>\$1,272</b>
<b>Total EBITDA</b>	<b>\$122</b>	<b>\$122</b>	<b>\$122</b>	<b>\$133</b>	<b>\$177</b>	<b>\$221</b>	<b>\$264</b>	<b>\$308</b>	<b>\$352</b>	<b>\$395</b>	<b>\$439</b>	<b>\$483</b>	<b>\$526</b>
Normalized Myriad Multiple on FY20 EBITDA	10x												
Net Debt	\$81												
Shares	77												
<b>Implied Stock Price</b>	<b>\$15</b>	<b>\$15</b>	<b>\$15</b>	<b>\$16</b>	<b>\$22</b>	<b>\$28</b>	<b>\$33</b>	<b>\$39</b>	<b>\$45</b>	<b>\$50</b>	<b>\$56</b>	<b>\$62</b>	<b>\$67</b>
<b>Barclays Probability</b>	<b>15%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>70%</b>	<b>5%</b>	<b>5%</b>	<b>5%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>
<b>New Price Target: Weighted Avg</b>	<b>\$23</b>												

Downside Case  
is Non-  
Coverage

Value at Current  
Coverage

\$37 Stock Price  
on 11/6

Upside Case for  
Myriad

Source: Thomson One, Company Documents, Barclays Research

## Observations

**1) Myriad lowered revenue guidance, though maintained EPS expectations for FY2019.** FY2019 revenues are expected in the range of \$855-\$865 million (from \$880-\$890 million), which represents 16-17% net revenue growth y/y. **Myriad attributed the reduction in revenue guidance to two main factors. First,** the GeneSight Medicare documentation changes are expected to reduce the percentage of samples that meet reimbursement requirements for the remainder of the year. **Second,** expectations for prenatal testing revenue were adjusted with a better understanding of the impact of UnitedHealth's out-of-network status. Guidance now assumes that Counsyl remains out of network with UnitedHealth. **Roughly half of the \$25mm reduction in the midpoint of revenue guidance was attributed to lower GeneSight expectations, while the other half was attributed to reduced expectations for Counsyl.**

**Cash EPS is forecasted to fall within the range of \$1.70-\$1.75, representing an increase of 15-19% y/y** (adjusting for stock-comp and ASC 606). It's important to note that guidance excludes stock-based compensation from adjusted EPS, which is forecasted to represent \$29 million or \$0.30 per share in FY2019. The company is guiding to a 17% tax rate and 76 million shares outstanding in FY2019. **The company listed a number of assumptions embedded in FY2019 guidance:**

- Myriad is guiding to "nominal" HCT revenue growth in FY2019. Pricing is expected to remain stable throughout the year with current levels.
- Growth in HCT is expected to be offset by a lower y/y revenue contribution from pharmaceutical services.
- Double-digit revenue growth with new products, including GeneSight, Vectra DA, Prolaris, and EndoPredict.
- Myriad does not embed any reimbursement beyond what it has achieved currently.

- Assumes the sale of the German Clinic in FY1H19, so no revenue in FY2H19. The German Clinic contributed \$12.7 million of revenue in FY1H18.
- Guidance does not include any contributions from myPath Melanoma.
- The company expects continued traction with its Elevate 2020 initiative in FY2019.

**With the FY4Q17 earnings report, Myriad announced the launch of Elevate 2020, an efficiency program targeted at generating \$50 million of annualized operating income savings by 2020.** The program has already exceeded Myriads \$50mm annual profit goal, with organic quarterly expenses declining greater than \$16 million since the program was initiated. The company is not making any changes to customer-facing representatives in order to limit any top-line impact. They see opportunities to improve lab operations, drive better operations, and potentially consolidate the lab footprint over time.

**For FY2Q19, Myriad expects revenues in the range of \$216 to \$218 million and EPS in the range of \$0.29 to \$0.30.** This guidance takes into account revenue recognition changes from ASC 606.

FIGURE 2  
FY2019 Guidance (\$MM)

FY2Q19 Guidance	11/6/2018			Barclays Research
	Low	Mid	High	
<b>Revenue</b>	<b>\$216</b>	<b>\$217</b>	<b>\$218</b>	<b>\$216</b>
Y/Y Change	16.9%	17.5%	18.0%	17.0%
<b>Cash EPS</b>	<b>\$0.36</b>	<b>\$0.37</b>	<b>\$0.38</b>	<b>\$0.37</b>
Y/Y Change	-0.9%	1.8%	4.6%	2.9%
Stock Comp	\$0.07	\$0.08	\$0.08	\$0.07
<b>Adjusted EPS</b>	<b>\$0.29</b>	<b>\$0.30</b>	<b>\$0.30</b>	<b>\$0.30</b>
Y/Y Change	-2.1%	-0.4%	1.3%	2.6%
Adjustments	\$0.23	\$0.23	\$0.22	
GAAP EPS	\$0.06	\$0.07	\$0.08	

FY2019 Guidance	11/6/2018			Barclays Research	8/21/2018		
	Low	Mid	High		Low	Mid	High
<b>Revenue</b>	<b>\$855</b>	<b>\$860</b>	<b>\$865</b>	<b>\$856</b>	<b>\$880</b>	<b>\$885</b>	<b>\$890</b>
Y/Y Change	15.5%	16.2%	16.8%	15.6%	18.9%	19.5%	20.2%
<b>Cash EPS</b>	<b>\$1.70</b>	<b>\$1.73</b>	<b>\$1.75</b>	<b>\$1.70</b>	<b>\$1.70</b>	<b>\$1.73</b>	<b>\$1.75</b>
Y/Y Change	15.4%	17.1%	18.8%	15.6%	15.4%	17.1%	18.8%
Stock Comp	\$0.30	\$0.30	\$0.30	\$0.30	\$0.30	\$0.30	\$0.30
<b>Adjusted EPS</b>	<b>\$1.40</b>	<b>\$1.43</b>	<b>\$1.45</b>	<b>\$1.40</b>	<b>\$1.40</b>	<b>\$1.43</b>	<b>\$1.45</b>
Y/Y Change	17.0%	19.1%	21.2%	17.1%	17.0%	19.1%	21.2%
Adjustments	\$1.00	\$1.00	\$1.00		\$1.00	\$1.00	\$1.00
GAAP EPS	\$0.40	\$0.43	\$0.45		\$0.40	\$0.43	\$0.45

Source: Company Documents, Barclays Research

**2) Revenues in FY1Q19 came in \$1.0 million above our estimate, with biopharma & clinical services representing a solid portion of the beat.** Hereditary cancer testing also came in modestly better than our model, but was aided by contributions from Counsyl and companion diagnostics. GeneSight, Prolaris, Counsyl and Vectra DA all came below our and street expectations in the quarter. All in, revenues increased 12.5% y/y to \$202.3 million, 0.5% above our estimate of \$201.3 million. **Comments by product:**

- **Hereditary cancer testing revenues fell -0.6% y/y to \$116.3 million, as higher volumes were offset by continued pricing pressure.** As a reminder, negative impacts

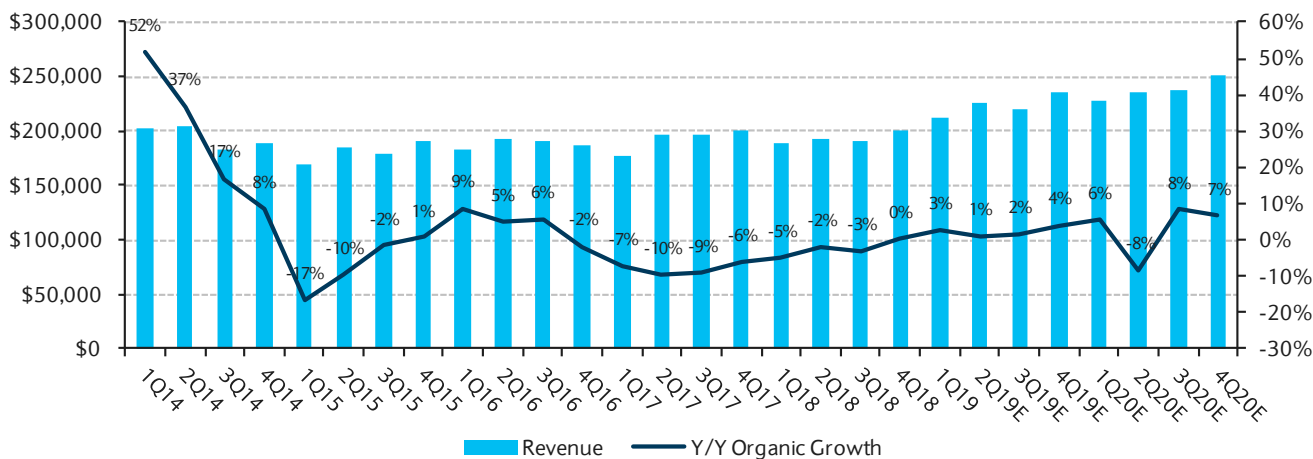
from commercial pricing contract negotiations spilled into FY1Q18, so the company saw remnants of pricing pressure in FY1Q19. We estimate that pricing was down ~5% in the quarter. **Myriad noted that volumes grew y/y in the quarter, and noted that riskScore is helping to drive volumes in the preventative care channel.** We estimate that volumes grew 4% y/y, but adjusting for CDx growth and a modest Counsyl HCT contribution, we believe that core HCT volumes could have been down in the quarter.

- **Myriad did not comment on companion diagnostic growth in the quarter.** As a reminder, during FY2Q18, Myriad received FDA approval for BRACAnalysis CDx as a companion diagnostic for AstraZeneca's Lynparza in patients with metastatic breast cancer. This represents the first FDA approval for a PARP inhibitor outside of ovarian cancer, **representing an increase in the annual testing market by 38K lives. Additionally, there is a pool of 125K untested patients that would be eligible for treatment upon approval.** The company has also received approval in Japan, which represents an additional 15K annual patient opportunity. **On October 16, 2018, Myriad received FDA approval of BRACAnalysis CDx as a companion diagnostic for Pfizer's talazoparib.** As a reminder, BRACAnalysis was first approved as a companion diagnostic with Lynparza in 3L+ ovarian cancer patients in December 2015.
- **Counsyl prenatal revenue (NIPT and ECS) was \$18.1 million in the quarter, which was \$2-3 million below our estimate.** While volume growth was in line with the company's expectations (at 16%), the company recognized lower than expected amounts of revenue as a result of the UnitedHealth out-of-network decision (see observation 5 below).
- **Vectra DA revenue decreased \$2.1mm q/q to \$13.0 million.** Myriad did not comment on volume trends in the quarter, though we estimate they decreased 1% y/y. Revenue was below our forecast of \$14.4mm in the quarter, but showed a strong improvement y/y due a more favorable ASP following the implementation of PAMA (Medicare pricing is \$840). **The lower than expected revenue was driven by a new program designed to limit unprofitable volumes in an effort to improve the test's gross margins.**
- **GeneSight revenue in the quarter was \$29.3 million, and volumes increased 28% y/y to an estimated 91.5K tests.** Revenue in the quarter was impacted by additional billing requirements that were put in place by Medicare in August 2018. In order to recognize reimbursement, physicians are now required to submit a patient attestation and collect additional patient information. See observation three and the links in the intro for more views on GeneSight. **Revenue came in roughly \$3.6 million below our expectations in the quarter.**
- **Prolaris continues to represent a near-term opportunity, and we estimate that volumes increased 13% y/y.** Prolaris revenues were \$6.2 million in the quarter, up 113% y/y, but down \$0.8 million sequentially, which we believe was likely driven by seasonality in the quarter. As a reminder, Myriad recently received a positive coverage decision for favorable intermediate risk Medicare patients, which went into effect on September 25, 2017. Additionally, the company noted that it signed on Blue Cross Blue Shield of California in the quarter, bringing total coverage of prostate cancer patients to 56%. **Myriad believes that expanded Medicare coverage as well as the inclusion in the NCCN guidelines will be a catalyst for continued payor adoption.**
- **Myriad is in the late stages of discussions to sell its German clinic, which was expected to contribute \$23 million of revenue in FY2018. We have pulled any revenue contribution from our model moving forward, though there is no impact to EPS given the segment was breakeven.** Pharmaceutical revenue in the quarter was \$13.3 million, up \$1.9 million y/y. As a reminder, Myriad entered the business through

the acquisition of Rules-Based Medicine in May 2011, and acquired a German clinic in the March 2015 quarter. **This revenue tends to be lumpy as it depends on the timing of clinical development activities of biopharma partners.**

- **EndoPredict revenue in the quarter was \$2.4 million, up 33% y/y.** Myriad noted that the uptick in revenue during the quarter was a result of strong reimbursement and volume trends in the U.S. The company has received positive coverage decisions for 90% of the addressable patient population, and noted its final Medicare LCD (40% of population) became effective on January 30, 2018.
- Myriad received a favorable LCD from Noridian in the quarter for myPath Melanoma.

FIGURE 3  
Revenue (\$1,000s) Growth Y/Y



Source: Company Documents, Barclays Research

**3) We continue to believe the key debate for Myriad is related to GeneSight, where we remain skeptical that the test can earn expanded reimbursement coverage from either commercial payors or Medicare. With earnings, Myriad noted that it has withdrawn the GeneSight RCT from submission at the American Journal of Psychiatry (AJP) and submitted it to another journal. Given our critical view of the GeneSight data, we view the withdrawal of the study as a major concern.**



FIGURE 4

## CEO Mark Capone Quotes on GeneSight RCT Journal Change

- “For GeneSight, we are anticipating acceptance of the landmark-guided publication by the end of the fiscal second quarter. While we had anticipated this publication earlier, it was delayed because the manuscript was withdrawn and submitted to a second journal. At the end of the review process, the first journal notified the company that as a condition of publication the proprietary GeneSight algorithm would need to be disclosed. Solely based upon the desire to protect our intellectual property, the manuscript was withdrawn and submitted to another journal, and we are anticipating acceptance in the second quarter.”

- “The second journal we submitted to is still a very high-quality journal. So we feel very good about the journal selection that the authors have made. I think from the perspective of Myriad and the company perspective, really the only requirement is that we just get this published in a peer-reviewed journal article. That’s really all the tech assessment committees are interested in is that they need to be able to have a citation. They evaluate the data on its own merits, and they have people well capable of doing so. And so we just need to get it published in any of peer-reviewed journal and that’s, of course, what we’re working towards. Obviously, we didn’t expect that last minute request from the first journal. So you can never be certain that there might not be something else requested like that. But we have experience with this journal, and so our belief is that a request such as that from this journal would be highly unlikely. It’s also highly unlikely for that request to be made for any of our tests. It has happened before with other tests, but it’s really highly, highly unusual. So our belief is and we’re not expecting a similar request to be made in this particular case.”

Source: Company Documents

**Earnings on Tuesday, November 6th, officially marked 129 days after Myriad’s first self-imposed deadline to publish the GeneSight randomized control trial (RCT) in a major peer-reviewed medical journal - around the end of the company’s fiscal year end of June 30th.** The lengthy delay in publication has not gone unnoticed, as one of the top questions we have fielded from investors is, “Where is the GeneSight RCT?” **Here is what we know:** **A)** Myriad submitted the GeneSight RCT to a major medical journal for publication as late as May 8<sup>th</sup>, when the company reported FY3Q18 earnings. At that time, the company quoted that they expected publication around June 30<sup>th</sup>. **B)** As late as a competitor conference on June 12<sup>th</sup>, Myriad continued to expect publication by around June 30<sup>th</sup> noting it was, “A near-term activity that we would expect to happen... in the coming weeks ahead.” **C)** With earnings on August 21<sup>st</sup>, Myriad acknowledged the study was late and said they were “encouraged with the publication,” which was in the “latter stages of review.” Myriad attributed the delay to the summer months and a large number of authors in the review process.

**What we also know is that Myriad submitted the GeneSight RCT for initial publication in the American Journal of Psychiatry (AJP), based on a footnote disclosure in the IMPACT Study.** The AJP is one of most well-regarded psychiatric medical journals. It would also be a very desirable journal to get the GeneSight RCT published in, as the AJP is the official journal of the American Psychiatric Association (APA) – which sets clinical practice guidelines for psychiatry. **Importantly, it is worth noting that the AJP has endorsed views critical of GeneSight twice over the last six months.** On July 19<sup>th</sup>, the AJP published that the APA *Task Force on Gene Testing for Antidepressant Efficacy Concludes Tests Not Yet Ready for Widespread Use*, issuing a negative guideline recommendation and that, “The GeneSight study fell short of statistical significance on its primary outcome—symptom improvement on the HAM-D test. Moreover... the remission rates for both treatment arms (10 and 15 percent) were unusually low even for treatment-resistant depression.” Additionally, on April 25<sup>th</sup>, the AJP published *Clinical Implementation of Pharmacogenetic Decision Support Tools for Antidepressant Drug Prescribing*, which reached a similar conclusion which was critical of GeneSight. **Given the AJP’s historical stance, we believe the bar was raised for publication of the GeneSight RCT.**

FIGURE 5

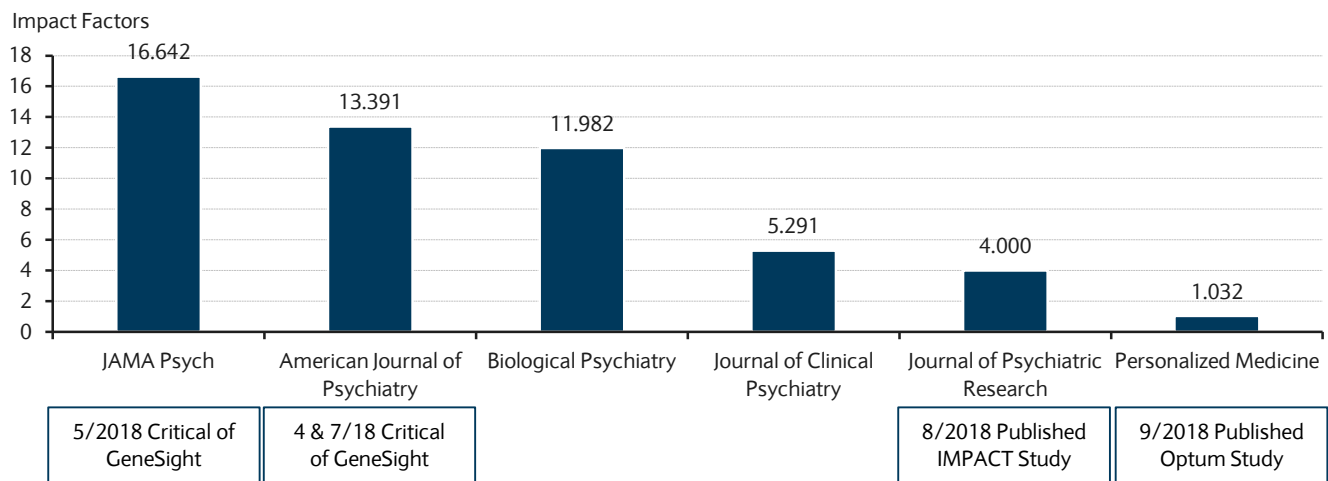
Footnotes of the IMPACT Study Show that the RCT was Submitted to the American Journal of Psychiatry

Greden, J.F., Parikh, S.V., Rothschild, A.J., Thase, M.E., Dunlop, B.W., DeBattista, C., Conway, C.R., Forester, B.P., Mondimore, F.M., Shelton, R.C., Li, J., Brown, K., Gilbert, A., Burns, L., Jablonski, M.R., Dechairo, B., 2018. Combinatorial Pharmacogenomic Testing Improves Outcomes in Major Depression. **Am J Psychiatry submitted.**

Source: The IMPACT Study, <https://www.sciencedirect.com/science/article/pii/S0022395618305569>

FIGURE 6

The Highest Regarded Journals in Psychiatry Have Endorsed Views Critical of GeneSight, whereas Myriad’s Studies Have Been Published in Lower Tier Journals (as Measured by 2017 Impact Factors)



Source: Impact Factors Provided by Journals Quoted, Barclays Research

**As a reminder, we have several concerns around the GeneSight Randomized Control Trial (RCT) which we think present risks for payor coverage. Our first major concern is that the GeneSight RCT failed its primary endpoint.** Nobody designs a landmark clinical trial with the goal of failing their primary endpoint. From our diligence, academic psychiatrists have questioned several factors which led to the RCT failure and think the manuscript could reveal new issues. **Additionally, the APA Task Force for Novel Biomarkers and Treatments has not only issued a negative position statement against including pharmacogenetic testing in guidelines, but is actively refuting the value of GeneSight.** We cannot think of a single example where a specialty diagnostic was reimbursed by a payor without guideline support. To further accentuate this point, we can reference a number of examples where tests have guideline support and still don't get reimbursed. Finally, two major medical journals have published views which are critical of the value GeneSight and pharmacogenetic tests offer to patients. **Finally, we do not believe GeneSight's value proposition is strong enough for payors to reimburse for the test.** In our view, the design of the RCT sheds light on one inherent problem that limits GeneSight's clinical utility – the test is only most helpful for a subset of the population. **We believe that the academic viewpoint is very important in driving guidelines and payor coverage decisions – and these concerns could present risks for payor coverage.**

FIGURE 7  
**Several Concerns Around the GeneSight RCT Drive our Underweight Rating**

Concern	Issue
1 GeneSight failed the primary endpoint in its Randomized Control Trial (RCT)	<b>Nobody designs a landmark clinical trial with the goal of failing their primary endpoint.</b> The RCT primary endpoint was to achieve a statistically significant improvement in symptoms in the GeneSight guided arm relative to TAU after eight weeks (defined as a p<0.05). On average, patients in the GeneSight-guided arm experienced a 27.2% reduction in symptoms (as measured by % reduction in HAMD-17 score), compared to 24.4% for the TAU cohort (p=.11).
2 Leading academic psychiatrists think the primary endpoint failure matters, and there could be broader issues presented in the RCT manuscript.	<b>Concerns that the academic psychiatrists raised include:</b> - The GeneSight RCT trial missed its primary endpoint of symptom improvement. - The overall remission and response rates were uncharacteristically low for this type of study. Academics have reason to believe there is something fundamentally wrong with the RCT. - Using a larger patient cohort (n = 1,167) raised the statistical power of the results, allowing the study to meet the secondary endpoints of remission and response. - Patients were selected if they had failed one or more <u>psychotropic</u> medication, versus <u>antidepressants</u> . - Using GeneSight could have led to increased clinical vigilance amount physicians treating the GeneSight-guided cohort. - GeneSight was compared against TAU, vs a protocol-based treatment approach or other genomic tests that look at similar drug metabolism enzymes.
3 The APA Task Force for Novel Biomarkers and Treatments does not endorse GeneSight in guidelines.	<b>Without guideline support from the academic psychiatry community, we believe it is unlikely that Myriad will earn broader commercial coverage for GeneSight.</b> We cannot think of a single example where a specialty diagnostic was reimbursed by a payor without guideline support. <b>In this case, academic psychiatrists actively have a negative statement refuting the value of pharmacogenetic testing.</b>
4 Two major medical journals have published views which are critical of the value GeneSight & pharmacogenetic tests offer to patients.	In addition to lack of guidance support, <b>we're concerned that JAMA Psychiatry and the American Journal of Psychiatry (AJP) have recently published and endorsed views critical of the value that GeneSight &amp; pharmacogenetic tests offer to patients.</b> These are the two most highly regarded medical journals in psychiatry, with a 2017 impact factor of 16.642 and 13.391 respectively. The AJP report specifically references the GeneSight RCT, as well as the failure of the study's primary endpoint. <b>These journals are well read by managed care payors, and we believe are influential in determining coverage decisions.</b>
5 We don't believe the GeneSight value proposition is strong enough for payors to reimburse for the test.	<b>We don't believe GeneSight's value proposition is strong enough for payors to reimburse for the test. In our view, the design of the study sheds light on one inherent problem that limits GeneSight's clinical utility – <u>the test is only most helpful for a subset of the population.</u></b> On an annual basis, Myriad estimates that each GeneSight test generates roughly \$3,275 in annual savings, which consist of \$1,000 in drug spend savings, \$1,500 in healthcare savings, and \$775 in workplace productivity savings. <b>The biggest three issues here are that: A)</b> This does not include the cost of the GeneSight test at roughly \$2,000. <b>B)</b> It is unclear whether health plans will give Myriad credit for the workplace productivity savings, and <b>C)</b> Payors historically only share a fraction of the savings generated from diagnostics with the lab itself.

Source: Company Documents, Barclays Research

**4) Further to that point, we believe the FDA's warning on the use of pharmacogenetic tests could have a volume impact on GeneSight – and potentially contain risks for coverage of the test with CMS.** As a reminder, the FDA issued a statement on 11/1/2018 that, "*The FDA Warns Against the use of Many Genetic Tests with Unapproved Claims to Predict Patient Response to Specific Medications.*" The report was subsequently tweeted by FDA Commissioner Scott Gottlieb at 8:20am. Notably, the FDA cautioned that there are genetic laboratory tests with claims around a patient's response to specific medications which have not been reviewed by the FDA and may not be supported by clinical evidence. **Importantly for GeneSight, the FDA highlighted, "Genetic tests with claims to predict whether some medications used to treat depression may be less effective or have an increased chance of side effects."** Myriad's GeneSight is one of several tests in a category of pharmacogenetics used for patients with treatment resistant depression. In addition to other lab developed tests (LDTs), direct-to-consumer offerings have emerged from Color Genomics and 23andMe. **Following the FDA's announcement, we also now see new risks related to the test's volume trajectory.** Technically, the FDA does not have regulatory oversight of LDTs – that is reserved for CMS. That said, we believe given the profile of this announcement, it will likely be raised to CMS' attention as well.

FIGURE 8

## CEO Mark Capone Views on Communication with the FDA on Pharmacogenomics

“As many of you are aware the FDA issued a notice for pharmacogenomic testing last week cautioning providers and patients about tests with claims that are not clinically validated. We strongly agree with this position as unlike GeneSight most companies have not published clinical outcomes data supporting their tests. Studies have shown that pharmacogenomic tests are not interchangeable. As an example, a recent study published in the May issue of the Pharmacogenomics Journal compared 4 commercial pharmacogenomics tests for major depressive disorder and found that 19% of the time the test had conflicting clinical recommendations. The FDA has maintained their position to exercise enforcement discretion over LDTs subject to congressional legislation. Myriad continues to support additional oversight of LDTs through legislation to ensure a consistent level of clinical evidence for approved cleared tests. And we believe that GeneSight is the only pharmacogenomic test supported by level 1 evidence, which demonstrates improved patient outcomes.”

“I think what the FDA is trying to do is make sure that there is a path for consumers that want to pursue that more consumer type testing, that there is a path for consumers to pursue that. At the same time, they were very clear, the last time, and this time, that those consumer tests are not clinical tests and they should not be used for clinical decision-making. And so that's consistent this time and last time. And so that's, I think, the perspective that we have on this as we've had communications with the FDA a number of times over the years about that. I think the other thing, the color I can add, of course, is we've had a chance to interact with physicians since then to get any perspective from them on questions they may have. A couple of things I would note. First, the awareness generally was relatively low about this. Second, we really haven't seen any impact in their utilization of the test since then. In fact, we had a record week last week for GeneSight orders. Third, the ones that were aware of this were confused about what exactly the 23andMe clearance meant. And I would say the confusion was similar to what we saw with BRCA testing that the language from the FDA regarding its use was confusing to practitioners.”

Source: Company Documents

**5) Driven by the UnitedHealth out-of-network decision, Counsyl revenue came in below expectations in the quarter.** Counsyl generated \$30 million of revenue in FY1Q19 (for the full quarter), which was roughly flat y/y, representing a deceleration from the company's prior growth trajectory. While volume growth appeared to be intact in the quarter (up 16% y/y), Myriad wasn't able to recognize as much revenue as it originally anticipated. As a result of the revenue shortfall, dilution from the deal was \$0.03 greater than anticipated, at \$0.09. **Until now, we've been surprised that the market has shrugged off UnitedHealth's decision that it was moving Counsyl out-of-network in July 2018.** As we reported in our note on 7/2/2018, “*MYGN: Counsyl Moving Out-of-Network with UnitedHealth.*” Frankly, we're surprised that this important detail was not discussed on Myriad's acquisition conference call on 5/29/2018 or the earnings call on 8/21/2018. When discussing FY2019 guidance for Counsyl, Myriad did not mention the UnitedHealth out-of-network decision as a risk, citing “*For Counsyl, we are assuming current run rate with approximately \$130 million in revenue based upon 11 months of owning the asset in fiscal year 2019. Our Counsyl guidance imply some revenue disruption from sales force integration and assumes no revenue synergies and known reimbursement.*”

**We believe lost network coverage from the largest US payor changes the economics of the Counsyl acquisition for Myriad.** Counsyl's revenue stream is comprised predominantly of commercial payors and Medicaid (there are not many Medicare patients >65 years of age that need carrier screening or NIPT). This contrasts with other areas of specialized testing focused on oncology, where there is a much larger exposure to Medicare. UnitedHealth has almost 27mm US commercially covered lives as of 1Q18, representing 15-20% of the commercial market. Layering on Medicaid, we think UnitedHealth could represent 10-15% of Counsyl's revenue. **Given that base of revenues, UnitedHealth could represent \$10-20**

million of Counsyl revenues – although we caveat that cash collection and network status make it difficult to quantify the exact amount.

6) There was also no update on the material weakness related to insufficient controls over financial reporting which Myriad disclosed with FY4Q18 earnings. As a reminder, Myriad re-stated results for FY1Q-3Q18 lower by \$6 million, and adjusted EPS was re-stated lower \$0.05. As a reminder, Myriad delayed its FY4Q18 earnings by one week due to these issues. During the financial close for fiscal year 2018, Myriad determined that it had not fully and timely taken into account changes in the business environment and experience with ultimate collection from third-party payors in estimating the amount of revenue that could be judged fixed or determinable at the date of performance of tests during 2018 and in previous annual and quarterly periods. **Consequently, Myriad concluded that the cumulative effect of correcting the errors in 2018 would materially misstate its financial statements for the year ended June 30, 2018.** Accordingly, the accompanying prior period results have been revised to reflect the correction of these immaterial errors in each period. **For the years ending June 30, 2017, 2016, and 2015, revenue was reduced by \$1.5, \$13.3, and \$0.6 million, respectively.**

FIGURE 9

## Re-Stated Results (Rev in \$MM)

	Sep-17 FY1Q18	Dec-17 FY2Q18	Mar-18 FY3Q18	Cumulative Change	Jun-18 FY4Q18
Old Reported Results	\$126.7	\$126.9	\$123.3	\$376.9	N/A
Re-stated Results	\$124.4	\$125.6	\$120.9	\$370.9	\$126.8
<b>HCT Revenues Change</b>	<b>-\$2.3</b>	<b>-\$1.3</b>	<b>-\$2.4</b>	<b>-\$6.0</b>	<b>N/A</b>
<b>% Change</b>	<b>-1.8%</b>	<b>-1.0%</b>	<b>-1.9%</b>	<b>-1.6%</b>	<b>N/A</b>
Old Reported Results	\$190.2	\$194.0	\$193.5	\$577.7	N/A
Re-stated Results	\$187.9	\$192.7	\$191.1	\$571.7	\$200.9
<b>Total Revs Change</b>	<b>-\$2.3</b>	<b>-\$1.3</b>	<b>-\$2.4</b>	<b>-\$6.0</b>	<b>N/A</b>
<b>% Change</b>	<b>-1.2%</b>	<b>-0.7%</b>	<b>-1.2%</b>	<b>-1.0%</b>	<b>N/A</b>

	Sep-17 FY1Q18	Dec-17 FY2Q18	Mar-18 FY3Q18	Cumulative Change	Jun-18 FY4Q18
Old Reported Results	\$0.26	\$0.31	\$0.31	\$0.88	N/A
Re-stated Results	\$0.24	\$0.30	\$0.29	\$0.83	\$0.38
<b>Adjusted EPS</b>	<b>-\$0.02</b>	<b>-\$0.01</b>	<b>-\$0.02</b>	<b>-\$0.05</b>	<b>N/A</b>
<b>% Change</b>	<b>-7.7%</b>	<b>-3.2%</b>	<b>-6.5%</b>	<b>-5.7%</b>	<b>N/A</b>

Source: Company Documents, Barclays Research

7) There was also no update on the outstanding subpoenas Myriad has with the Department of Health and Human Services, Office of the Inspector General – which span the company’s hereditary cancer testing and Vectra DA businesses. The two proceedings are still just in discovery mode and Myriad is cooperating. It is impossible to determine the scope or magnitude of the proceedings, at this point we think potential risks should not be discounted.

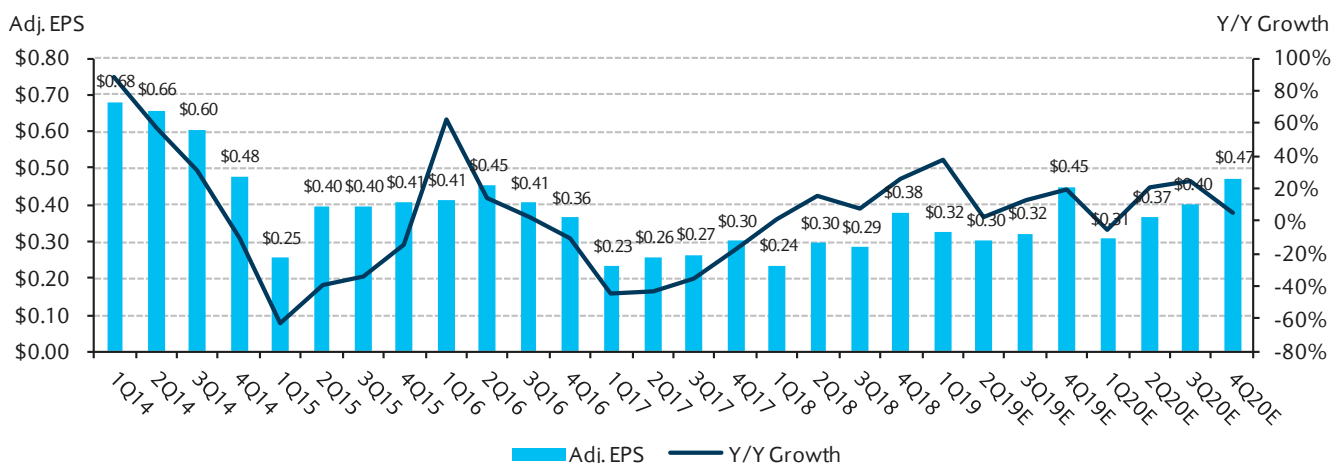
- As initially disclosed in February 2018, Myriad received a subpoena from the Department of Health and Human Services, Office of Inspector General, in connection with an investigation into possible false or otherwise improper claims submitted for payment under Medicare and Medicaid. The time period covered by the subpoena is January 1, 2014, through the date of issuance of the subpoena, which related to the company’s hereditary cancer testing. Myriad is cooperating with the government’s request and is in the process of responding to the subpoena. No claims

have been made against the company. **Myriad is unable to predict what action, if any, might be taken in the future by the Government or any other regulatory authority as a result of the matters related to this investigation.**

- **In addition, Myriad’s subsidiary, Crescendo Bioscience, received in June 2016 a Subpoena from the Department of Health and Human Services, Office of Inspector General, requesting that it produce documents relating to a designated unrelated company, other third party entities, and healthcare providers who received payment from Crescendo for the collection and processing of blood specimens for testing. In connection with this investigation, the Government has recently requested additional documents. Crescendo is providing the documents requested and continues to cooperate with the Government’s requests. **Crescendo is unable to predict what action, if any, might be taken in the future by the Government or any other regulatory authority as a result of the matters related to this investigation. No claims have been made against Crescendo.****

**8) Adjusted EPS in the quarter was reported at \$0.32, \$0.10 above our expectations.** Revenue that came in 0.3% ahead of our expectations, coupled with solid expense management from the company’s Elevate 2020 efficiency program, drove the earnings beat. The company’s tax rate came in 270bps below our expectations at 13.8%.

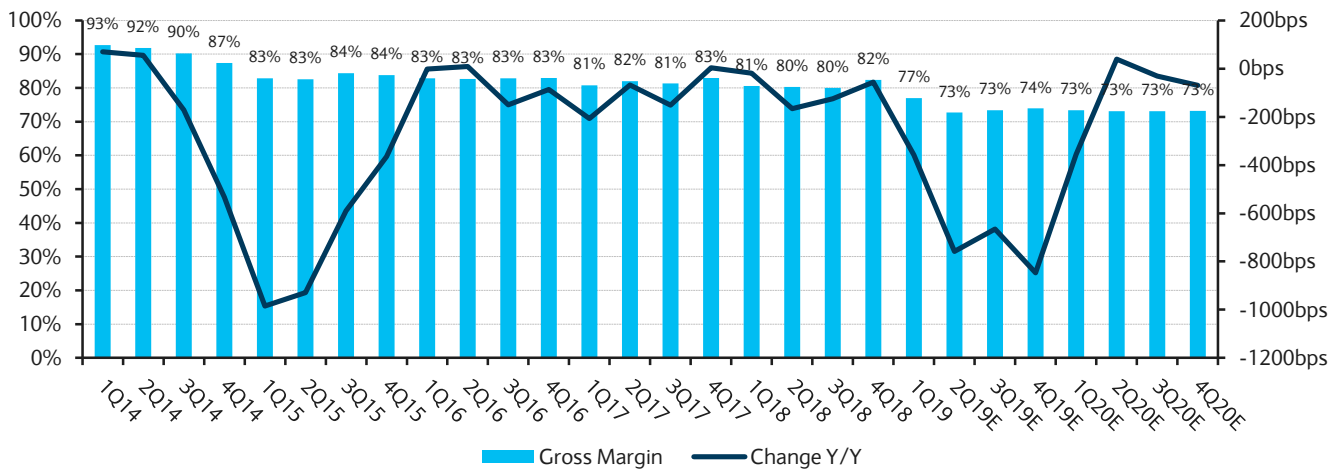
FIGURE 10  
Adj EPS Growth Quarterly



Source: Company Documents, Barclays Research

**9) Myriad’s gross margins decreased 350bps y/y to 77.0% of revenues – although did beat our forecast by 220bps.** Specifically, the company attributed gross margin improvements to lab initiatives that reduced reagent costs.

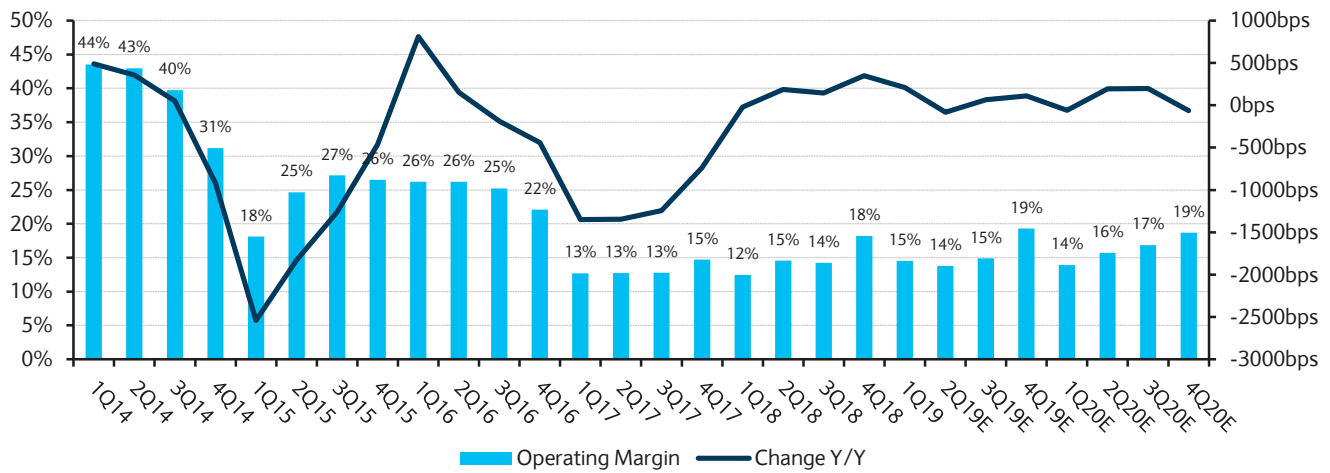
FIGURE 7  
Gross Margin Trajectory



Source: Company Documents, Barclays Research

**10) Similarly, operating margins improved 235bps y/y.** Notably, Myriad’s Elevate 2020 initiatives drove a \$12 million decrease in expenses year-over-year. R&D expenses increased 20bps y/y to 9.1% of revenues, 170bps below our expectations. Total SG&A expenses declined 340bps to 53.0% of revenue, 10bps below our expectations. **The company anticipates these initiatives to become more prevalent in FY2019.**

FIGURE 11  
Operating Margin Historical



Source: Company Documents, Barclays Research

## First Look

FIGURE 12  
Myriad Genetics First Look

Myriad Genetics - 1Q19 (\$ in MM's except EPS)										
Income Statement	Reported	Barclays Research			Prior Year			Prior Quarter		
	1Q19	1Q19E	+/-	%	1Q18	+/-	% Y/Y	4Q18	+/-	% Q/Q
Revenues	\$202.3	\$201.3	\$1.0	0.5%	\$179.9	\$22.4	12.5%	\$191.8	\$10.5	5.5%
Gross Profit Margin	77.0%	74.8%	2.20%		77.1%	-0.15%		78.6%	-1.68%	
Core SG&A	\$99.6	\$99.8	(\$0.3)	-0.3%	\$91.6	\$8.0	8.7%	\$91.4	\$8.1	8.9%
Stock Comp	\$7.8	\$7.0	\$0.7	10.4%	\$6.4	\$1.4	21.1%	\$7.1	\$0.7	9.2%
Total SG&A	\$107.3	\$106.9	\$0.4	0.4%	\$106.0	\$1.3	1.2%	\$107.6	(\$0.3)	-0.3%
% of Revenue	53.0%	53.1%	-0.03%		56.4%	-3.37%		53.6%	-0.52%	
R&D ex-Comp	\$19.2	\$21.8	(\$2.6)	-12.1%	\$16.8	\$2.4	14.3%	\$15.6	\$3.6	23.1%
% of Revenue	9.1%	10.8%	-1.76%		8.9%	0.15%		7.8%	1.32%	
Adj. EBITDA	\$34.5	\$26.4	\$8.1	30.4%	\$26.4	\$8.1	30.7%	\$38.7	(\$4.2)	-10.9%
% EBITDA Margin	17.1%	13.1%	3.92%		14.1%	3.00%		19.3%	-2.21%	
Adj. EBIT	\$29.4	\$22.2	\$7.2	32.2%	\$22.4	\$7.0	31.3%	\$34.9	(\$5.5)	-15.8%
% EBIT Margin	18.4%	11.0%	7.32%		16.0%	2.35%		21.9%	-3.53%	
Adj. Pre-Tax Income	\$29.0	\$20.0	\$9.0	45.2%	\$21.6	\$7.4	34.3%	\$35.1	(\$6.1)	-17.4%
% Pre-Tax Margin	14.3%	9.9%	4.42%		11.5%	2.84%		17.5%	-3.14%	
Taxes	\$4.0	\$3.4	\$0.6	17.8%	\$5.0	(\$1.0)	-20.0%	\$7.5	(\$3.5)	-46.7%
% Tax Rate	13.8%	17.0%	-3.21%		23.1%	-9.36%		21.4%	-7.57%	
Diluted Shares	77.0	75.2	1.8	2.3%	70.4	6.6	9.4%	72.9	4.1	5.6%
Adj. Net Income	\$25.0	\$16.6	\$8.4	50.8%	\$16.6	\$8.4	50.6%	\$27.6	(\$2.6)	-9.4%
% Adj. Net Margin	12.4%	8.2%	4.13%		8.8%	3.52%		13.7%	-1.38%	
Cash EPS	\$0.43	\$0.29	\$0.14	46.5%	\$0.30	\$0.13	42.0%	\$0.45	-\$0.03	-6.2%

Source: Company Documents, Barclays Research



## Myriad Genetics Model Update

**FIGURE 13**  
**Myriad Genetics Income Statement**

<i>Income Statement (\$ 1,000s)</i>	2016	2017	1Q18	2Q18	3Q18	4Q18	2018	1Q19	EST	EST	EST	EST	EST	EST	
	6/30/2016	6/30/2017	9/30/2017	12/31/2017	3/31/2018	6/30/2018	6/30/2018	9/30/2018	12/31/2018	3/31/2019	6/30/2019	9/30/2019	12/31/2019	3/31/2020	6/30/2021
Molecular diagnostic testing	705,700	722,100	176,500	177,900	177,300	187,600	719,300	198,000	211,943	212,940	229,228	852,111	923,801	966,263	
% Y/Y Growth	1.5%	2.3%	6.9%	-3.3%	-4.3%	-0.2%	-0.4%	12.2%	19.1%	20.1%	22.2%	18.5%	8.4%	4.6%	
% Q/Q Growth			-6.1%	0.8%	-0.3%	5.8%		5.5%	7.0%	0.5%	7.6%				
Pharmaceutical and clinical services	48,100	49,300	11,400	14,800	13,800	13,300	53,300	13,300	13,500	7,000	7,000	40,800	29,700	31,185	
% Y/Y Growth	73.8%	2.5%	-8.1%	17.5%	17.9%	5.6%	8.1%	16.7%	-8.8%	-49.3%	-47.4%	-23.5%	-27.2%	5.0%	
% Q/Q Growth			-9.5%	29.8%	-6.8%	-3.6%		0.0%	1.5%	-48.1%	0.0%				
<b>Gross Revenue</b>	<b>\$753,800</b>	<b>\$771,400</b>	<b>\$187,900</b>	<b>\$192,700</b>	<b>\$191,100</b>	<b>\$200,900</b>	<b>\$772,600</b>	<b>\$211,300</b>	<b>\$225,443</b>	<b>\$219,940</b>	<b>\$236,228</b>	<b>\$892,911</b>	<b>\$953,501</b>	<b>\$997,448</b>	
% Y/Y Growth	4.2%	2.3%	5.9%	-1.9%	-2.9%	0.2%	0.2%	12.5%	17.0%	15.1%	17.6%	15.6%	6.8%	4.6%	
% Organic Growth	4.2%	-8.1%	-5.0%	-1.9%	-2.9%	0.2%	-2.3%	2.8%	1.0%	1.6%	4.0%	2.4%	3.0%	4.6%	
% Q/Q Growth			-6.3%	2.6%	-0.8%	5.1%		5.2%	6.7%	-2.4%	7.4%				
Bad Debt Expense	33,300	37,300	8,000	8,000	7,200	9,100	32,300	9,000	9,359	8,287	10,700	37,346	39,868	41,702	
% Y/Y Growth	5.7%	12.0%	11.1%	-26.6%	-21.7%	-9.0%	-13.4%	12.5%	17.0%	15.1%	17.6%	15.6%	6.8%	4.6%	
% of Gross Revs	4.4%	4.8%	4.3%	4.2%	3.8%	4.5%	4.2%	4.3%	4.2%	3.8%	4.5%	4.2%	4.2%	4.2%	
<b>Net Revenue</b>	<b>\$720,500</b>	<b>\$734,100</b>	<b>\$179,900</b>	<b>\$184,700</b>	<b>\$183,900</b>	<b>\$191,800</b>	<b>\$740,300</b>	<b>\$202,300</b>	<b>\$216,084</b>	<b>\$211,653</b>	<b>\$225,528</b>	<b>\$855,565</b>	<b>\$913,633</b>	<b>\$955,745</b>	
% Y/Y Growth	4.2%	1.9%	5.6%	-0.5%	-2.0%	0.7%	0.8%	12.5%	17.0%	15.1%	17.6%	15.6%	6.8%	4.6%	
Cost of MDx testing (ex-Dep/Comp)	118,000	129,100	32,000	33,600	32,600	31,300	129,500	33,900	47,262	48,086	50,262	179,509	209,498	225,105	
% of MDx revenue	16.7%	17.9%	18.1%	18.9%	18.4%	16.7%	18.0%	17.1%	22.3%	22.6%	21.9%	21.1%	22.7%	23.3%	
% of MDx revenue (inc-Dep/Comp)	18.8%	20.1%	20.5%	21.2%	20.6%	18.8%	20.3%	19.8%	24.5%	24.7%	24.1%	23.4%	24.8%	25.5%	
Cost of pharma and clinical services	24,100	25,700	6,700	6,700	7,200	7,700	28,300	7,400	6,953	3,605	3,605	21,563	15,296	16,060	
% of Pharma/Clinical Revs	50.1%	52.1%	58.8%	45.3%	52.2%	57.9%	53.1%	55.6%	51.5%	51.5%	51.5%	52.8%	51.5%	51.5%	
<b>Gross Profit</b>	<b>\$611,700</b>	<b>\$616,600</b>	<b>\$149,200</b>	<b>\$152,400</b>	<b>\$151,300</b>	<b>\$161,900</b>	<b>\$614,800</b>	<b>\$161,000</b>	<b>\$161,869</b>	<b>\$159,963</b>	<b>\$171,661</b>	<b>\$654,493</b>	<b>\$688,839</b>	<b>\$714,580</b>	
% Gross Margin	81.1%	79.9%	79.4%	79.1%	79.2%	80.6%	79.6%	76.2%	71.8%	72.7%	72.7%	73.3%	72.2%	71.6%	
% Gross Margin (inc-Dep/Comp)	79.1%	77.8%	77.1%	77.0%	77.0%	78.6%	77.5%	77.0%	72.7%	73.4%	73.9%	74.2%	73.2%	72.6%	
R&D Expense ex-Stock Based Comp	64,800	68,000	16,800	15,400	16,400	15,600	64,200	19,200	19,250	18,450	17,550	74,450	78,653	82,585	
% R&D of Revenue	8.6%	8.8%	8.9%	8.0%	8.6%	7.8%	8.3%	9.1%	8.9%	8.7%	7.8%	8.7%	8.6%	8.6%	
% Y/Y Growth	-7.8%	4.9%	-4.5%	-9.9%	1.9%	-9.3%	-5.6%	14.3%	25.0%	12.5%	12.5%	16.0%	5.6%	5.0%	
Bad Debt	33,300	37,300	8,000	8,000	7,200	9,100	32,300	9,100	9,100	8,287	10,700	37,346	39,868	41,702	
% Bad Debt	4.4%	4.8%	4.3%	4.2%	3.8%	4.5%	4.2%	4.3%	4.2%	3.8%	4.5%	4.2%	4.2%	4.2%	
Core SG&A	288,400	369,000	91,600	91,300	91,100	91,400	365,400	99,550	102,940	100,108	101,178	403,775	418,544	436,916	
% SG&A ex-Comp	38.3%	47.8%	48.7%	47.4%	47.7%	45.5%	47.3%	47.1%	47.6%	47.3%	44.9%	47.2%	45.8%	45.7%	
Stock Based Comp	31,600	29,900	6,400	6,900	6,600	7,100	27,000	7,750	5,472	5,482	4,708	23,412	23,226	26,657	
% Stock Comp	4.2%	3.9%	3.4%	3.6%	3.5%	3.5%	3.5%	3.8%	2.5%	2.6%	2.1%	2.7%	2.5%	2.8%	
Total SG&A	353,300	436,200	106,000	106,200	104,900	107,600	424,700	107,300	108,411	105,590	105,886	427,187	441,770	463,573	
% SG&A of Revenue	46.9%	56.5%	56.4%	55.1%	54.9%	53.6%	55.0%	53.0%	50.2%	49.9%	47.0%	49.9%	48.4%	48.5%	
% Y/Y Growth	3.8%	23.5%	7.5%	-4.9%	-7.0%	-4.9%	-2.6%	1.2%	2.1%	0.7%	-1.6%	0.6%	3.4%	4.9%	
<b>Adj. EBITDA</b>	<b>\$193,600</b>	<b>\$112,400</b>	<b>\$26,400</b>	<b>\$30,800</b>	<b>\$30,000</b>	<b>\$38,700</b>	<b>\$125,900</b>	<b>\$34,500</b>	<b>\$34,208</b>	<b>\$35,923</b>	<b>\$48,226</b>	<b>\$152,857</b>	<b>\$168,417</b>	<b>\$168,422</b>	
% EBITDA Margin	25.7%	14.6%	14.1%	16.0%	15.7%	19.3%	16.3%	17.1%	15.8%	17.0%	21.4%	17.9%	18.4%	17.6%	
% Y/Y Growth	7.1%	-41.9%	3.9%	13.2%	8.3%	20.6%	12.0%	30.7%	11.1%	19.7%	24.6%	21.4%	10.2%	0.0%	
Depreciation Expense	13,900	15,200	4,000	3,900	3,800	3,800	15,500	5,100	4,509	4,399	4,725	18,732	19,070	19,949	
% of Revenue	1.84%	1.97%	2.13%	2.02%	1.99%	1.89%	2.01%	2.41%	2.00%	2.00%	2.00%	2.10%	2.00%	2.00%	
<b>Cash EBIT</b>	<b>\$211,300</b>	<b>\$127,100</b>	<b>\$28,800</b>	<b>\$33,800</b>	<b>\$32,800</b>	<b>\$42,000</b>	<b>\$137,400</b>	<b>\$37,150</b>	<b>\$35,171</b>	<b>\$37,006</b>	<b>\$48,209</b>	<b>\$157,536</b>	<b>\$172,573</b>	<b>\$175,131</b>	
% EBIT Margin	29.3%	17.3%	16.0%	18.3%	17.8%	21.9%	18.6%	18.4%	16.3%	17.5%	21.4%	18.4%	18.9%	18.3%	
% Y/Y Growth	7.2%	-39.8%	-2.0%	9.0%	4.1%	19.3%	8.1%	29.0%	4.1%	12.8%	14.8%	14.7%	9.5%	1.5%	
<b>Operating Income (EBIT)</b>	<b>\$179,700</b>	<b>\$97,200</b>	<b>\$22,400</b>	<b>\$26,900</b>	<b>\$26,200</b>	<b>\$34,900</b>	<b>\$110,400</b>	<b>\$29,400</b>	<b>\$29,699</b>	<b>\$31,524</b>	<b>\$43,501</b>	<b>\$134,124</b>	<b>\$149,347</b>	<b>\$148,474</b>	
% EBIT Margin	23.6%	12.6%	11.9%	14.0%	13.7%	17.4%	14.3%	14.5%	13.7%	14.9%	19.3%	15.7%	16.3%	15.5%	
% Y/Y Growth	7.3%	-45.9%	3.7%	14.0%	9.2%	24.6%	13.6%	31.3%	10.4%	20.3%	24.6%	21.5%	11.3%	-0.6%	
Interest Expense		(4,000)	(900)	(700)	(500)	(1,100)	(3,200)	(2,200)	(2,558)	(2,558)	(2,558)	(9,875)	(9,063)	(5,687)	
% Interest Expense		-8.1%	-0.5%	-0.4%	-0.3%	-0.5%	-6.0%	-1.1%	-1.2%	-1.2%	-1.1%	-1.2%	-1.0%	-0.6%	
% of Debt Outstanding		3.34%	1.81%	1.41%	0.99%	2.11%	2.57%	4.16%	3.75%	3.75%	3.75%	3.85%	3.85%	4.20%	
Interest income	900	1,200	400	400	500	500	1,800	700	479	517	595	2,291	3,025	2,842	
% Interest Income	0.1%	0.2%	0.2%	0.2%	0.3%	0.2%	0.2%	0.3%	0.2%	0.2%	0.3%	0.3%	0.3%	0.3%	
% of Invested Assets	0.42%	0.55%	0.80%	0.81%	0.99%	0.96%	0.88%	1.33%	1.00%	1.00%	1.00%	0.89%	1.07%	1.15%	
Other	1,200	(1,300)	(300)	(400)	(500)	800	(400)	1,100	1,000	1,000	1,000	4,100	1,000	1,000	
<b>Pre-Tax Income</b>	<b>\$181,800</b>	<b>\$93,100</b>	<b>\$21,600</b>	<b>\$26,200</b>	<b>\$25,700</b>	<b>\$35,100</b>	<b>\$108,600</b>	<b>\$29,000</b>	<b>\$28,620</b>	<b>\$30,482</b>	<b>\$42,538</b>	<b>\$130,640</b>	<b>\$144,309</b>	<b>\$146,629</b>	
% Pre-Tax Margin	24.1%	12.1%	11.5%	13.6%	13.4%	17.5%	14.1%	14.3%	13.2%	14.4%	18.9%	15.3%	15.8%	15.3%	
% Y/Y Growth	7.9%	-48.8%	8.5%	11.5%	13.2%	30.0%	16.6%	34.3%	9.2%	18.6%	21.2%	20.3%	10.5%	1.6%	
Income tax provision	62,300	20,900	5,000	4,900	5,000	7,500	22,400	4,000	4,865	5,182	7,231	21,279	24,532	24,927	
% Tax Rate	34.3%	22.4%	23.1%	18.7%	19.5%	21.4%	20.6%	13.8%	17.0%	17.0%	17.0%	16.3%	17.0%	17.0%	
<b>Adj. Net Income</b>	<b>\$119,500</b>	<b>\$72,400</b>	<b>\$16,600</b>	<b>\$21,300</b>	<b>\$20,700</b>	<b>\$27,600</b>	<b>\$86,200</b>	<b>\$25,000</b>	<b>\$23,755</b>	<b>\$25,300</b>	<b>\$35,306</b>	<b>\$109,361</b>	<b>\$119,776</b>	<b>\$121,702</b>	
% Net Margin	15.9%	9.4%	8.8%	11.1%	10.8%	13.7%	11.2%	12.4%	11.0%	12.0%	15.7%	12.6%	13.1%	12.7%	
% Y/Y Growth	10.8%	-39.4%	3.8%	21.7%	14.4%	32.7%	19.1%	50.6%	11.5%	22.2%	27.9%	26.9%	9.5%	1.6%	
Weighted average shares:															
Basic Shares	70,925	68,325	68,600	69,300	69,800	70,100	69,450	73,000	74,167	74,317	74,467	73,988	73,448	72,195	
Diluted Shares	72,050	68,575	70,400	71,900	72,400	72,100	71,900	77,000	78,167	78,317	78,467	77,988	77,448	76,195	
<b>Adj. EPS</b>	<b>\$1.64</b>	<b>\$1.06</b>	<b>\$0.24</b>	<b>\$0.30</b>	<b>\$0.29</b>	<b>\$0.38</b>	<b>\$1.20</b>	<b>\$0.32</b>	<b>\$0.30</b>	<b>\$0.32</b>	<b>\$0.45</b>	<b>\$1.40</b>	<b>\$1.55</b>	<b>\$1.60</b>	
% Y/Y Growth	12.7%	-35.5%	1.4%	15.6%	7.9%	25.4%	13.3%	37.7%	2.6%	13.0%	18.8%	17.1%	10.4%	3.3%	
<b>Stock Based Comp</b>	<b>\$0.28</b>	<b>\$0.34</b>	<b>\$0.06</b>	<b>\$0.07</b>	<b>\$0.07</b>	<b>\$0.07</b>	<b>\$0.28</b>	<b>\$0.10</b>	<b>\$0.07</b>	<b>\$0.07</b>	<b>\$0.06</b>	<b>\$0.30</b>	<b>\$0.30</b>	<b>\$0.35</b>	
<b>Cash EPS</b>	<b>\$1.92</b>	<b>\$1.39</b>	<b>\$0.30</b>	<b>\$0.36</b>	<b>\$0.36</b>	<b>\$0.45</b>	<b>\$1.47</b>	<b>\$0.43</b>	<b>\$0.37</b>	<b>\$0.39</b>	<b>\$0.51</b>	<b>\$1.70</b>	<b>\$1.85</b>	<b>\$1.95</b>	
% Y/Y Growth	12.4%	-27.4%	-7.5%	7.9%	1.0%	18.9%	5.6%	42.0%	2.9%	10.4%	12.4%	15.6%	8.6%	5.4%	

## ANALYST(S) CERTIFICATION(S):

I, Jack Meehan, CFA, hereby certify (1) that the views expressed in this research report accurately reflect my personal views about any or all of the subject securities or issuers referred to in this research report and (2) no part of my compensation was, is or will be directly or indirectly related to the specific recommendations or views expressed in this research report.

## IMPORTANT DISCLOSURES

Barclays Research is produced by the Investment Bank of Barclays Bank PLC and its affiliates (collectively and each individually, "Barclays"). All authors contributing to this research report are Research Analysts unless otherwise indicated. The publication date at the top of the report reflects the local time where the report was produced and may differ from the release date provided in GMT.

### Availability of Disclosures:

Where any companies are the subject of this research report, for current important disclosures regarding those companies please refer to <https://publicresearch.barclays.com> or alternatively send a written request to: Barclays Research Compliance, 745 Seventh Avenue, 13th Floor, New York, NY 10019 or call +1-212-526-1072.

The analysts responsible for preparing this research report have received compensation based upon various factors including the firm's total revenues, a portion of which is generated by investment banking activities, the profitability and revenues of the Markets business and the potential interest of the firm's investing clients in research with respect to the asset class covered by the analyst.

Analysts regularly conduct site visits to view the material operations of covered companies, but Barclays policy prohibits them from accepting payment or reimbursement by any covered company of their travel expenses for such visits.

Barclays Research Department produces various types of research including, but not limited to, fundamental analysis, equity-linked analysis, quantitative analysis, and trade ideas. Recommendations contained in one type of Barclays Research may differ from those contained in other types of Barclays Research, whether as a result of differing time horizons, methodologies, or otherwise.

In order to access Barclays Statement regarding Research Dissemination Policies and Procedures, please refer to <https://publicresearch.barclays.com/S/RD.htm>. In order to access Barclays Research Conflict Management Policy Statement, please refer to: <https://publicresearch.barclays.com/S/CM.htm>.

### Primary Stocks (Ticker, Date, Price)

**Myriad Genetics Inc.** (MYGN, 06-Nov-2018, USD 36.67), Underweight/Neutral, CE/J

Prices are sourced from Thomson Reuters as of the last available closing price in the relevant trading market, unless another time and source is indicated.

### Disclosure Legend:

**A:** Barclays Bank PLC and/or an affiliate has been lead manager or co-lead manager of a publicly disclosed offer of securities of the issuer in the previous 12 months.

**B:** An employee or non-executive director of Barclays Bank PLC and/or an affiliate is a director of this issuer.

**CD:** Barclays Bank PLC and/or an affiliate is a market-maker in debt securities issued by this issuer.

**CE:** Barclays Bank PLC and/or an affiliate is a market-maker in equity securities issued by this issuer.

**D:** Barclays Bank PLC and/or an affiliate has received compensation for investment banking services from this issuer in the past 12 months.

**E:** Barclays Bank PLC and/or an affiliate expects to receive or intends to seek compensation for investment banking services from this issuer within the next 3 months.

**FA:** Barclays Bank PLC and/or an affiliate beneficially owns 1% or more of a class of equity securities of this issuer, as calculated in accordance with US regulations.

**FB:** Barclays Bank PLC and/or an affiliate beneficially owns a long position of more than 0.5% of a class of equity securities of this issuer, as calculated in accordance with EU regulations.

**FC:** Barclays Bank PLC and/or an affiliate beneficially owns a short position of more than 0.5% of a class of equity securities of this issuer, as calculated in accordance with EU regulations.

**GD:** One of the analysts on the fundamental credit coverage team (or a member of his or her household) has a financial interest in the debt or equity securities of this issuer.

**GE:** One of the analysts on the fundamental equity coverage team (or a member of his or her household) has a financial interest in the debt or equity securities of this issuer.

**H:** This issuer beneficially owns more than 5% of any class of common equity securities of Barclays PLC.

**I:** Barclays Bank PLC and/or an affiliate is party to an agreement with this issuer for the provision of financial services to Barclays Bank PLC and/or an affiliate.

**J:** Barclays Bank PLC and/or an affiliate is a liquidity provider and/or trades regularly in the securities of this issuer and/or in any related derivatives.

**K:** Barclays Bank PLC and/or an affiliate has received non-investment banking related compensation (including compensation for brokerage services, if applicable) from this issuer within the past 12 months.

## IMPORTANT DISCLOSURES CONTINUED

- L:** This issuer is, or during the past 12 months has been, an investment banking client of Barclays Bank PLC and/or an affiliate.
- M:** This issuer is, or during the past 12 months has been, a non-investment banking client (securities related services) of Barclays Bank PLC and/or an affiliate.
- N:** This issuer is, or during the past 12 months has been, a non-investment banking client (non-securities related services) of Barclays Bank PLC and/or an affiliate.
- O:** Not in use.
- P:** A partner, director or officer of Barclays Capital Canada Inc. has, during the preceding 12 months, provided services to the subject company for remuneration, other than normal course investment advisory or trade execution services.
- Q:** Barclays Bank PLC and/or an affiliate is a Corporate Broker to this issuer.
- R:** Barclays Capital Canada Inc. and/or an affiliate has received compensation for investment banking services from this issuer in the past 12 months.
- S:** This issuer is a Corporate Broker to Barclays PLC.
- T:** Barclays Bank PLC and/or an affiliate is providing equity advisory services to this issuer.
- U:** The equity securities of this Canadian issuer include subordinate voting restricted shares.
- V:** The equity securities of this Canadian issuer include non-voting restricted shares.

### Risk Disclosure(s)

Master limited partnerships (MLPs) are pass-through entities structured as publicly listed partnerships. For tax purposes, distributions to MLP unit holders may be treated as a return of principal. Investors should consult their own tax advisors before investing in MLP units.

### Guide to the Barclays Fundamental Equity Research Rating System:

Our coverage analysts use a relative rating system in which they rate stocks as Overweight, Equal Weight or Underweight (see definitions below) relative to other companies covered by the analyst or a team of analysts that are deemed to be in the same industry (the "industry coverage universe").

In addition to the stock rating, we provide industry views which rate the outlook for the industry coverage universe as Positive, Neutral or Negative (see definitions below). A rating system using terms such as buy, hold and sell is not the equivalent of our rating system. Investors should carefully read the entire research report including the definitions of all ratings and not infer its contents from ratings alone.

### Stock Rating

**Overweight** - The stock is expected to outperform the unweighted expected total return of the industry coverage universe over a 12-month investment horizon.

**Equal Weight** - The stock is expected to perform in line with the unweighted expected total return of the industry coverage universe over a 12-month investment horizon.

**Underweight** - The stock is expected to underperform the unweighted expected total return of the industry coverage universe over a 12-month investment horizon.

**Rating Suspended** - The rating and target price have been suspended temporarily due to market events that made coverage impracticable or to comply with applicable regulations and/or firm policies in certain circumstances including where the Investment Bank of Barclays Bank PLC is acting in an advisory capacity in a merger or strategic transaction involving the company.

### Industry View

**Positive** - industry coverage universe fundamentals/valuations are improving.

**Neutral** - industry coverage universe fundamentals/valuations are steady, neither improving nor deteriorating.

**Negative** - industry coverage universe fundamentals/valuations are deteriorating.

Below is the list of companies that constitute the "industry coverage universe":

#### U.S. Life Science Tools & Diagnostics

Agilent Technologies (A)	Bio-Rad Laboratories (BIO)	Bruker Corp (BRKR)
Charles River Laboratories (CRL)	Genomic Health Inc. (GHDX)	Hologic Inc. (HOLX)
ICON plc (ICLR)	Illumina Inc. (ILMN)	IQVIA (IQV)
Laboratory Corp. of America Hldgs. (LH)	Mettler Toledo (MTD)	Myriad Genetics Inc. (MYGN)
PerkinElmer Inc. (PKI)	PRA Health Sciences (PRAH)	QIAGEN N.V. (QGEN)
Quest Diagnostics (DGX)	Quidel Corp. (QDEL)	Syneos Health, Inc. (SYNH)
Thermo Fisher Scientific, Inc. (TMO)	Waters Corp. (WAT)	

### Distribution of Ratings:

Barclays Equity Research has 1541 companies under coverage.

45% have been assigned an Overweight rating which, for purposes of mandatory regulatory disclosures, is classified as a Buy rating; 58% of

## IMPORTANT DISCLOSURES CONTINUED

companies with this rating are investment banking clients of the Firm; 76% of the issuers with this rating have received financial services from the Firm.

38% have been assigned an Equal Weight rating which, for purposes of mandatory regulatory disclosures, is classified as a Hold rating; 47% of companies with this rating are investment banking clients of the Firm; 67% of the issuers with this rating have received financial services from the Firm.

15% have been assigned an Underweight rating which, for purposes of mandatory regulatory disclosures, is classified as a Sell rating; 36% of companies with this rating are investment banking clients of the Firm; 67% of the issuers with this rating have received financial services from the Firm.

### Guide to the Barclays Research Price Target:

Each analyst has a single price target on the stocks that they cover. The price target represents that analyst's expectation of where the stock will trade in the next 12 months. Upside/downside scenarios, where provided, represent potential upside/potential downside to each analyst's price target over the same 12-month period.

### Top Picks:

Barclays Equity Research's "Top Picks" represent the single best alpha-generating investment idea within each industry (as defined by the relevant "industry coverage universe"), taken from among the Overweight-rated stocks within that industry. Barclays Equity Research publishes "Top Picks" reports every quarter and analysts may also publish intra-quarter changes to their Top Picks, as necessary. While analysts may highlight other Overweight-rated stocks in their published research in addition to their Top Pick, there can only be one "Top Pick" for each industry. To view the current list of Top Picks, go to the Top Picks page on Barclays Live (<https://live.barcap.com/go/keyword/TopPicks>).

To see a list of companies that comprise a particular industry coverage universe, please go to <https://publicresearch.barclays.com>.

### Types of investment recommendations produced by Barclays Equity Research:

In addition to any ratings assigned under Barclays' formal rating systems, this publication may contain investment recommendations in the form of trade ideas, thematic screens, scorecards or portfolio recommendations that have been produced by analysts within Equity Research. Any such investment recommendations shall remain open until they are subsequently amended, rebalanced or closed in a future research report.

### Disclosure of other investment recommendations produced by Barclays Equity Research:

Barclays Equity Research may have published other investment recommendations in respect of the same securities/instruments recommended in this research report during the preceding 12 months. To view all investment recommendations published by Barclays Equity Research in the preceding 12 months please refer to <https://live.barcap.com/go/research/Recommendations>.

### Legal entities involved in producing Barclays Research:

Barclays Bank PLC (Barclays, UK)

Barclays Capital Inc. (BCI, US)

Barclays Securities Japan Limited (BSJL, Japan)

Barclays Bank PLC, Hong Kong branch (Barclays Bank, Hong Kong)

Barclays Capital Canada Inc. (BCCI, Canada)

Barclays Bank Mexico, S.A. (BBMX, Mexico)

Barclays Securities (India) Private Limited (BSIPL, India)

Barclays Bank PLC, India branch (Barclays Bank, India)

Barclays Bank PLC, Singapore branch (Barclays Bank, Singapore)

IMPORTANT DISCLOSURES CONTINUED

Myriad Genetics Inc. (MYGN / MYGN)

USD 36.67 (06-Nov-2018)

Stock Rating

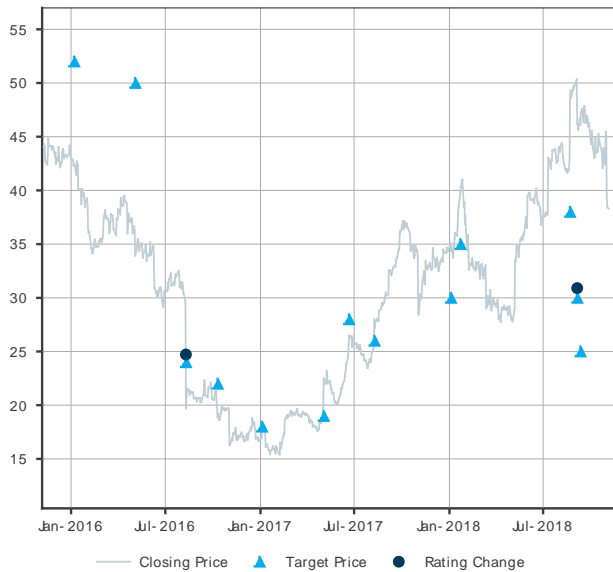
UNDERWEIGHT

Industry View

NEUTRAL

Rating and Price Target Chart - USD (as of 06-Nov-2018)

Currency=USD



Publication Date	Closing Price	Rating	Adjusted Price Target
11-Sep-2018	46.09		25.00
05-Sep-2018	46.16	Underweight	30.00
22-Aug-2018	48.20		38.00
22-Jan-2018	39.88		35.00
04-Jan-2018	34.38		30.00
09-Aug-2017	27.98		26.00
21-Jun-2017	26.47		28.00
03-May-2017	22.50		19.00
04-Jan-2017	17.62		18.00
10-Oct-2016	18.87		22.00
10-Aug-2016	19.70	Equal Weight	24.00
04-May-2016	33.94		50.00
07-Jan-2016	42.42		52.00

On 06-Nov-2015, prior to any intra-day change that may have been published, the rating for this security was Overweight, and the adjusted price target was 50.00.

Source: Thomson Reuters, Barclays Research

Historical stock prices and price targets may have been adjusted for stock splits and dividends.

Source: IDC, Barclays Research

[Link to Barclays Live for interactive charting](#)

CE: Barclays Bank PLC and/or an affiliate is a market-maker in equity securities issued by Myriad Genetics Inc..

J: Barclays Bank PLC and/or an affiliate is a liquidity provider and/or trades regularly in the securities by Myriad Genetics Inc. and/or in any related derivatives.

**Valuation Methodology:** Our \$23 PT is based on a payor coverage scenario analysis. This also represents 12x our CY2019 EBITDA estimate of \$159mm.

**Risks which May Impede the Achievement of the Barclays Research Valuation and Price Target:** Competition in the Hereditary Cancer Testing business is the primary concern, as new entrants look to gain share and decentralize the market away from Myriad. Additionally, the company's new product portfolio carries risks around commercialization, with greater scrutiny from regulators and payors. Finally, reimbursement remains a concern for the company's entire portfolio, with pressure on pricing a risk to margins and profitability given the fixed cost nature of Myriad's business.

## DISCLAIMER:

This publication has been produced by Barclays Research Department in the Investment Bank of Barclays Bank PLC and/or one or more of its affiliates (collectively and each individually, "Barclays"). It has been distributed by one or more Barclays affiliated legal entities listed below. It is provided to our clients for information purposes only, and Barclays makes no express or implied warranties, and expressly disclaims all warranties of merchantability or fitness for a particular purpose or use with respect to any data included in this publication. To the extent that this publication states on the front page that it is intended for institutional investors and is not subject to all of the independence and disclosure standards applicable to debt research reports prepared for retail investors under U.S. FINRA Rule 2242, it is an "institutional debt research report" and distribution to retail investors is strictly prohibited. Barclays also distributes such institutional debt research reports to various issuers, media, regulatory and academic organisations for their own internal informational news gathering, regulatory or academic purposes and not for the purpose of making investment decisions regarding any debt securities. Media organisations are prohibited from re-publishing any opinion or recommendation concerning a debt issuer or debt security contained in any Barclays institutional debt research report. Any such recipients that do not want to continue receiving Barclays institutional debt research reports should contact [debtresearch@barclays.com](mailto:debtresearch@barclays.com). Barclays will not treat unauthorized recipients of this report as its clients and accepts no liability for use by them of the contents which may not be suitable for their personal use. Prices shown are indicative and Barclays is not offering to buy or sell or soliciting offers to buy or sell any financial instrument.

Without limiting any of the foregoing and to the extent permitted by law, in no event shall Barclays, nor any affiliate, nor any of their respective officers, directors, partners, or employees have any liability for (a) any special, punitive, indirect, or consequential damages; or (b) any lost profits, lost revenue, loss of anticipated savings or loss of opportunity or other financial loss, even if notified of the possibility of such damages, arising from any use of this publication or its contents.

Other than disclosures relating to Barclays, the information contained in this publication has been obtained from sources that Barclays Research believes to be reliable, but Barclays does not represent or warrant that it is accurate or complete. Barclays is not responsible for, and makes no warranties whatsoever as to, the information or opinions contained in any written, electronic, audio or video presentations of third parties that are accessible via a direct hyperlink in this publication or via a hyperlink to a third-party web site ("Third-Party Content"). Any such Third-Party Content has not been adopted or endorsed by Barclays, does not represent the views or opinions of Barclays, and is not incorporated by reference into this publication. Third-Party Content is provided for information purposes only and Barclays has not independently verified its accuracy or completeness.

The views in this publication are solely and exclusively those of the authoring analyst(s) and are subject to change, and Barclays Research has no obligation to update its opinions or the information in this publication. Unless otherwise disclosed herein, the analysts who authored this report have not received any compensation from the subject companies in the past 12 months. If this publication contains recommendations, they are general recommendations that were prepared independently of any other interests, including those of Barclays and/or its affiliates, and/or the subject companies. This publication does not contain personal investment recommendations or investment advice or take into account the individual financial circumstances or investment objectives of the clients who receive it. The securities and other investments discussed herein may not be suitable for all investors. Barclays is not a fiduciary to any recipient of this publication. Investors must independently evaluate the merits and risks of the investments discussed herein, consult any independent advisors they believe necessary, and exercise independent judgment with regard to any investment decision. The value of and income from any investment may fluctuate from day to day as a result of changes in relevant economic markets (including changes in market liquidity). The information herein is not intended to predict actual results, which may differ substantially from those reflected. Past performance is not necessarily indicative of future results.

This document is being distributed (1) only by or with the approval of an authorised person (Barclays Bank PLC) or (2) to, and is directed at (a) persons in the United Kingdom having professional experience in matters relating to investments and who fall within the definition of "investment professionals" in Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the "Order"); or (b) high net worth companies, unincorporated associations and partnerships and trustees of high value trusts as described in Article 49(2) of the Order; or (c) other persons to whom it may otherwise lawfully be communicated (all such persons being "Relevant Persons"). Any investment or investment activity to which this communication relates is only available to and will only be engaged in with Relevant Persons. Any other persons who receive this communication should not rely on or act upon it. Barclays Bank PLC is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority and is a member of the London Stock Exchange.

The Investment Bank of Barclays Bank PLC undertakes U.S. securities business in the name of its wholly owned subsidiary Barclays Capital Inc., a FINRA and SIPC member. Barclays Capital Inc., a U.S. registered broker/dealer, is distributing this material in the United States and, in connection therewith accepts responsibility for its contents. Any U.S. person wishing to effect a transaction in any security discussed herein should do so only by contacting a representative of Barclays Capital Inc. in the U.S. at 745 Seventh Avenue, New York, New York 10019.

Non-U.S. persons should contact and execute transactions through a Barclays Bank PLC branch or affiliate in their home jurisdiction unless local regulations permit otherwise.

Barclays Bank PLC, Paris Branch (registered in France under Paris RCS number 381 066 281) is regulated by the Autorité des marchés financiers and the Autorité de contrôle prudentiel. Registered office 34/36 Avenue de Friedland 75008 Paris.

This material is distributed in Canada by Barclays Capital Canada Inc., a registered investment dealer, a Dealer Member of IIROC ([www.iiroc.ca](http://www.iiroc.ca)), and a Member of the Canadian Investor Protection Fund (CIPF).

All Barclays research reports are distributed to institutional investors in Japan by Barclays Securities Japan Limited. Barclays Securities Japan Limited is a joint-stock company incorporated in Japan with registered office of 6-10-1 Roppongi, Minato-ku, Tokyo 106-6131, Japan. It is a subsidiary of Barclays Bank PLC and a registered financial instruments firm regulated by the Financial Services Agency of Japan. Registered Number: Kanto Zaimukyokucho (kinsho) No. 143.

Barclays Bank PLC, Hong Kong Branch is distributing this material in Hong Kong as an authorised institution regulated by the Hong Kong Monetary Authority. Registered Office: 41/F, Cheung Kong Center, 2 Queen's Road Central, Hong Kong.

All Indian securities-related research and other equity research produced by Barclays' Investment Bank are distributed in India by Barclays Securities (India) Private Limited (BSIPL). BSIPL is a company incorporated under the Companies Act, 1956 having CIN U67120MH2006PTC161063. BSIPL is registered and regulated by the Securities and Exchange Board of India (SEBI) as a Research Analyst: INH000001519; Portfolio Manager INP000002585; Stock Broker/Trading and Clearing Member: National Stock Exchange of India Limited (NSE) Capital Market INB231292732, NSE Futures & Options INF231292732, NSE Currency derivatives INE231450334, Bombay Stock Exchange Limited (BSE) Capital Market INB011292738, BSE Futures & Options INF011292738; Depository Participant (DP) with the National Securities & Depositories Limited (NSDL): DP ID: IN-DP-NSDL-299-2008; Investment Adviser: INA000000391. The registered office of BSIPL is at 208, Ceejay House, Shivsagar Estate, Dr. A. Besant Road, Worli, Mumbai – 400 018, India. Telephone No:

+91 2267196000. Fax number: +91 22 67196100. Any other reports produced by Barclays' Investment Bank are distributed in India by Barclays Bank PLC, India Branch, an associate of BSIPL in India that is registered with Reserve Bank of India (RBI) as a Banking Company under the provisions of The Banking Regulation Act, 1949 (Regn No BOM43) and registered with SEBI as Merchant Banker (Regn No INM000002129) and also as Banker to the Issue (Regn No INBI00000950). Barclays Investments and Loans (India) Limited, registered with RBI as Non Banking Financial Company (Regn No RBI CoR-07-00258), and Barclays Wealth Trustees (India) Private Limited, registered with Registrar of Companies (CIN U93000MH2008PTC188438), are associates of BSIPL in India that are not authorised to distribute any reports produced by Barclays' Investment Bank.

Barclays Bank PLC Frankfurt Branch distributes this material in Germany under the supervision of Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin).

This material is distributed in Mexico by Barclays Bank Mexico, S.A.

Nothing herein should be considered investment advice as defined in the Israeli Regulation of Investment Advisory, Investment Marketing and Portfolio Management Law, 1995 ("Advisory Law"). This document is being made to eligible clients (as defined under the Advisory Law) only. Barclays Israeli branch previously held an investment marketing license with the Israel Securities Authority but it cancelled such license on 30/11/2014 as it solely provides its services to eligible clients pursuant to available exemptions under the Advisory Law, therefore a license with the Israel Securities Authority is not required. Accordingly, Barclays does not maintain an insurance coverage pursuant to the Advisory Law.

Barclays Bank PLC in the Dubai International Financial Centre (Registered No. 0060) is regulated by the Dubai Financial Services Authority (DFSA). Principal place of business in the Dubai International Financial Centre: The Gate Village, Building 4, Level 4, PO Box 506504, Dubai, United Arab Emirates. Barclays Bank PLC-DIFC Branch, may only undertake the financial services activities that fall within the scope of its existing DFSA licence. Related financial products or services are only available to Professional Clients, as defined by the Dubai Financial Services Authority.

Barclays Bank PLC in the UAE is regulated by the Central Bank of the UAE and is licensed to conduct business activities as a branch of a commercial bank incorporated outside the UAE in Dubai (Licence No.: 13/1844/2008, Registered Office: Building No. 6, Burj Dubai Business Hub, Sheikh Zayed Road, Dubai City) and Abu Dhabi (Licence No.: 13/952/2008, Registered Office: Al Jazira Towers, Hamdan Street, PO Box 2734, Abu Dhabi).

Barclays Bank PLC in the Qatar Financial Centre (Registered No. 00018) is authorised by the Qatar Financial Centre Regulatory Authority (QFCRA). Barclays Bank PLC-QFC Branch may only undertake the regulated activities that fall within the scope of its existing QFCRA licence. Principal place of business in Qatar: Qatar Financial Centre, Office 1002, 10th Floor, QFC Tower, Diplomatic Area, West Bay, PO Box 15891, Doha, Qatar. Related financial products or services are only available to Business Customers as defined by the Qatar Financial Centre Regulatory Authority.

This material is distributed in the UAE (including the Dubai International Financial Centre) and Qatar by Barclays Bank PLC.

This material is not intended for investors who are not Qualified Investors according to the laws of the Russian Federation as it might contain information about or description of the features of financial instruments not admitted for public offering and/or circulation in the Russian Federation and thus not eligible for non-Qualified Investors. If you are not a Qualified Investor according to the laws of the Russian Federation, please dispose of any copy of this material in your possession.

This material is distributed in Singapore by the Singapore branch of Barclays Bank PLC, a bank licensed in Singapore by the Monetary Authority of Singapore. For matters in connection with this report, recipients in Singapore may contact the Singapore branch of Barclays Bank PLC, whose registered address is 10 Marina Boulevard, #23-01 Marina Bay Financial Centre Tower 2, Singapore 018983.

This material is distributed to persons in Australia by either Barclays Bank PLC, Barclays Capital Inc., Barclays Capital Securities Limited or Barclays Capital Asia Limited. None of Barclays Bank PLC, nor any of the other referenced Barclays group entities, hold an Australian financial services licence and instead they each rely on an exemption from the requirement to hold such a licence. This material is intended to only be distributed to "wholesale clients" as defined by the Australian Corporations Act 2001.

IRS Circular 230 Prepared Materials Disclaimer: Barclays does not provide tax advice and nothing contained herein should be construed to be tax advice. Please be advised that any discussion of U.S. tax matters contained herein (including any attachments) (i) is not intended or written to be used, and cannot be used, by you for the purpose of avoiding U.S. tax-related penalties; and (ii) was written to support the promotion or marketing of the transactions or other matters addressed herein. Accordingly, you should seek advice based on your particular circumstances from an independent tax advisor.

© Copyright Barclays Bank PLC (2018). All rights reserved. No part of this publication may be reproduced or redistributed in any manner without the prior written permission of Barclays. Barclays Bank PLC is registered in England No. 1026167. Registered office 1 Churchill Place, London, E14 5HP. Additional information regarding this publication will be furnished upon request.

