

# PHARMACEUTICAL INDUSTRY

The Cash Cows



# INTRODUCTIONS



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01

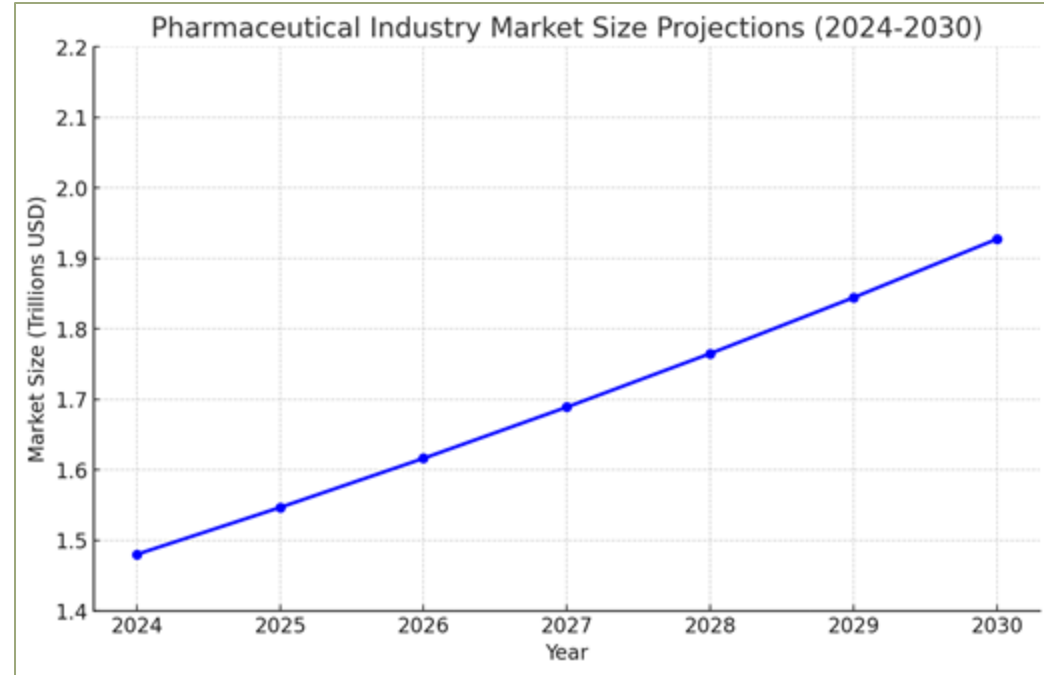
# INDUSTRY BACKGROUND





# INDUSTRY BACKGROUND

- ▼ Global Market Value - \$1.48 Trillion
- ▼ By 2030 - \$1.92 Trillion
- ▼ CAGR - 4.5 %





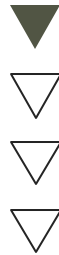
# INDUSTRY BACKGROUND

**Patent** - a government authority or license conferring a right or title for a set period, especially the sole right to exclude others from making, using, or selling an invention.

**Impact** - grant exclusive rights to companies & allow them to recoup R&D investments and fund future research but can also lead to high drug prices and market monopolies impacting patients



# INDUSTRY TRENDS



## AI Integration

- Speeding up data analysis
- Efficiency in R&D and clinical trials



## Expansion

- Gene and cell therapies
- Weight management



## New Regulations

- Medicare through the Inflation Reduction Act





# STRENGTHS AND WEAKNESSES



## Strengths

- Life Saving Products
- Strict Regulations
- Economic Driver

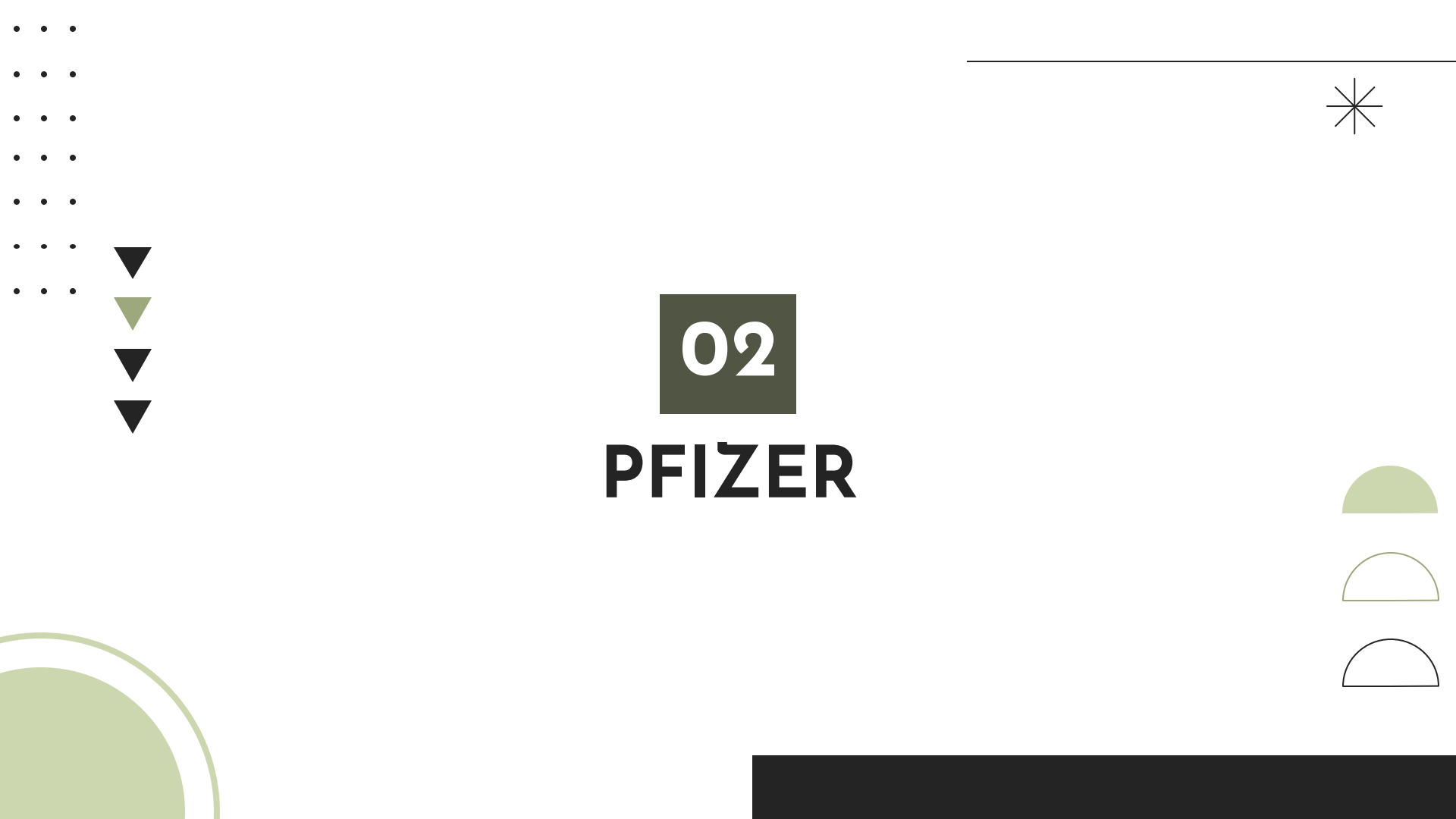


## Weaknesses

- High Costs and long timelines
- Dependence on Patents
- Public Perception







02

PFIZER



**Ticker:** PFE

**Location:** New York City

**History:** Founded in 1849 by Charles Pfizer

**Market Cap:** \$161.61B

**Pfizer Inc.** is a leading global pharmaceutical and **biotechnology** company focused on developing and delivering **innovative medicines and vaccines**. With a diverse portfolio that addresses **various therapeutic areas**, including oncology, immunology, and infectious diseases, Pfizer is committed to improving patient health worldwide.



## **R&D Investments**

The percentage of revenue allocated for Research and Development can indicate potential growth, innovation, and long-term success.

Pfizer committed \$10.58B to R&D in 2023, about 13.5% of their revenue.

## **Recent Developments**

Pfizer showcases significant scientific advancements in respiratory and infectious diseases.

US FDA approves multiple Pfizer vaccines for treatments regarding adults and adolescents.



**Stock Price: \$28.52**

Pfizer's 52-week range is  
25.20 - 31.24.

**P/E Ratio: 38.03**

The P/E ratio is above 30,  
showing high growth and  
earnings expectations.

**PEG Ratio: 0.99**

Pfizer's PEG Ratio  
indicates that the stock is  
fairly valued.

**EBITDA: \$18.39B**

Displays Pfizer's enormous  
operational efficiency and  
performance alongside  
financial health.

**Profit Margin: 25.2%**

The profit margin is  
markedly higher than Q2.  
Margins are boosted by  
patented products in this  
industry.

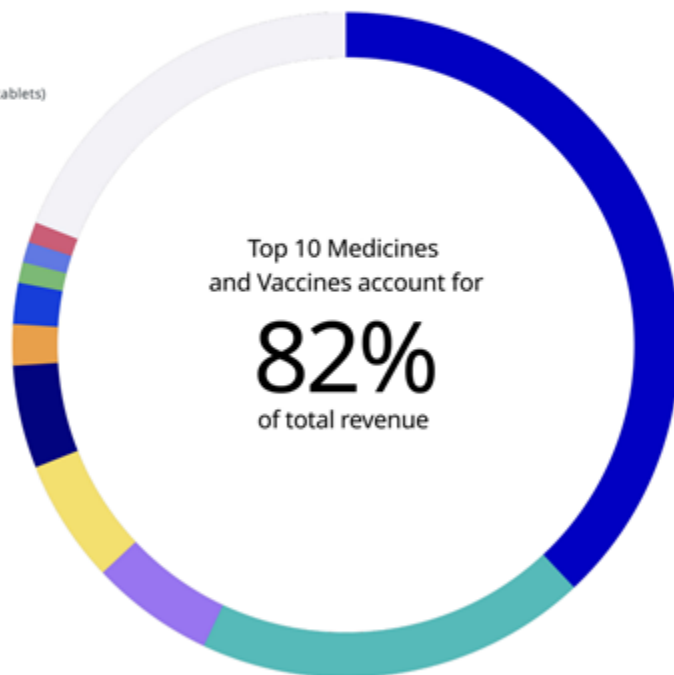
**Q3 Revenue: \$17.73B**

Illustrates how active the  
company is and aids in  
predicting future growth.

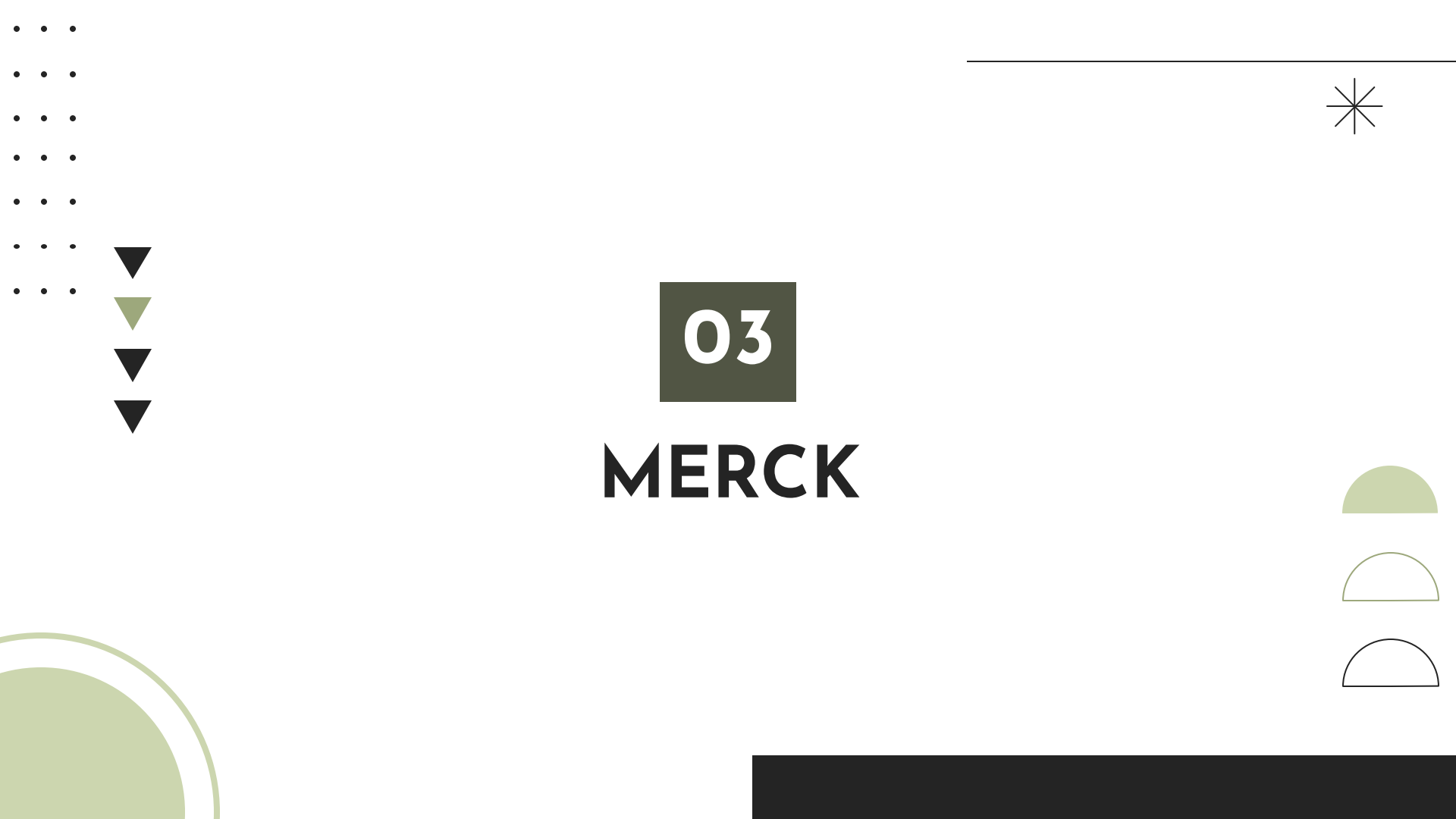
# Top 10 Medicines and Vaccines

Take a look at our breakdown of the top medicines and vaccines by revenue from 2022.

- **\$37,806 million**  
(38% of total revenue)  
COMIRNATY<sup>®</sup>
- **\$18,933 million**  
(19% of total revenue)  
PAXLOVID<sup>®</sup> (nirmatrelvir tablets and ritonavir tablets)
- **\$6,480 million**  
(6% of total revenue)  
ELIQUIS<sup>®</sup> (apixaban)<sup>2</sup>
- **\$6,337 million**  
(6% of total revenue)  
PREVNAR<sup>®</sup> Family<sup>3</sup>
- **\$5,120 million**  
(5% of total revenue)  
IBRANCE<sup>®</sup> (palbociclib)
- **\$2,447 million**  
(2% of total revenue)  
VYNDAQEL<sup>®</sup> Family<sup>4</sup>
- **\$1,796 million**  
(2% of total revenue)  
XELJANZ<sup>®</sup> (tofacitinib)
- **\$1,198 million**  
(1% of total revenue)  
XTANDI<sup>®</sup> (enzalutamide)<sup>5</sup>
- **\$1,003 million**  
(1% of total revenue)  
ENBREL<sup>®</sup> (etanercept)
- **\$1,003 million**  
(1% of total revenue)  
INLYTA<sup>®</sup> (axitinib)



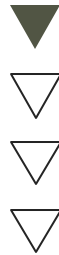
[View the interactive graph on the Annual Review site.](#)



03

MERCK





**Ticker:** MRK

**Location:** Rahway, NJ

**History:** Founded in 1668 in Germany

**Market Cap:** \$265.72B

**Merck & Co., Inc.** is a leading global healthcare company recognized for its innovative pharmaceuticals and vaccines, with a strong focus on oncology, vaccines, infectious diseases, and cardiovascular health. What sets Merck apart from other pharmaceutical companies is its commitment to **extensive research and development**, which is exemplified by its robust pipeline aimed at addressing unmet medical needs, along with a strong emphasis on **sustainable practices** and **access** to medicines.



## **Business Model**

Heavy R&D investments in new drugs & vaccines - \$30.5B for 2023

Strategic partnerships with governments, universities, and other firms

Prioritize high-value special medications in oncology & immunizations to gain better demand and margins

## **Recent Developments**

Developed Gardasil which protects against HPV

Formulated Keytruda, an immunotherapy drug that treats forms of cancer

Multiple R&D centers worldwide - Boston, Ireland, Singapore, etc.

100+ R&D Programs





**Stock Price: \$104.3**

Pfizer's 52-week range is  
99.80 - 134.63.

**PEG Ratio: 1.55**

Merck's PEG Ratio  
indicates that the stock  
valuation is aligned closely  
with its growth prospects.

**Profit Margin: 18.9%**

Solid return on its revenue  
base. It reflects Merck's  
strong product mix such as  
Oncology and Vaccines.

**P/E Ratio: 19.2**

The P/E ratio is low,  
showing that it could be  
undervalued.

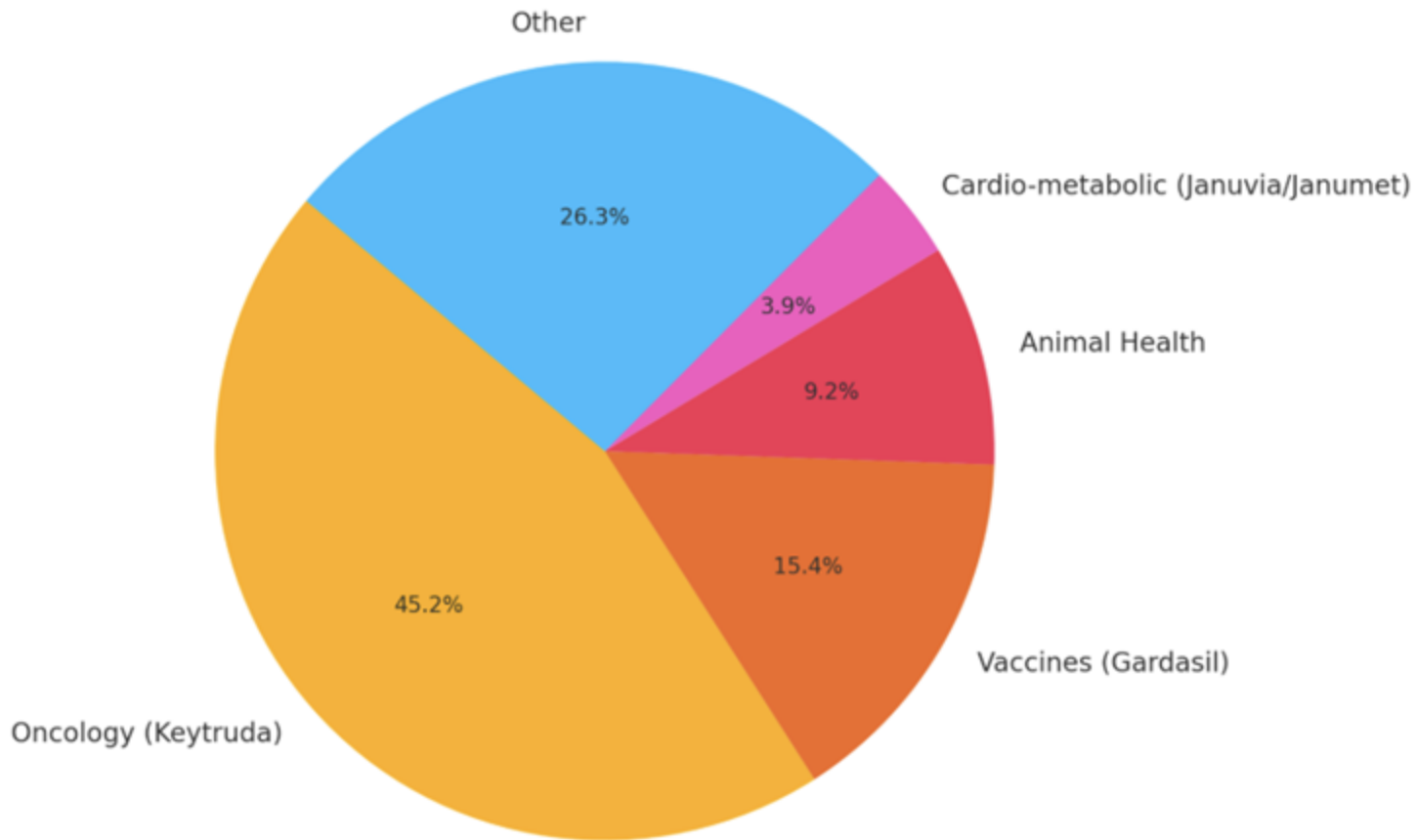
**EBITDA: \$20.1B**

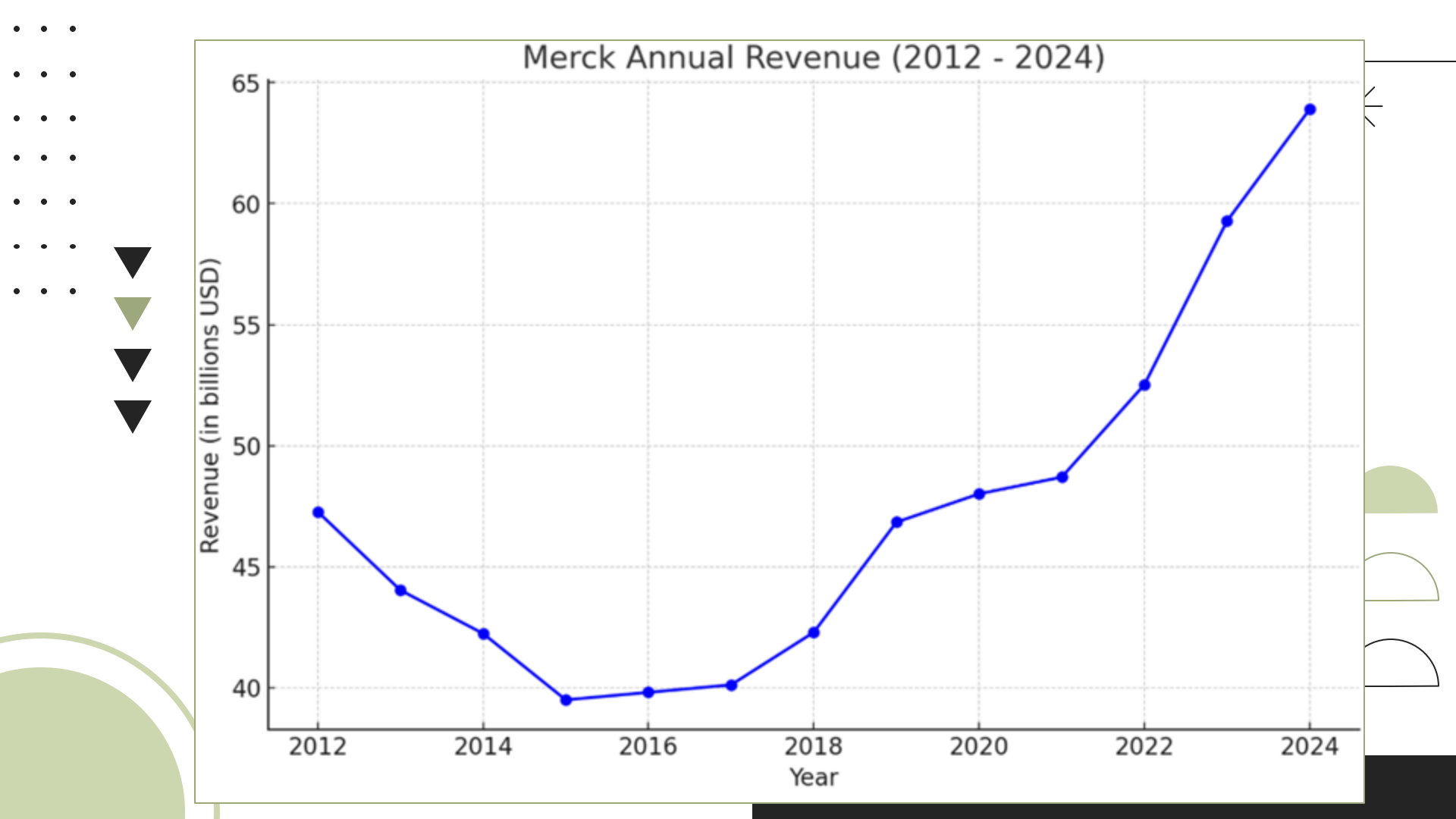
Strong growth from  
consistent focus on high  
margin products and  
strategic R&D investments.

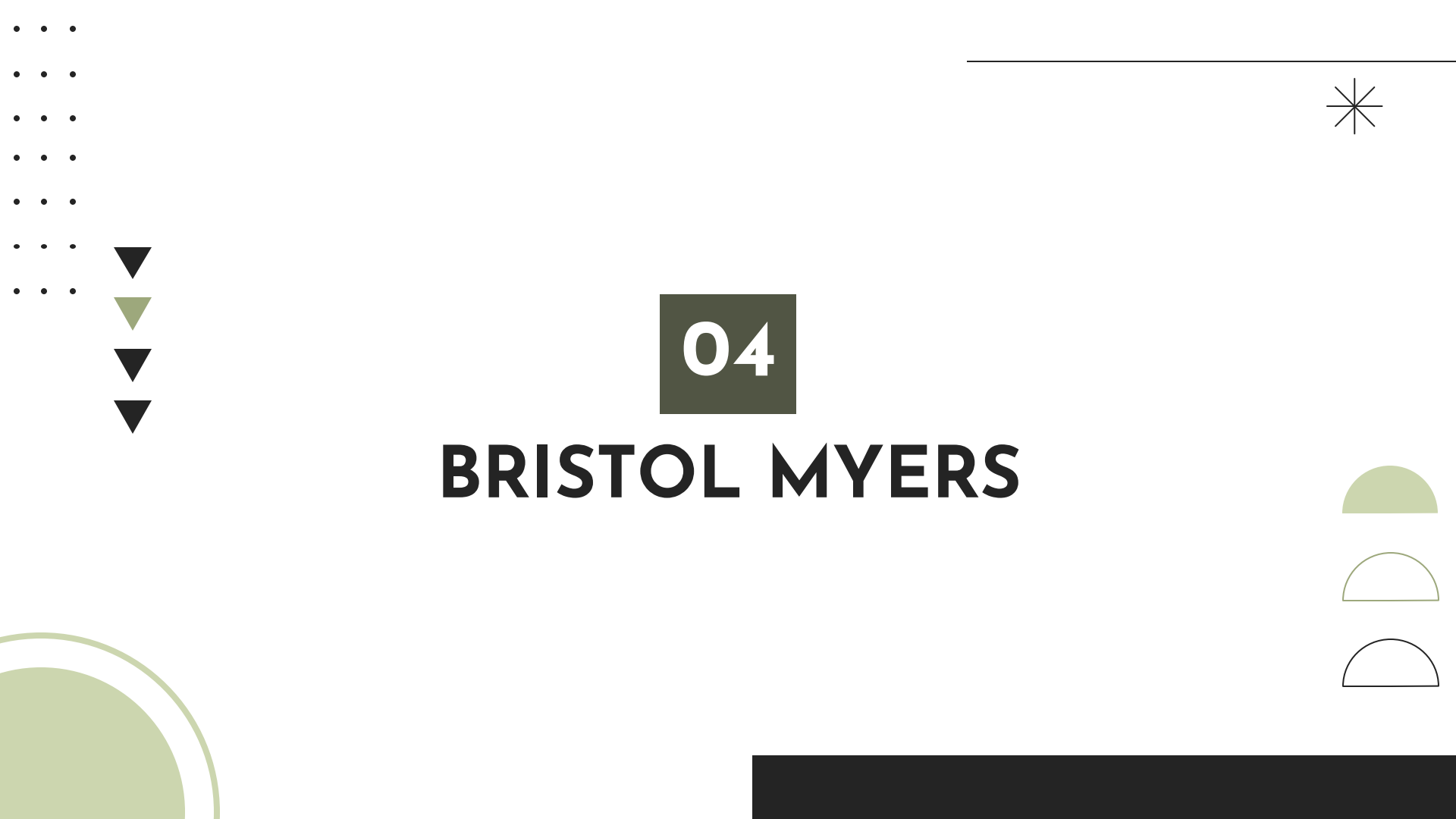
**Q3 Revenue: \$16.7B**

4% growth from previous  
year driven by strong sales  
from Keytruda and  
Gardasil.

## Merck Revenue Breakdown Q2 2024

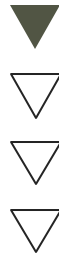






04

**BRISTOL MYERS**



**Ticker:** BMY

**Location:** New Jersey

**History:** Founded in 1989 from merger

**Market Cap:** \$106.76B

**Bristol Myers Squibb (BMS)** is a global biopharmaceutical company dedicated to discovering, developing, and delivering innovative medicines that address serious diseases, with a strong focus on oncology, immunology, and cardiovascular health. What sets BMS apart from its competitors is its commitment to **cutting-edge research** and **strategic acquisitions**, such as the purchase of Celgene, which significantly expanded its **oncology portfolio** and reinforced its **leadership** in the pharmaceutical industry.



## **Business Model**

Emphasis on R&D for new medical treatments - \$10B

Partnerships with other pharma and medical companies

Focus on cardiovascular disease, oncology, and immunology

## **Recent Developments**

Currently developing and testing 51 new compounds

Studying over 40+ diseases to discover new treatments

R&D and manufacturing facilities around the world



**Stock Price: \$52.66**

BMS' 52-week range is  
39.35 - 55.04

**PEG Ratio: 1.57**

BMS' PEG Ratio indicates  
that the stock is  
overvalued

**Profit Margin: -14.06%**

The profit margin is  
negative, indicating more  
spending on R&D

**P/E Ratio: 12.66**

The P/E ratio is low,  
showing low earnings  
expectations

**EBITDA: \$29.93B**

Shows the scale of Bristol  
Myers R&D and products

**Q3 Revenue: \$11.9B**

Up 8% from Q2 through  
increased demand in  
Eliquis

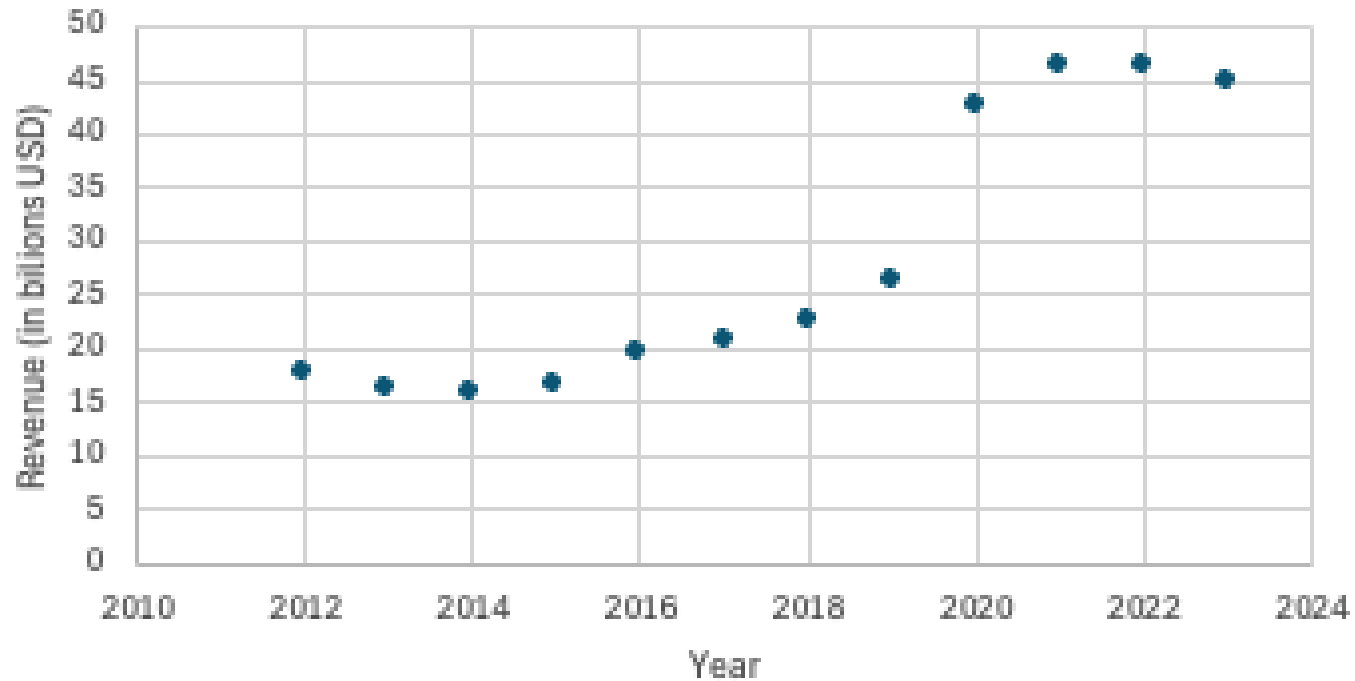
	U.S.	Int'l <sup>(c)</sup>	WW <sup>(d)</sup>
<b>Growth Portfolio</b>			
<i>Opdivo</i>	\$ 1,366	\$ 994	\$ 2,360
<i>Orencia</i>	706	230	936
<i>Yervoy</i>	399	243	642
<i>Reblozyl</i>	358	89	447
<i>Opdualag</i>	216	17	233
<i>Abecma</i>	77	47	124
<i>Zeposia</i>	105	42	147
<i>Breyanzi</i>	173	51	224
<i>Camzyos</i>	135	21	156
<i>Sotyktu</i>	51	15	66
<i>Augtyro</i>	10	—	10
<i>Krazati</i>	32	2	34
<i>Other Growth Products <sup>(a)</sup></i>	172	261	433
<b>Total Growth Portfolio</b>	<b>3,800</b>	<b>2,012</b>	<b>5,812</b>

#### Legacy Portfolio

<i>Eliquis</i>	2,045	957	3,002
<i>Revlimid</i>	1,212	200	1,412
<i>Pomalyst/Imnovid</i>	697	201	898
<i>Sprycel</i>	225	65	290
<i>Abraxane</i>	151	102	253
<i>Other Legacy Products <sup>(b)</sup></i>	102	123	225
<b>Total Legacy Portfolio</b>	<b>4,432</b>	<b>1,648</b>	<b>6,080</b>
<b>Total Revenues</b>	<b>\$ 8,232</b>	<b>\$ 3,660</b>	<b>\$ 11,892</b>



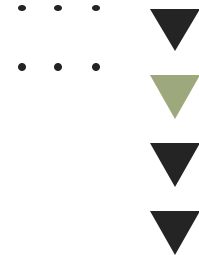
## Bristol Myers Squibb Revenue (2012-2023)

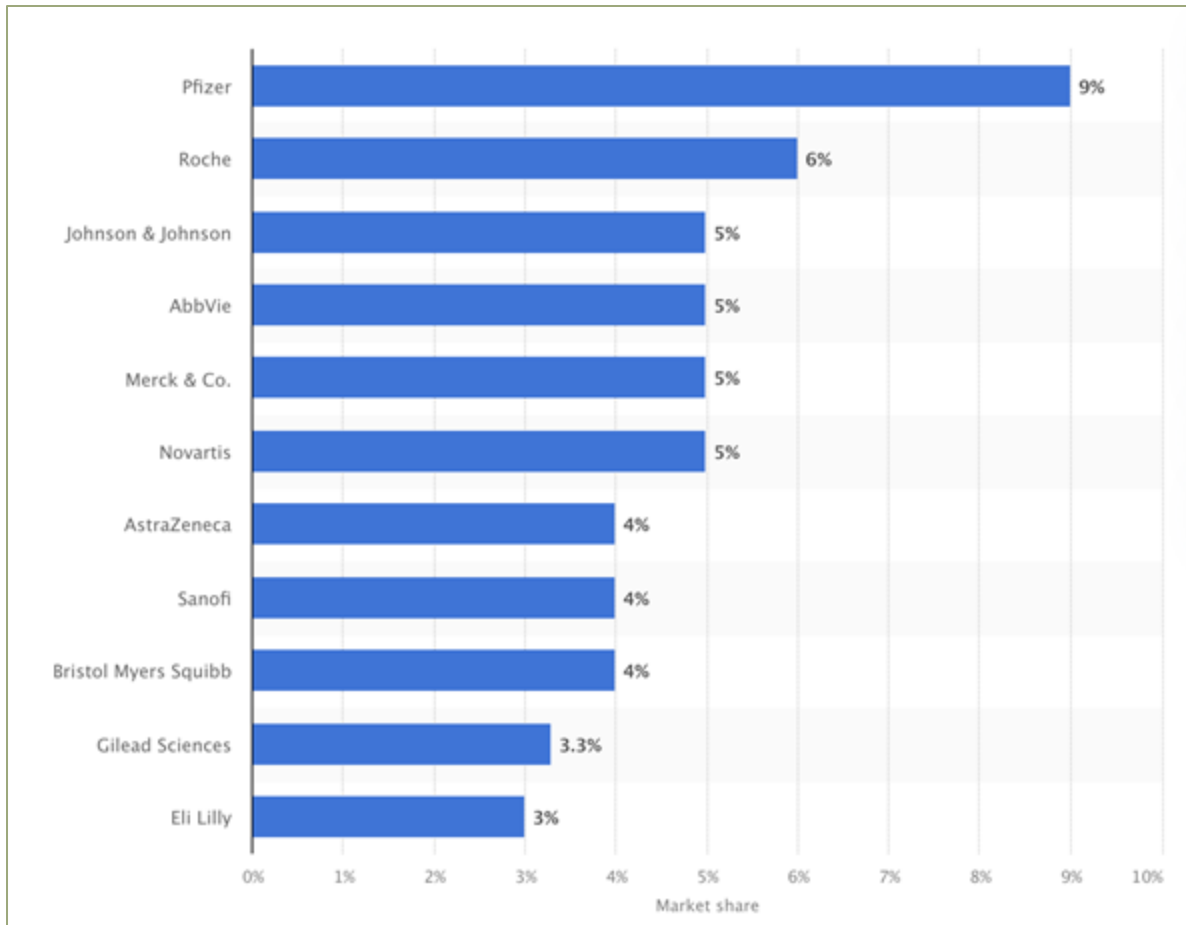




05

# COMPARISONS





# MARKET SHARE

	<b>PFE</b>	<b>MRK</b>	<b>BMJ</b>
<b>Market Value</b>	161.61B	265.72B	106.76B
<b>P/E Ratio</b>	38.03	19.41	12.66
<b>Revenue Growth YoY</b>	2.13%	7.16%	8.69%
<b>Gross Profit</b>	31.65B	47.02B	35.06B
<b>Free Cash Flow (FCF)</b>	4.81B	13.15B	12.95B
<b>Profit Margin</b>	-4.70%	18.9%	-14.06%
<b>Return on Assets</b>	-1.19%	12.65%	-6.95%



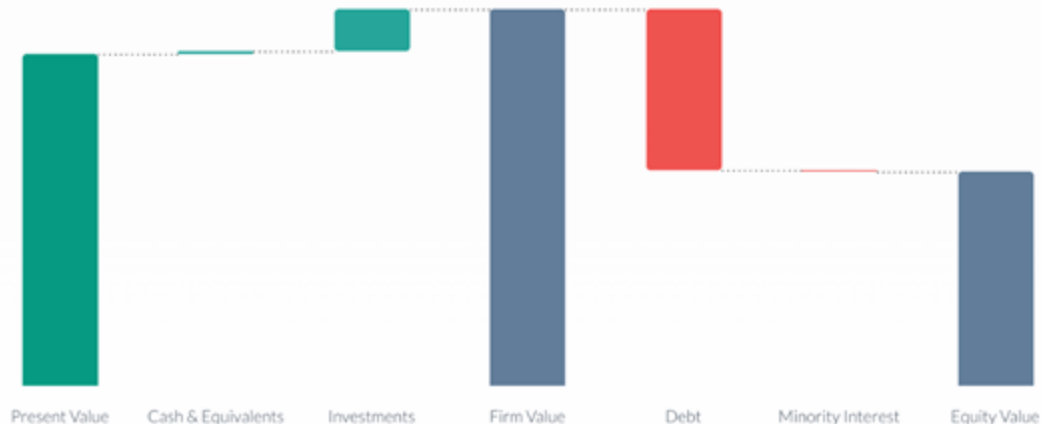
## Present Value to DCF Value

Capital Structure



Present Value	135.2B USD
+ Cash & Equivalents	1.1B USD
+ Investments	17.2B USD
Firm Value	153.4B USD
- Debt	65.7B USD
- Minority Interest	275m USD
Equity Value	87.4B USD
/ Shares Outstanding	5.7B
<u>PFE DCF Value</u>	<u>15.43 USD</u>

OVERVALUED BY 46%





## Present Value to DCF Value

Capital Structure



Present Value 369.6B USD

Equity Value 369.6B USD

/ Shares Outstanding 2.5B

MRK DCF Value 145.81 USD

UNDERVALUED BY 28%

You are using the equity valuation model. In this approach, further calculations for converting firm value to equity value are not required. The present value, obtained in the present value calculation block, already represents the equity value.

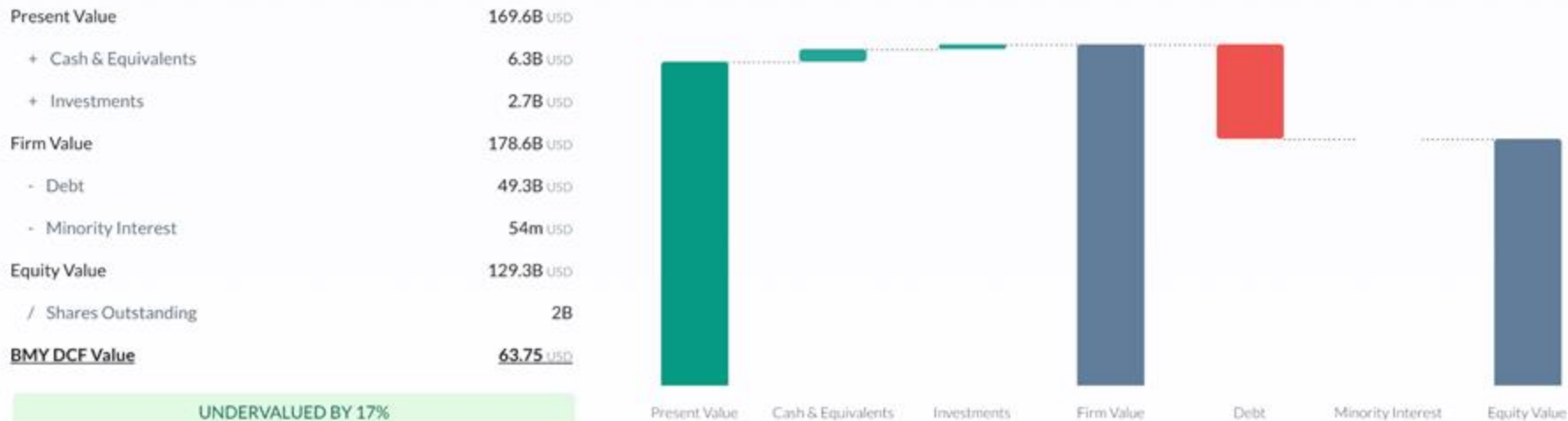
The DCF value per share is derived by dividing the present value by the number of shares:

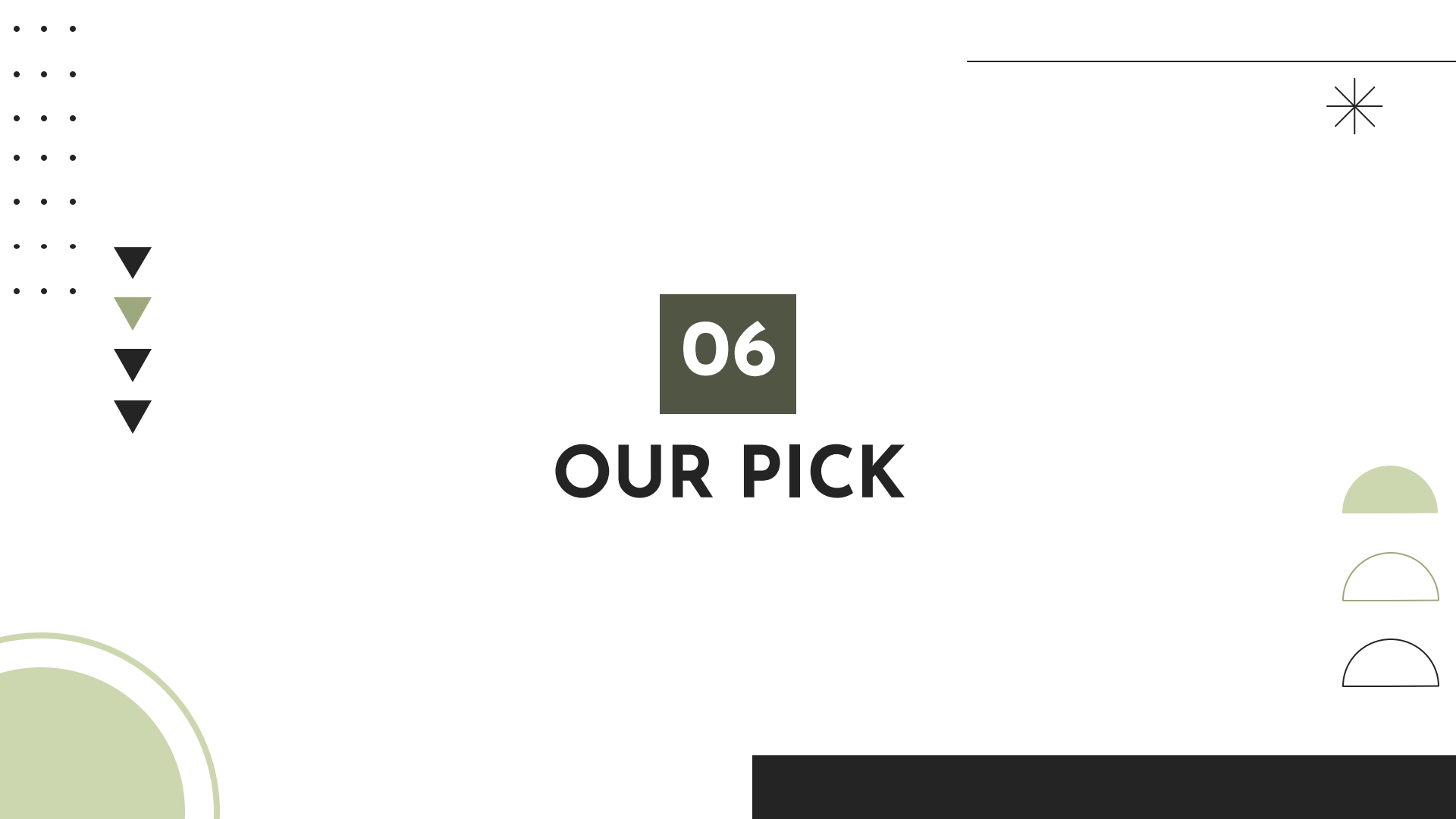
Present Value 369.6B USD / Number of Shares 2.5B = DCF Value 145.81 USD



## Present Value to DCF Value

Capital Structure





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OUR PICK







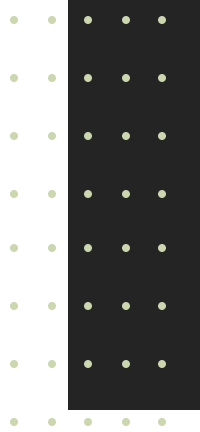
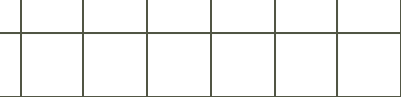
Pfizer - 2nd Place



Merck - 1st Place



Bristol Myers - 3rd Place



# Thanks! Any Questions?

The Cash Cows

