

# REGENERON

## Regeneron Pharma Research (12/30/19)

**Description:** Regeneron discovers, invents, develops, manufactures, and commercializes medicines for treating various medical conditions worldwide. The company was founded in 1988 and is headquartered in Tarrytown, New York with a focus on many conditions to be discussed in detail below.

**Ticker:** REGN

**Price:** \$373.32

**Market Cap:** \$40.6B

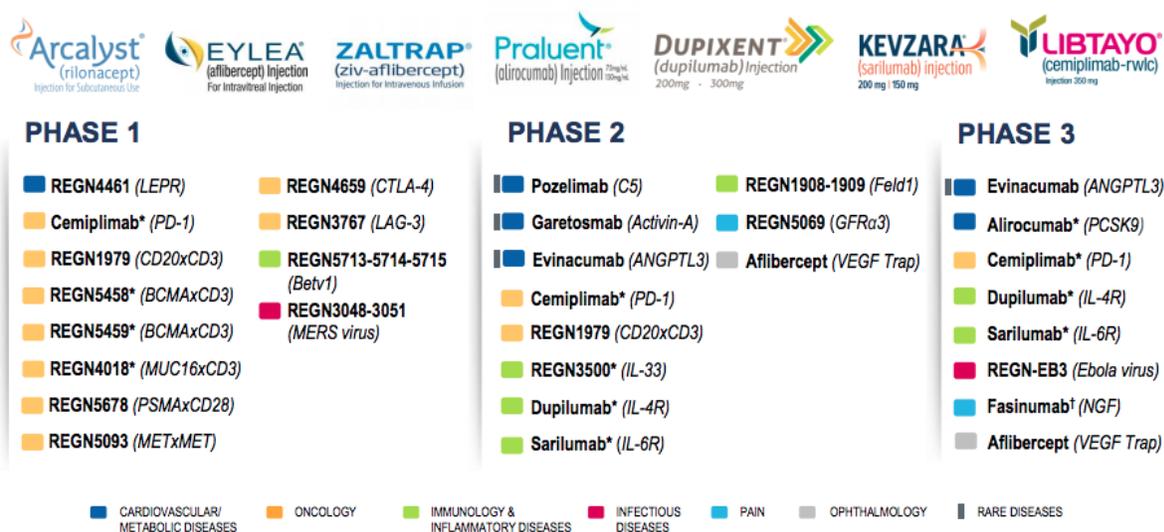
**Performance:** -0.05% YTD

**Dividend Yield:** N/A

### Analysis

Regeneron is one of the largest biotech giants in the world right up there with the likes of Biogen, Amgen, Gilead, Abbvie, Celgene, and others. The company's products are wide ranging so let's break them down in an easy-to-read manner.

Below is a screenshot of where the company's drugs currently stand with the FDA:



As we can see, REGN's pipeline is far from small with 12 drugs in Phase 1, 11 drugs in Phase 2, and 8 drugs in Phase 3 spanning cardiovascular metabolic diseases, oncology (treatment of tumors), immunology/inflammatory diseases, infectious diseases, pain, ophthalmology (eye and vision care), and other rare diseases. At this moment, REGN has 7 drugs approved by the FDA as seen across the top of the table and they are:

1. **Eylea** - injection to treat wet age-related macular degeneration and diabetic macular edema (DME); myopic choroidal neovascularization; and diabetic retinopathy in patients with DME, as well as macular edema following retinal vein occlusion, including macular edema following central retinal vein occlusion and macular edema following branch retinal vein occlusion. Put simply, many people with these conditions experience vision loss.
  - Note: Since 2006, REGN and Bayer have been parties to a license and collaboration agreement for the global development and commercialization outside the United States of EYLEA. Under the agreement, REGN and Bayer collaborate on, and share the costs of, the development of EYLEA. Bayer markets EYLEA outside the United States, where, for countries other than Japan, the companies share equally in profits and losses from sales of EYLEA. In Japan, REGN is currently entitled to receive a tiered percentage of between 33.5% and 40.0% of EYLEA net sales. REGN is obligated to reimburse Bayer for 50% of the development costs that it has incurred under the agreement from their share of the collaboration profits (including payments to REGN based on sales in Japan). The reimbursement payment in any quarter will equal 5% of the then outstanding repayment obligation, but never more than REGN's share of the collaboration profits in the quarter unless they elect to reimburse Bayer at a faster rate.
  - Within the United States, REGN retains exclusive commercialization rights to EYLEA and are entitled to all profits from such sales
2. **Dupixent** - injection to treat atopic dermatitis in adults, and asthma in adults and adolescents
3. **Praluent** - injection for heterozygous familial hypercholesterolemia or clinical atherosclerotic cardiovascular disease in adults
4. **Kevzara** - solution for subcutaneous injection for treating rheumatoid arthritis in adults.
5. **Libtayo** - injection to treat metastatic or locally advanced cutaneous squamous cell carcinoma
6. **Arcalyst** - injection for cryopyrin-associated periodic syndromes, including familial cold auto-inflammatory syndrome and muckle-wells syndrome
7. **Zaltrap** - injection for intravenous infusion to treat metastatic colorectal cancer

Also note: REGN and Sanofi share commercial expenses related to Dupixent, Praluent, and Kevzara in accordance with the companies' Antibody License and Collaboration Agreement. As such, during the same periods in which we recorded reimbursements from Sanofi related to REGN commercialization expenses, REGN also records their share of combined profits/losses in connection with the companies commercializing Dupixent, Praluent, and Kevzara within Sanofi collaboration revenue.

Product	Disease Area <sup>(1)</sup>	Territory			
		U.S.	EU	Japan	ROW <sup>(6)</sup>
EYLEA (aflibercept) Injection <sup>(2)</sup>	- Neovascular age-related macular degeneration (wet AMD)	✓	✓	✓	✓
	- Diabetic macular edema (DME)	✓	✓	✓	✓
	- Macular edema following retinal vein occlusion (RVO), which includes macular edema following central retinal vein occlusion (CRVO) and macular edema following branch retinal vein occlusion (BRVO)	✓	✓	✓	✓
	- Myopic choroidal neovascularization (mCNV)		✓	✓	✓
	- Diabetic retinopathy	✓			
Dupixent (dupilumab) Injection <sup>(3)</sup>	- Atopic dermatitis (in adults)	✓	✓	✓	✓
	- Atopic dermatitis (in adolescents)	✓	✓		✓
	- Asthma (in adults and adolescents)	✓	✓	✓	✓
	- Chronic rhinosinusitis with nasal polyposis (CRSwNP)	✓	✓		
Praluent (alirocumab) Injection <sup>(3)</sup>	- LDL-lowering in heterozygous familial hypercholesterolemia (HeFH) or clinical atherosclerotic cardiovascular disease (ASCVD) (in adults)	✓	✓	✓	✓
	- Cardiovascular risk reduction in patients with established cardiovascular disease	✓	✓		✓
Kevzara (sarilumab) Solution for Subcutaneous Injection <sup>(3)</sup>	- Rheumatoid arthritis (RA) (in adults)	✓	✓	✓	✓
Libtayo (cemiplimab) Injection <sup>(3)(4)</sup>	- Metastatic or locally advanced cutaneous squamous cell carcinoma (CSCC)	✓	✓		✓
ARCALYST® (rilonacept) Injection for Subcutaneous Use	- Cryopyrin-Associated Periodic Syndromes (CAPS), including Familial Cold Auto-inflammatory Syndrome (FCAS) and Muckle-Wells Syndrome (MWS)	✓			
ZALTRAP® (ziv-aflibercept) Injection for Intravenous Infusion <sup>(5)</sup>	- Metastatic colorectal cancer (mCRC)	✓	✓	✓	✓

Above is a screenshot of areas in which their approved drugs are allowed to be marketed and sold. For the most part, nearly all the products cover the major worldwide markets. Below is a screenshot of the stage in which those same drugs can be applied for different demographics. This is of great significance because it allows those same approved drugs to tap into greater audiences they are already marketing to and can allow for even more growth and upside potential/market penetration.

Clinical Program	Phase 1	Phase 2	Phase 3	Regulatory Review <sup>(9)</sup>
<b>EYLEA</b>		- High-dose formulation in wet AMD	- Retinopathy of prematurity (ROP) <sup>(5)</sup>	
<b>Dupixent (dupilumab)<sup>(8)</sup></b> <i>Antibody to IL-4R alpha subunit</i>		- Grass allergy - Peanut allergy	- Atopic dermatitis in pediatrics (6–11 years of age) <sup>(4)</sup> - Atopic dermatitis in pediatrics (6 months–5 years of age) (Phase 2/3) <sup>(4)</sup> - Asthma in pediatrics (6–11 years of age) - Eosinophilic esophagitis (EoE) <sup>(5)</sup> - Chronic obstructive pulmonary disease (COPD)	- Auto-injector for 300 mg dose (U.S., EU, and Japan) - CRSwNP (Japan)
<b>Praluent (alirocumab)<sup>(8)</sup></b> <i>Antibody to PCSK9</i>			- Homozygous familial hypercholesterolemia (HoFH) <sup>(5)</sup> in adults and pediatrics - HeFH in pediatrics	
<b>Kevzara (sarilumab)<sup>(8)</sup></b> <i>Antibody to IL-6R</i>		- Polyarticular-course juvenile idiopathic arthritis (pcJIA) - Systemic juvenile idiopathic arthritis (sJIA)	- Polymyalgia rheumatica (PMR) - Giant cell arteritis (GCA)	
<b>Libtayo (cemiplimab)<sup>(8)(9)</sup></b> <i>Antibody to PD-1</i>	- Solid tumors and advanced hematologic malignancies	- Basal cell carcinoma (BCC) (potentially pivotal study) - Metastatic or locally advanced CSCC <sup>(4)</sup>	- First-line non-small cell lung cancer (NSCLC) - Second-line cervical cancer <sup>(6)</sup> - Adjuvant CSCC	
<b>Fasinumab<sup>(8)(9)</sup> (REGN475)</b> <i>Antibody to NGF</i>			- Osteoarthritis pain of the knee or hip <sup>(6)</sup>	
<b>Evinacumab<sup>(8)</sup> (REGN1500)</b> <i>Antibody to ANGPTL3</i>		- Refractory hypercholesterolemia (both HeFH and non-FH) - Severe hypertriglyceridemia	- HoFH <sup>(5)(6)</sup>	
<b>REGN1979</b> <i>Bispecific antibody targeting CD20 and CD3</i>	- Certain B-cell malignancies <sup>(5)</sup> (on partial clinical hold pending FDA review of protocol amendment)	- Relapsed/refractory follicular lymphoma (FL)		
<b>REGN-EB3<sup>(9)</sup> (REGN3470-3471-3479)</b> <i>Multi-antibody therapy to Ebola virus infection (Ebola)</i>				- Ebola (U.S.) <sup>(8)(9)</sup>

As we can see, for example, Dupixent is current in review to offer a 300mg auto injector dose in the U.S., EU, and Japan. In addition, they are in Phase 3 approval for the drug to be administered to children between the ages of 6-11 for things like atopic dermatitis and asthma amongst other conditions.

Let's now take a look at the current revenue break out and the growth within each product:

**Net Product Sales of Regeneron-Discovered Products<sup>(2)</sup>**

(In millions)

	Three Months Ended September 30,						% Change (Total Sales)
	2019			2018			
	U.S.	ROW	Total	U.S.	ROW	Total	
EYLEA*	\$ 1,187.7	\$ 730.2	\$ 1,917.9	\$ 1,021.8	\$ 654.6	\$ 1,676.4	14%
Libtayo*	47.6	3.9	51.5	—	—	—	**
ARCALYST	3.0	—	3.0	3.7	—	3.7	(19%)
Net product sales recorded by Regeneron	<u>\$ 1,238.3</u>			<u>\$ 1,025.5</u>			

Global net product sales recorded by Sanofi:

Dupixent	\$ 508.3	\$ 124.8	\$ 633.1	\$ 219.6	\$ 43.0	\$ 262.6	141%
Praluent	\$ 33.5	\$ 36.2	\$ 69.7	\$ 48.4	\$ 31.8	\$ 80.2	(13%)
Kevzara	\$ 36.5	\$ 18.3	\$ 54.8	\$ 19.9	\$ 5.0	\$ 24.9	120%
ZALTRAP	\$ 3.1	\$ 25.3	\$ 28.4	\$ 1.5	\$ 23.9	\$ 25.4	12%

**Nine Months Ended September 30,**

	2019						% Change (Total Sales)
	2019			2018			
	U.S.	ROW	Total	U.S.	ROW	Total	
EYLEA*	\$ 3,422.1	\$ 2,114.9	\$ 5,537.0	\$ 2,997.8	\$ 1,944.5	\$ 4,942.3	12%
Libtayo*	115.2	3.9	119.1	—	—	—	**
ARCALYST	10.7	—	10.7	12.0	—	12.0	(11%)
Net product sales recorded by Regeneron	<u>\$ 3,548.0</u>			<u>\$ 3,009.8</u>			

Global net product sales recorded by Sanofi:

Dupixent	\$ 1,266.0	\$ 298.1	\$ 1,564.1	\$ 517.7	\$ 85.4	\$ 603.1	159%
Praluent	\$ 82.9	\$ 124.4	\$ 207.3	\$ 121.5	\$ 92.0	\$ 213.5	(3%)
Kevzara	\$ 91.4	\$ 55.6	\$ 147.0	\$ 48.1	\$ 13.3	\$ 61.4	139%
ZALTRAP	\$ 4.9	\$ 74.6	\$ 79.5	\$ 6.6	\$ 73.5	\$ 80.1	(1%)

*Reminder: The net product sales recorded by Sanofi is from a partnership that the two agreed to back in 2015. It was renewed this year as the agreement was coming to an end in mid-2020.*

As of REGN recent Q3 report released in November, EYLEA, REGN's largest selling drug, experienced revenues of \$1.92B in Q3 which was up 14% Y/Y. Year-to-date, the drug is seeing 12% growth on revenue of \$5.53B.

If we look at Dupixent, it is experiencing insane growth to the amount of 141% Y/Y and 159% YTD. Sales so far this year from Dupixent are roughly \$1.56B. Growth here looks like it could stick around for a while too because, as we saw in the images above, Dupixent has a ton of target markets to hit that are still pending approval.

Another big grower this year has been Kevzara as sales are up 139% YTD and 120% Y/Y in Q3. Much of this growth in Q3 came from outside the U.S. as sales jumped from \$5M last year in Q3 to \$18.3M which is 266% growth internationally.

Because Libtayo wasn't live last year, there aren't any numbers to report on a Y/Y basis but the drug is off to a pretty hot start and looks very promising bringing in over \$119M in revenue YTD.

Praluent, Arcalyst, and Zaltrap haven't been doing that well this year as each are down 3%, 11%, and 1%, respectively. The good thing here is that Arcalyst being down 11% barely moves the needle as the drug has only brought in \$10.7M YTD, or 1.4% of total revenues. Praluent, while only down 3% YTD, saw a much faster decay in growth in Q3 of -13% so that is something we should be keeping an eye on as that drug is responsible for over \$207M in revenues YTD.

Below is also some additional information found on the breakout of EYLEA, Dupixent, Praluent, and Kevzara sales and how the product sales are shared between partners that help market the drug (refer to the first couple of pages about collaborations on REGN's product pipeline).

<i>(In millions)</i>	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
EYLEA net product sales outside the United States	\$ 730.2	\$ 654.6	\$ 2,114.9	\$ 1,944.5
Regeneron's share of collaboration profit from sales outside the United States	\$ 289.2	\$ 256.7	\$ 835.5	\$ 761.1
Reimbursement of development expenses incurred by Bayer in accordance with Regeneron's payment obligation	(14.2)	(13.5)	(42.2)	(39.6)
Regeneron's net profit in connection with commercialization of EYLEA outside the United States	\$ 275.0	\$ 243.2	\$ 793.3	\$ 721.5
Regeneron's net profit as a percentage of EYLEA net product sales outside the United States	38%	37%	38%	37%

<i>(In millions)</i>	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Dupixent, Praluent, and Kevzara net product sales*	\$ 757.6	\$ 367.7	\$ 1,918.4	\$ 878.0
Regeneron's share of collaboration profits (losses)	\$ 105.0	\$ (38.9)	\$ 120.1	\$ (182.6)
Reimbursement of development expenses incurred by Sanofi in accordance with Regeneron's payment obligation	(10.8)	—	(14.9)	—
Regeneron's share of profits (losses) in connection with commercialization of antibodies	\$ 94.2	\$ (38.9)	\$ 105.2	\$ (182.6)
Regeneron's share of collaboration profits as a percentage of Dupixent, Praluent, and Kevzara net product sales	12%	**	5%	**

\* Global net product sales of Dupixent, Praluent, and Kevzara are recorded by Sanofi

\*\* Percentage not meaningful

As we can easily tell, EYLEA is REGN's cash cow and they also see a net profit of 38% on sales outside the U.S. after accounting for what goes to Bayer.

Let's take a look at the rest of the 10Q now to get a better gauge of the health of REGN.

## Balance Sheet

	September 30, 2019	December 31, 2018
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 1,384.8	\$ 1,467.7
Marketable securities	1,493.1	1,342.2
Accounts receivable - trade, net	2,027.7	1,723.7
Accounts receivable from Sanofi	345.4	226.4
Accounts receivable from Bayer	286.9	293.1
Inventories	1,344.3	1,151.2
Prepaid expenses and other current assets	226.9	243.3
<b>Total current assets</b>	<b>7,109.1</b>	<b>6,447.6</b>
Marketable securities	3,112.6	1,755.0
Property, plant, and equipment, net	2,771.4	2,575.8
Deferred tax assets	808.3	828.7
Other noncurrent assets	137.9	127.4
<b>Total assets</b>	<b>\$ 13,939.3</b>	<b>\$ 11,734.5</b>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable	\$ 335.6	\$ 218.2
Accrued expenses and other current liabilities	821.1	772.1
Deferred revenue from Sanofi	427.1	246.7
Deferred revenue - other	181.6	205.8
<b>Total current liabilities</b>	<b>1,765.4</b>	<b>1,442.8</b>
Finance lease liabilities	712.7	708.5
Deferred revenue from Sanofi	551.9	279.3
Deferred revenue - other	131.9	184.9
Other noncurrent liabilities	273.0	361.7
<b>Total liabilities</b>	<b>3,434.9</b>	<b>2,977.2</b>
Stockholders' equity:		
Preferred Stock, \$01 par value; 30,000,000 shares authorized; issued and outstanding - none	—	—
Class A Stock, convertible, \$001 par value; 40,000,000 shares authorized; shares issued and outstanding - 1,848,970 in 2019 and 1,911,354 in 2018	—	—
Common Stock, \$001 par value; 320,000,000 shares authorized; shares issued - 112,039,746 in 2019 and 111,084,951 in 2018	0.1	0.1
Additional paid-in capital	4,388.4	3,911.6
Retained earnings	6,587.8	5,254.3
Accumulated other comprehensive income (loss)	16.5	(12.3)
Treasury Stock, at cost; 4,167,018 shares in 2019 and 3,990,021 shares in 2018	(488.4)	(396.4)
<b>Total stockholders' equity</b>	<b>10,504.4</b>	<b>8,757.3</b>
<b>Total liabilities and stockholders' equity</b>	<b>\$ 13,939.3</b>	<b>\$ 11,734.5</b>

Cash & marketable securities stands at a healthy \$6B. When looking at REGN's history, this is actually the highest it's ever been. In 2015, for example, cash & marketable securities stood at \$1.7B. As far as debt goes, the company has about \$713M in debt with Bank of America which was taken on in March of 2017. The company has not added any debt to its balance sheet since. With a current ratio of 4.0x, quick ratio of 3.2x, and total debt to EBITDA of 0.7x, REGN has little-to-no liquidity or solvency concerns.

## Income Statement

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
<b>Statements of Operations</b>				
Revenues:				
Net product sales	\$ 1,238.3	\$ 1,025.5	\$ 3,548.0	\$ 3,009.8
Sanofi collaboration revenue	404.2	256.3	999.7	683.5
Bayer collaboration revenue	302.8	264.4	868.0	775.2
Other revenue	103.1	117.3	278.2	314.5
	<u>2,048.4</u>	<u>1,663.5</u>	<u>5,693.9</u>	<u>4,783.0</u>
Expenses:				
Research and development	663.4	557.0	2,353.5	1,584.8
Selling, general, and administrative	419.9	369.2	1,248.0	1,064.9
Cost of goods sold	115.9	30.8	253.8	136.1
Cost of collaboration and contract manufacturing	110.7	79.6	304.5	180.9
	<u>1,309.9</u>	<u>1,036.6</u>	<u>4,159.8</u>	<u>2,966.7</u>
Income from operations	<u>738.5</u>	<u>626.9</u>	<u>1,534.1</u>	<u>1,816.3</u>
Other income (expense):				
Other income (expense), net	37.8	16.4	28.7	81.8
Interest expense	(7.8)	(7.4)	(23.5)	(20.8)
	<u>30.0</u>	<u>9.0</u>	<u>5.2</u>	<u>61.0</u>
Income before income taxes	<u>768.5</u>	<u>635.9</u>	<u>1,539.3</u>	<u>1,877.3</u>
Income tax expense	<u>(98.9)</u>	<u>(41.2)</u>	<u>(215.5)</u>	<u>(253.3)</u>
Net income	<u>\$ 669.6</u>	<u>\$ 594.7</u>	<u>\$ 1,323.8</u>	<u>\$ 1,624.0</u>
Net income per share - basic	\$ 6.12	\$ 5.50	\$ 12.12	\$ 15.06
Net income per share - diluted	\$ 5.86	\$ 5.17	\$ 11.54	\$ 14.14
Weighted average shares outstanding - basic	109.4	108.0	109.2	107.8
Weighted average shares outstanding - diluted	114.2	115.1	114.7	114.8
<b>Statements of Comprehensive Income</b>				
Net income	\$ 669.6	\$ 594.7	\$ 1,323.8	\$ 1,624.0
Other comprehensive income (loss), net of tax:				
Unrealized gain (loss) on debt securities	1.0	0.7	31.5	(6.9)
Unrealized (loss) gain on cash flow hedges	(0.3)	0.3	(2.7)	2.4
Comprehensive income	<u>\$ 670.3</u>	<u>\$ 595.7</u>	<u>\$ 1,352.6</u>	<u>\$ 1,619.5</u>

Total net revenues YTD stand at \$5.69B, up from \$4.78B in 2018, up a solid 19% YTD. Unfortunately, this hasn't matriculated to the bottom line in the same fashion as expenses, particularly as it relates to R&D, have skyrocketed. In fact, R&D jumped nearly 49% Y/Y from \$1.58B to \$2.35B. This shouldn't come as too much of a surprise as REGN has a ton of drugs in the pipeline and also brought Libtayo to the market this year.

Below is an image of the breakout of their R&D expenses this year:

<i>(In millions)</i>	Three Months Ended September 30,		Increase (Decrease)	Nine Months Ended September 30,		Increase (Decrease)
	2019	2018*		2019	2018*	
Direct research and development expenses:						
Fasimumab	\$ 57.0	\$ 32.5	\$ 24.5	\$ 166.7	\$ 131.6	\$ 35.1
Libtayo (cemiplimab)	33.6	34.2	(0.6)	112.0	89.4	22.6
Dupixent (dupilumab)	22.6	28.9	(6.3)	67.9	85.9	(18.0)
Praluent (alirocumab)	10.6	14.9	(4.3)	32.1	44.4	(12.3)
Evinacumab	9.6	4.7	4.9	24.6	14.4	10.2
Up-front payments related to license and collaboration agreements	—	—	—	400.0	—	400.0
Other product candidates in clinical development and other research programs	92.4	55.4	37.0	263.7	140.7	123.0
<b>Total direct research and development expenses</b>	<b>225.8</b>	<b>170.6</b>	<b>55.2</b>	<b>1,067.0</b>	<b>506.4</b>	<b>560.6</b>
Indirect research and development expenses:						
Payroll and benefits	171.8	152.8	19.0	510.5	433.7	76.8
Lab supplies and other research and development costs	32.8	25.4	7.4	94.3	71.3	23.0
Occupancy and other operating costs	79.6	63.5	16.1	226.7	185.8	40.9
<b>Total indirect research and development expenses</b>	<b>284.2</b>	<b>241.7</b>	<b>42.5</b>	<b>831.5</b>	<b>690.8</b>	<b>140.7</b>
Clinical manufacturing costs	153.4	144.7	8.7	455.0	387.6	67.4
<b>Total research and development expenses</b>	<b>\$ 663.4</b>	<b>\$ 557.0</b>	<b>\$ 106.4</b>	<b>\$ 2,353.5</b>	<b>\$ 1,584.8</b>	<b>\$ 768.7</b>

If we look at the most recent quarter, REGN was able to increase profits and revenue on a Y/Y basis which may be a solid sign for a turning point as revenues rose 23%, outpacing 2019 YTD numbers, and EPS and net income rose 13.3% and 12.6%, respectively.

For the full year, REGN expects higher collaboration revenue with Sanofi, a slightly higher CAPEX spend, and higher tax rate.

GAAP Sanofi collaboration revenue: Sanofi reimbursement of Regeneron commercialization-related expenses	\$490 million–\$510 million (previously \$500 million–\$530 million)
Unreimbursed R&D <sup>(4)</sup>	\$2.360 billion–\$2.410 billion (previously \$2.300 billion–\$2.380 billion)
Non-GAAP Unreimbursed R&D <sup>(1)(3)</sup>	\$1.680 billion–\$1.710 billion (previously \$1.650 billion–\$1.710 billion)
GAAP SG&A	\$1.730 billion–\$1.780 billion (previously \$1.705 billion–\$1.785 billion)
Non-GAAP SG&A <sup>(1)(3)</sup>	\$1.550 billion–\$1.580 billion (previously \$1.530 billion–\$1.580 billion)
GAAP effective tax rate	12%–14% (previously 11%–13%)
Capital expenditures	\$390 million–\$420 million (previously \$380 million–\$420 million)

## Statement of Cash Flows

	Nine Months Ended September 30,	
	2019	2018
<b>Cash flows from operating activities:</b>		
Net income	\$ 1,323.8	\$ 1,624.0
<b>Adjustments to reconcile net income to net cash provided by operating activities:</b>		
Depreciation and amortization	156.0	105.4
Non-cash compensation expense	330.8	300.7
Other non-cash items, net	113.2	(82.7)
Deferred taxes	(110.0)	(33.5)
<b>Changes in assets and liabilities:</b>		
Increase in Sanofi, Bayer, and trade accounts receivable	(460.9)	(228.6)
Increase in inventories	(227.2)	(281.6)
Decrease (increase) in prepaid expenses and other assets	21.2	(87.8)
Increase (decrease) in deferred revenue	375.8	(29.5)
Increase in accounts payable, accrued expenses, and other liabilities	119.9	179.9
Total adjustments	318.8	(157.7)
Net cash provided by operating activities	1,642.6	1,466.3
<b>Cash flows from investing activities:</b>		
Purchases of marketable and other securities	(2,834.9)	(1,533.6)
Sales or maturities of marketable securities	1,306.4	644.1
Capital expenditures	(290.6)	(297.6)
Other	—	(10.0)
Net cash used in investing activities	(1,819.1)	(1,197.1)
<b>Cash flows from financing activities:</b>		
Proceeds from issuance of Common Stock	163.5	87.4
Payments in connection with Common Stock tendered for employee tax obligations	(40.5)	(77.1)
Repurchases of Common Stock	(29.4)	(4.4)
Net cash provided by financing activities	93.6	5.9
Net (decrease) increase in cash, cash equivalents, and restricted cash	(82.9)	275.1
Cash, cash equivalents, and restricted cash at beginning of period	1,480.2	825.2
Cash, cash equivalents, and restricted cash at end of period	\$ 1,397.3	\$ 1,100.3

The good news here is that while EPS may have been down so far in 2019, cash is up Y/Y from \$1.1B to nearly \$1.4B. REGN likes to put their cash to use which is why under investing activities you will see they are pretty active in purchasing marketable securities as seen below. What CUBE likes more is that operating cash flow is up nearly \$200M Y/Y.

As of September 30, 2019	Amortized Cost Basis	Unrealized		Fair Value
		Gains	Losses	
Corporate bonds	\$ 3,880.6	\$ 27.0	\$ (0.6)	\$ 3,907.0
U.S. government and government agency obligations	65.9	0.2	(0.1)	66.0
Sovereign bonds	26.9	0.5	—	27.4
Commercial paper	108.8	—	—	108.8
Certificates of deposit	66.7	0.1	—	66.8
	\$ 4,148.9	\$ 27.8	\$ (0.7)	\$ 4,176.0
<b>As of December 31, 2018</b>				
Corporate bonds	\$ 2,734.8	\$ 1.0	\$ (17.4)	\$ 2,718.4
U.S. government and government agency obligations	110.4	—	(1.0)	109.4
Sovereign bonds	7.6	—	—	7.6
Commercial paper	113.8	—	—	113.8
Certificates of deposit	60.0	—	—	60.0
	\$ 3,026.6	\$ 1.0	\$ (18.4)	\$ 3,009.2

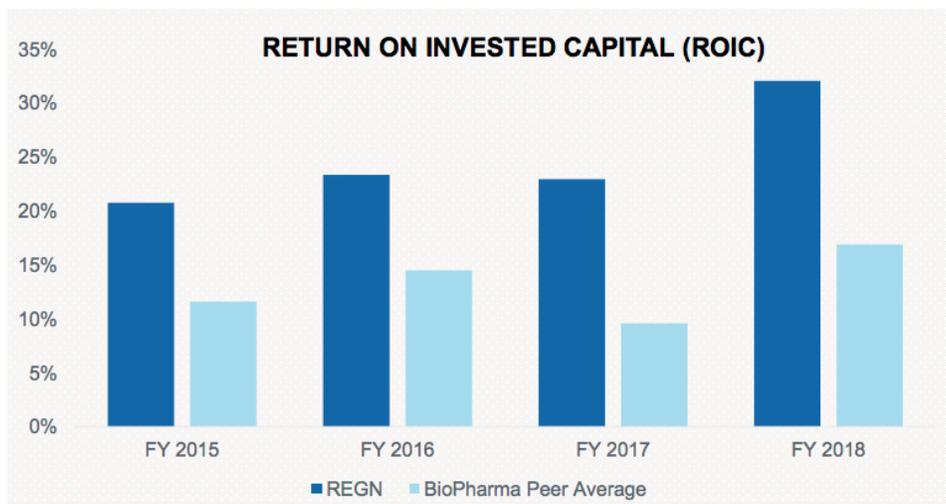
Before we conduct fundamental analysis on REGN, there are three things CUBE wants to make note of that was found while conducting research.

1. REGN's sales are heavily concentrated amongst certain clients

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Besse Medical, a subsidiary of AmerisourceBergen Corporation	57%	57%	57%	56%
McKesson Corporation	34%	36%	33%	37%

As we can see, Besse Medical Corp and McKesson Corp make up 57% and 33% of total revenues for REGN, respectively this year. This is in comparison to 56% and 37% last year. While it is moving down in the right direction, these figures are still high.

2. REGN is outperforming their peers on Return on Invested Capital by a large margin with over 30% in 2018 – nearly double competition which is around the 16-17% mark.



3. REGN announced a \$1B share repurchase plan. This may not be huge in comparison to their \$40B market cap but it is a strong vote of confidence as research shows they have not purchased more than \$300M in a given year and that was back in 2017. In fact, YTD the company has only purchased \$29M of stock. This could help send the market the right message.

## Fundamental Analysis vs. Peers

As we mentioned, REGN's main peers are:

- Gilead (GILD)
- Amgen (AMGN)
- Biogen (BIIB)
- Abbvie (ABBV)
- Celgene (CELG)

REGN has been trailing its peers and the Biotech ETF over the last 5 years. REGN has actually fallen nearly 10% while the Biotech ETF has gained 20%. Only Gilead has performed worse, while Amgen & Abbvie have returned nearly 69% and 63%, respectively.



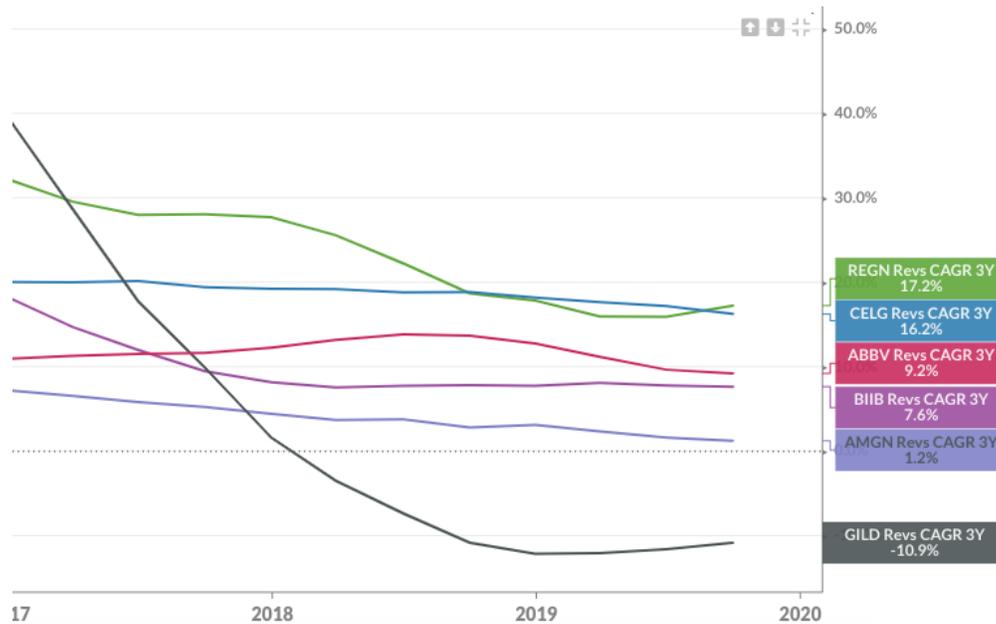
The more we zoom in, the worse the picture gets for REGN. Below is a 3-year chart.



Now here is a 1-year chart. REGN is only up 2.76% Y/Y while the industry is up 28.5% and even the laggard in GILD is up over 8%.



How does REGN stack up on fundamentals?



If we look at their compounded annual growth rates over the last 3 years, REGN is actually leading the group at 17.2% which is a huge plus. As we know in their most recent quarter, they grew revenues 23% and is growing revs 19% YTD so this is not slowing down.

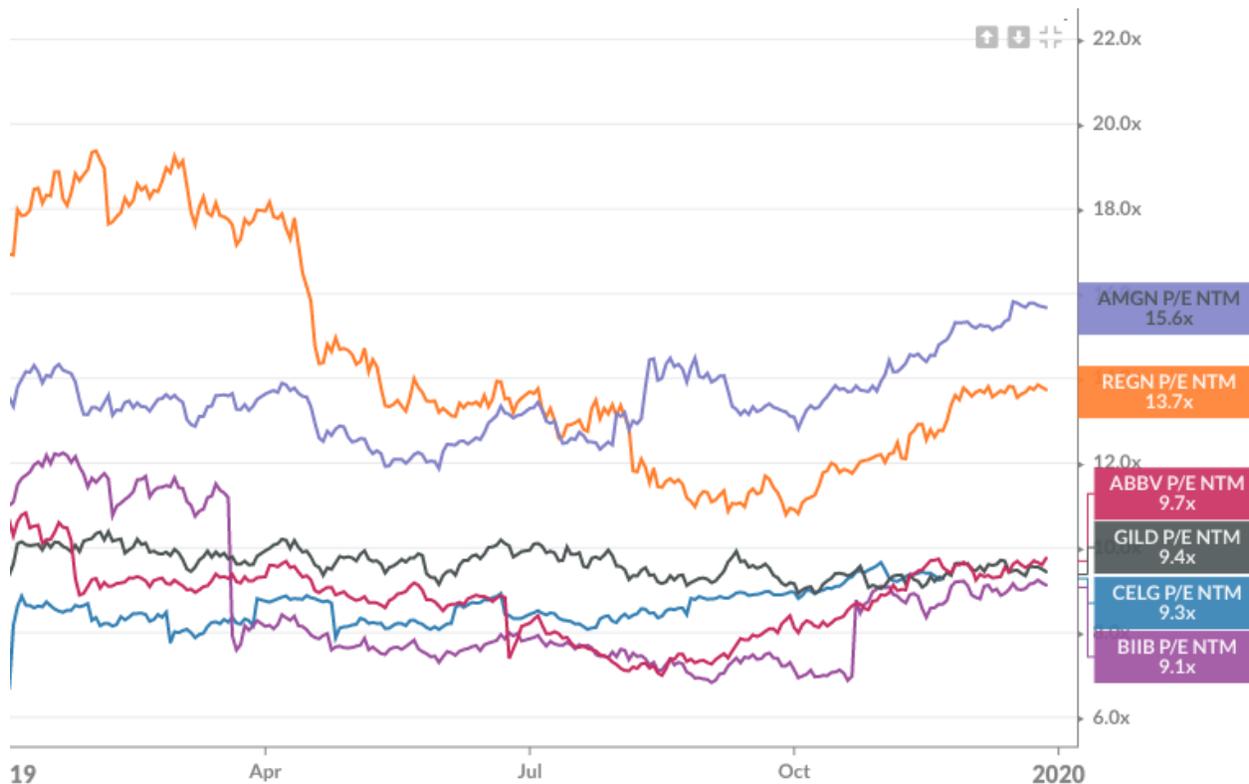
When examining their enterprise value (market cap – cash + debt), REGN is in the middle of the pack at 4.6x forward sales. If we rewind the clocks 10 years, biotech is actually trading at a pretty attractive valuation as some of these metrics were closer to 8-10x mark.



When taking that same EV and dividing it by Earnings before interest, taxes, depreciation, and amortization, REGN becomes a little more expensive in comparison to its peers. This could be for many reasons such as increased spending in CAPEX leading to lowered profits and/or garnering a higher multiple for growing faster than the others.



When looking at the famous forward price to earnings ratio, REGN is trading at 13.7x while many of their peers are in the 9x range. Once again, given REGN's growth rate this could most certainly be worth paying extra for. As a whole, all of these companies are considerably cheaper than the S&P500 which is trading at a forward P/E closer to 19.0x.



All in all, REGN actually looks like a pretty solid way of playing the biotech space. As always, it should be a part of a diversified portfolio and if you're still not sold on an individual company in the space, purchasing the IBB is a great way of getting exposure to all of the companies without the risk of owning one individually. CUBE really likes REGN's deep product line, share buyback program, cash flow, valuation, and ultimately their growth rate and will be adding this along with many of the other names to the CUBE watchlist. While REGN has been dead money for the last 5 years, their new drugs like Libtayo and deeper penetration in certain demographics with Dupixent could help them finally breakout. Biotech, in general, is something CUBE will most likely be adding more exposure to in 2020.

## Technical Analysis



REGN has bounced back pretty strong as of late but right now the stock is looking like it wants to test its 20-day moving average of \$371.67. Volume has been pretty weak, given its been the holidays, and it's going to take a considerable rise in volume to get passed the upper bollinger band which will serve as a pretty sturdy resistance line of \$378.37. Given how close to overbought the stock is on RSI and Wm%R, CUBE expects a short-term slide with near-term support at the lower BB of \$364.97. The fact that the bands have tightened considerably also tells us that there is a solid chance for a breakout one way or another. If



to the top, the level to look out for is the R1 of \$391.91. If to the bottom, look out for the pivot point of \$349.68 to serve as support.