

Recommendation

BUY \star \star \star \star

USD 432.76 (as of market close Mar 01, 2024) USD 484.00

12-Mo. Target Price

Report Currency HSD

Investment Style Large-Cap Growth

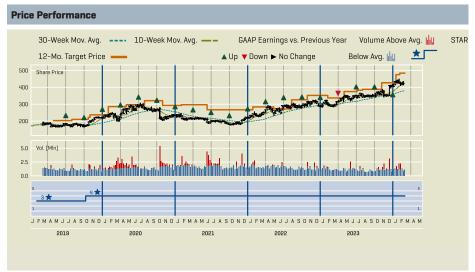
Equity Analyst Sel Hardy

GICS Sector Health Care Sub-Industry Biotechnology

Summary VRTX develops small molecule therapeutics for the treatment of a wide range of diseases, led by cystic fibrosis and anti-inflammatory conditions.

Key Stock Statistics (Source: CFRA, S&P Global Market Intelligence (SPGMI), Company Reports)

52-Wk Range USD 448.4 - 283.	Oper.EPS2024 E	USD 17.14	Market Capitalization[B]	USD 108.68	Beta	0.36
Trailing 12-Month EPS USD 15.2	2 Oper.EPS2025 E	USD 17.96	Yield [%]	N/A	3-yr Proj. EPS CAGR[%]	9
Trailing 12-Month P/E 28.4	P/E on Oper.EPS2024 E	25.25	Dividend Rate/Share	N/A	SPGMI's Quality Ranking	B-
USD 10K Invested 5 Yrs Ago 22,928.	Common Shares Outstg.[M]] 258.00	Trailing 12-Month Dividen	d N/A	Institutional Ownership [%]	94.0



Source: CFRA, S&P Global Market Intelligence

Past performance is not an indication of future performance and should not be relied upon as such. Analysis prepared by Sel Hardy on Feb 06, 2024 04:11 PM ET, when the stock traded at USD 416.16.

Highlights

- ▶ Q4 product revenues were up 9% Y/Y, driven by solid performance of Trikafta/Kaftrio. Sales of this drug were up 15% Y/Y. This was due to solid uptake for children aged 2-5 in the US following the treatment's recent launch and label extensions outside of the US for younger children.
- ► Trikafta is a triple combination therapy of VX-445, tezacaftor, and ivacaftor indicated for most patients with cystic fibrosis (CF). This drug expanded VRTX's market opportunity by approximately 55% (relative basis) to about 90% of the CF population. VRTX estimates that there are 83,000 patients living with CF in the U.S., Europe, Canada, and Australia. We believe that Trikafta will be a key driver of sales growth as VRTX continues to expand commercial access to the drug and converts patients on old therapies to it.
- ► In December, the US FDA approved exa-cel (Casgevy), developed with CRISPR Therapeutics, to treat severe sickle cell disease and the treatment started to be commercialized in a number of countries. Vertex also has a PDUFA date (when a final approval decision can be expected) of March 30, 2024 for exa-cel for the treatment of transfusion-dependent betathalassemia (TDT).

Investment Rationale/Risk

- ▶ Our opinion is Buy after Q4 earnings. VRTX has a first-mover advantage in CF treatment, complemented by potential early- to mid-stage clinical programs outside of CF. Strong patient reliance on VRTX's CF drugs and currently limited competition to the CF franchise support the cost of diversifying into non-CF businesses. We are particularly optimistic about Casqevy's potential as a one-time cure for sickle cell disease. We also see continued opportunities for Trikafta to outperform consensus expectations as VRTX continues to obtain additional reimbursement agreements outside the U.S. and expands the treatable population.
- ► Risks to our opinion and target include unfavorable regulatory rulings, the emergence of competitive threats (including Abbvie's potential CF drug), weaker-than-expected margins, and pricing or reimbursement
- ▶ Our target of \$484 reflects a 26.9x multiple applied to our projected 2025 EPS, above VRTX's five-year historical forward P/E average, justified by its strengthening growth prospects. While there is some risk from competing CF drugs, we think VRTX's pipeline of candidates in other areas offers good potential, as does expansion into the underserved acute pain

Analyst's Risk Assessment

•		
LOW	MEDIUM	HIGH

Although VRTX is a clear and dominant leader in the market for cystic fibrosis treatments and has historically maintained a strong financial position, VRTX's current reliance on only sales of cystic fibrosis treatments precludes us from assigning it a Low risk assessment.

Revenue/Earnings Data

Revenue (Million USD)

	10	20	30	4Q	Year
2025	E 2,746	E 2,804	E 2,927	E 3,042	E 11,519
2024	E 2,541	E 2,596	E 2,708	E 2,815	E 10,660
2023	2,375	2,493	2,484	2,518	9,869
2022	2,098	2,196	2,334	2,303	8,931
2021	1,724	1,793	1,984	2,073	7,574
2020	1,515	1,524	1,538	1,628	6,206

Earnings Per Share (USD)

	10	20	3Q	4Q	Year
2025	E 4.32	E 4.41	E 4.53	E 4.70	E 17.96
2024	E 4.12	E 4.21	E 4.32	E 4.49	E 17.14
2023	3.05	3.89	4.08	4.20	15.23
2022	3.52	3.60	4.01	3.76	14.88
2021	2.98	3.11	3.56	3.37	13.02
2020	2.56	2.61	2.64	2.51	10.32

Fiscal Year ended Dec 31. EPS Estimates based on CFRA's Operating Earnings; historical earnings are adjusted. In periods where a different currency has been reported, this has been adjusted to match the current quoted currency.

Dividend Data

No cash dividends have been paid in the last year.

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Business Summary Feb 06, 2024

CORPORATE OVERVIEW. Vertex Pharmaceuticals (VRTX) is a biotechnology company that focuses on developing and commercializing therapies for the treatment of cystic fibrosis (CF). In 2020, all of VRTX's product revenues came from sales of CF therapies. The company is also advancing research and development in other areas, including pain, sickle cell disease, beta-thalassemia, and alpha-1 antitrypsin deficiency. We believe that these programs have significant commercial potential. For example, VRTX's program with CRISPR Therapeutics to develop exa-cel (Casgevy) for sickle cell disease and beta-thalassemia is unique because it is one of the first human trials to use the powerful CRISPR/Cas-9 geneediting technology.

MARKET BACKGROUND. CF is a life-shortening genetic disease affecting approximately 83,000 people across North America, Europe, and Australia. CF is caused by a defective or missing CFTR protein resulting from mutations in the CFTR gene. The absence of working CFTR proteins results in poor flow of salt and water into and out of cells in a number of organs, including the lungs. As a result, thick, sticky mucus builds up and blocks the passages in many organs, leading to a variety of symptoms. In particular, mucus builds up and clogs the airways in the lungs, causing chronic lung infections and progressive lung damage.

VRTX's commercialized medicines include Symdeko/Symkevi, Orkambi, Kalydeco, and Trikafta/Kaftrio. Since the late 2019 launch of Trikafta, many patients that were previously on VRTX's other CF therapies have switched over to Trikafta. Collectively, VRTX's four CF drugs are approved to treat a large majority of CF patients in North America, Europe, and Australia. VRTX believes that its current therapies could address up to 90% of all CF patients. The company is pursuing genetic therapies to address the remaining population with CF

COMPETITIVE DYNAMICS. A number of companies are seeking to identify and develop drug candidates for the treatment of CF, including public companies such as AbbVie, Eloxx Pharmaceuticals, Proteostasis
Therapeutics, and Translate Bio, as well as several private companies. Given VRTX's dominance in the market for CF treatments, we believe that the company's sales would face significant pressure if a competing therapy were successfully developed. In recent years, VRTX has committed significant research resources to and made significant investments in its pipeline of potential new therapies for alpha-1 antitrypsin deficiency, APOL1-mediated kidney diseases, pain, beta-thalassemia, sickle cell disease, muscular dystrophy, T1D, and other diseases. Many other pharmaceutical and biotechnology companies are also investing resources for the discovery and development of small molecules, gene therapies, and cell therapies to treat the same diseases for which VRTX is developing therapies.

IMPACT OF MAJOR DEVELOPMENTS. Negative or positive news related to the company's clinical studies may cause sharp day to day volatility in VRTX's shares. On October 15, 2020, VRTX announced that it was discontinuing its Phase 2 study of VX-814 in patients with alpha-1 antitrypsin deficiency [AATD], causing shares to trade down by 21% the next day.

In late October 2019, VRTX's triple combination therapy of VX-445, tezacaftor, and ivacaftor for CF [i.e., Trikafta] was approved by the FDA. This drug significantly expanded VRTX's market opportunity to about 90% of the CF population, up from an estimated 58% of the CF population that was previously treatable with VRTX's therapies. The key patents for Trikafta are expected to expire in 2037 in both the U.S. and Europe. The largest development prior to VRTX's triple combination therapy was the launch of SYMDEKO in the U.S. in 2018. Prior to that, in July 2015, VRTX received FDA approval for ORKAMBI to treat the underlying causes of cystic fibrosis in patients 12 and older with the F580del mutation. This approval was a significant milestone for VRTX because it enabled VRTX to become the clear market leader for the treatment of CF. VRTX subsequently obtained additional approvals for ORKAMBI to treat additional subsets of the CF patient population.

The U.S. FDA approved exa-cel [Casgevy], developed with CRISPR Therapeutics, for the treatment of severe sickle cell disease, on December 8, 2023 for people aged 12 years and above. The therapy was also approved in the U.K. during November 2023 and subsequently in a number of other countries. We are also encouraged by Casgevy's expanded potential following the January 17, 2024 US FDA approval of Casgevy for transfusion-dependent beta thalassemia [TDT], a rare blood disease, in patients 12 years and older.

As of February 2024, data releases related to VX-548, in Phase 3 clinical studies, for the treatment of both acute and neuropathic pain, will likely be the next key development to follow. Vertex estimates VX-548, a non-opioid alternative, to be a multi-billion dollar commercial opportunity. Based on strong data releases, we also see a solid revenue potential for VRTX. The company published in August 2023, positive Phase 2 proof of concept trial results in New England Journal of Medicine, which demonstrated strong efficacy. With the study now in Phase 3, the company expects to share more results during 2024.

FINANCIAL TRENDS. For the year ending December 31, 2023, VRTX achieved revenue of \$9.9 billion versus \$8.9 billion in 2022 [+11% Y/Y]. Growth in 2023 was largely driven by the rapidly expanding sales of Trikafta [up almost by \$1.2 billion Y/Y in 2023]. The company's adjusted EPS was \$15.23 in 2023, up 2.8% Y/Y from \$14.88 in the prior year. VRTX has generated growing levels of positive free cash flow for the past several years and has generally maintained a significant net cash position. As such, we believe that VRTX has substantial financial flexibility. The company has indicated an interest in deals involving transformative midto late-stage assets, but management suggested that it was not a priority.

Corporate information

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Executive VP & COO

S. A. Arbuckle

Executive Chairman

J. M. Leiden

Senior VP & Chief Accounting Officer

K. C. Ambrose

Executive VP & CFO

C. F. Wagner

Executive VP & Chief Legal Officer

J. Biller

Board Members

A. M. Garber

B. I. Sachs

D. L. McKenzie

J. M. Leiden

L. A. Carney

M. Lagarde

N. A. Thornberry

R. Kewalramani

S. N. Bhatia

S. P. Upadhyay

T. C. Kearney

Domicile

Massachusetts

Founded

1989

Employees

5,400

Stockholders

106

Auditor

Ernst & Young LLP



Quantitative Evaluations											
Fair Value Rank		1 2 3 4 5 LOWEST HIGHEST Based on CFRA's proprietary quantitative model, stocks are ranked from most overvalued [1] to most undervalued [5].									
Fair Value Calculation	USD 701.36	Analysis of the stock's current worth, based on CFRA's proprietary quantitative model suggests that VRTX is undervalued by USD 268.60 or 62.07%									
Volatility		LOW AVERAGE HIGH									
Technical Evaluation	BULLISH	•	Since December, 2023, the technical indicators for VRTX have been BULLISH"								
Insider Activity		UNFAVORABLE		NEUTRAL	F.A	VORABLE					

Expanded Ratio Analysis											
	2023	2022	2021	2020							
Price/Sales	10.74	8.38	7.54	10.03							
Price/EBITDA	23.68	16.53	14.20	19.68							
Price/Pretax Income	24.20	17.68	20.90	19.97							
P/E Ratio	26.72	19.41	16.87	22.90							
Avg. Diluted Shares Outstg. [M]	260.50	259.10	259.90	263.40							
Figures based on fiscal year-end price											

Key Growth Rates and Averages			
Past Growth Rate (%)	1 Year	3 Years	5 Years
Net Income	8.96	10.10	11.54
Sales	10.51	16.72	26.49
Ratio Analysis (Annual Avg.)			
Net Margin [%]	36.68	34.93	35.35
% LT Debt to Capitalization	N/A	N/A	N/A
Return on Equity [%]	22.99	25.20	26.93

Company Financials Fiscal year ending Dec 31										
Per Share Data (USD)	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Tangible Book Value	60.74	47.55	34.18	28.03	18.08	17.18	7.70	3.31	2.46	4.16
Free Cash Flow	12.72	15.33	9.35	11.52	5.82	4.62	2.35	0.73	-2.03	-2.65
Earnings	13.89	12.82	9.01	10.29	4.51	8.09	1.04	-0.46	-2.31	-3.14
Earnings (Normalized)	15.23	14.88	13.02	10.32	5.33	4.08	1.95	0.85	-1.11	-2.17
Dividends	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Payout Ratio (%)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Prices: High	413.00	324.75	242.99	306.08	225.66	194.92	167.86	127.60	143.45	124.35
Prices: Low	282.21	214.66	176.36	197.47	160.95	144.07	73.34	71.46	97.45	59.79
P/E Ratio: High	27.10	21.80	18.70	29.70	42.30	47.80	86.10	NM	NM	NM
P/E Ratio: Low	18.50	14.40	13.50	19.10	30.20	35.30	37.60	84.10	NM	NM
Income Statement Analysis [Million USD]										
Revenue	9,869	8,931	7,574	6,206	4,163	3,048	2,489	1,702	1,032	580.00
Operating Income	4,308	4,378	3,892	3,054	1,202	664.00	393.00	11.00	-465.00	-641.00
Depreciation + Amortization	170.00	148.00	126.00	110.00	107.00	72.00	61.00	61.00	62.00	63.00
Interest Expense	44.00	55.00	62.00	58.00	58.00	72.00	69.00	81.00	84.00	73.00
Pretax Income	4,380	4,232	2,730	3,117	1,395	600.00	-16.00	-67.00	-558.00	-735.00
Effective Tax Rate	17.40	21.50	14.20	13.00	15.60	-247.70	684.10	-24.70	-5.40	-0.90
Net Income	3,620	3,322	2,342	2,712	1,177	2,097	263.00	NM	NM	NM
Net Income (Normalized)	3,039	2,783	2,390	1,877	751.10	401.40	382.90	NM	NM	NM
Balance Sheet and Other Financial Data (Million USD)										
Cash	11,218	10,778	7,525	6,659	3,808	3,168	2,089	1,435	1,042	1,387
Current Assets	14,144	13,235	9,561	8,133	4,823	3,843	2,649	1,832	1,407	1,547
Total Assets	22,730	18,151	13,433	11,752	8,319	6,246	3,546	2,897	2,499	2,335
Current Liabilities	3,547	2,742	2,142	1,878	1,335	1,120	807.00	793.00	506.00	368.00
Long Term Debt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	224.00	281.00
Total Capital	18,389	14,812	11,067	9,629	6,758	5,022	2,649	2,179	1,920	1,921
Capital Expenditures	200.00	205.00	235.00	260.00	75.00	95.00	99.00	57.00	45.00	51.00
Cash from Operations	3,537	4,130	2,644	3,254	1,569	1,270	845.00	236.00	-365.00	-573.00
Current Ratio	3.99	4.83	4.46	4.33	3.61	3.43	3.28	2.31	2.78	4.20
% Long Term Debt of Capitalization	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	11.70	14.60
% Net Income of Revenue	36.70	37.20	30.90	43.70	28.30	68.80	10.60	-6.60	-53.90	NM
% Return on Assets	13.17	17.33	19.32	19.02	10.32	8.48	7.62	0.26	-12.02	-17.23
% Return on Equity	23.00	27.70	24.90	36.70	22.40	64.40	5.40	-6.90	-53.70	-60.50

Source: S&P Global Market Intelligence. Data may be preliminary or restated; before results of discontinued operations/special items. Per share data adjusted for stock dividends; EPS diluted. E-Estimated. NA-Not Available. NM-Not Meaningful. NR-Not Ranked. UR-Under Review.



Sub-Industry Outlook

We have a neutral outlook on the biotechnology sub-industry. We expect lower demand for Covid-19 vaccines and treatments Y/Y, despite upticks in cases and hospitalizations globally, which may continue through Q1 2024. We expect Covid-related activity to evolve to an endemic stage, which may lengthen the revenue stream, but likely at a more subdued level.

Reducing drug costs has been a bipartisan issue in the past few years, and the passage of the Inflation Reduction Act (IRA) included new legislation enabling Medicare to directly negotiate pricing on the top 10 branded drugs. The act will have no near-term impact, but it will affect pricing effective January 2026, and it will expand to 20 branded drugs by 2028. In August, the CMS posted the first list of the 10 prescription drugs selected for negotiation. Two biotech firms' drugs are on the list: (i) Enbrel, manufactured by AMGN to treat psoriasis and arthritis; and (ii) Imbruvica, codeveloped and commercialized by ABBV and JNJ to treat cancer. From a company perspective, we do not see a strategic change based on the IRA in the near term; yet, there is a risk that the act has future implications as to where and how companies decide to invest in the future. The current IRA legislation excludes cell and gene therapies; therefore, there may be increased focus on developing these type of therapies in the future, which are more costly, versus the more traditional small molecule drugs that are under the IRA's current scope. Also, if a biotech firm knows that a new blockbuster may get negotiated down, it may price it higher at launch.

We think that the FTC appears to be taking a more active stance on antitrust review. We are seeing increased scrutiny for potential biopharma M&A activity, which may result in delays in approvals and higher deal making costs for companies, in our view. Despite some concerns, Pfizer closed the \$43 billion acquisition of the biotech firm Seagen in December 2023, within anticipated timelines, after it received the necessary regulatory approvals. Now, there are concerns that Abbvie's proposed acquisition of Cerevel Therapeutics for

an \$8.7 billion consideration, announced in December, may be challenged by the Federal Trade Commission as there was a second request from the agency for more information.

In the long run, the growth of the biotechnology industry depends on the volume of new therapy approvals. The number of approvals hit a high water mark in 2018 (61), although 2019-2021 levels have been in the range of 75%-90% of peak, indicating modest drops. In 2023, the FDA approved 55 novel drugs as new molecular entities (NMEs) under New Drug Applications (NDAs), or as new therapeutic biological products under Biologics License Applications (BLAs). This is up from a noticeably low level of 37 approvals in 2022, which we attribute to the disruptions caused by the Covid-19 pandemic. The 2023 total approvals number is in line with typical historical levels and slightly above the 2021 level (52 novel drugs). New drugs usually take at least five years to reach peak sales levels, so if the pace did not improve in 2023, this could result in some long-run headwinds beginning in 2027, in our view.

YTD through February 29, the S&P 1500 Biotechnology Index was up 2.5% versus a 6.5% rise for the S&P Composite 1500 Index. In 2023, the S&P Biotechnology Index returned a gain of only 0.9% vs. a 23.4% rise for the S&P Composite 1500.

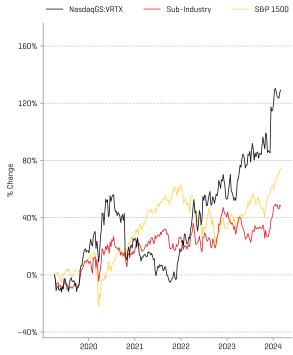
/ Sel Hardy

Industry Performance

GICS Sector: Health Care Sub-Industry: Biotechnology

Based on S&P 1500 Indexes

Five-Year market price performance through Mar 02, 2024



NOTE: A sector chart appears when the sub-industry does not have sufficient historical index data.

All Sector & Sub-Industry information is based on the Global Industry Classification Standard [GICS].

Past performance is not an indication of future performance and should not be relied upon as such.

Source: CFRA, S&P Global Market Intelligence

Sub-Industry: Biotechnology Peer Group*: Biotechnology												
Peer Group	Stock Symbol	Exchange	Currency	Recent Stock Price	Stk. Mkt. Cap. (M)	30-Day Price Chg. (%)	1-Year Price Chg. (%)	P/E Ratio	Fair Value Calc.	Yield (Return on Equity (%)	LTD to Cap (%)
Vertex Pharmaceuticals Incorporated	VRTX	NasdaqGS	USD	420.74	108,680.0	-5.7	44.5	28.0	701.36	N/A	23.0	N/A
Alnylam Pharmaceuticals, Inc.	ALNY	NasdaqGS	USD	151.09	19,029.0	-16.1	-22.7	NM	N/A	N/A	232.4	95.2
Amgen Inc.	AMGN	NasdaqGS	USD	273.83	146,751.0	-13.0	15.9	15.0	272.63	3.3	135.8	88.2
BeiGene, Ltd.	BGNE	NasdaqGS	USD	165.65	17,280.0	6.8	-29.8	NM	N/A	N/A	-22.3	4.4
BioMarin Pharmaceutical Inc.	BMRN	NasdaqGS	USD	86.28	16,279.0	-3.7	-14.6	41.0	73.16	N/A	3.5	9.7
BioNTech SE	BNTX	NasdaqGS	USD	88.96	21,147.0	-6.3	-30.2	7.0	N/A	N/A	14.4	N/A
Biogen Inc.	BIIB	NasdaqGS	USD	216.99	31,542.0	-12.2	-20.3	15.0	234.28	N/A	8.2	30.5
Gilead Sciences, Inc.	GILD	NasdaqGS	USD	72.10	89,820.0	-8.3	-9.4	11.0	71.69	4.3	25.5	47.9
Incyte Corporation	INCY	NasdaqGS	USD	58.36	13,103.0	-1.6	-25.0	17.0	96.19	N/A	12.5	N/A
Moderna, Inc.	MRNA	NasdaqGS	USD	92.24	35,242.0	-10.0	-32.0	NM	N/A	N/A	-28.6	N/A
Regeneron Pharmaceuticals, Inc.	REGN	NasdaqGS	USD	966.09	103,818.0	0.7	25.4	22.0	1,012.42	N/A	16.3	6.9

^{*}For Peer Groups with more than 10 companies or stocks, selection of issues is based on market capitalization.

NA-Not Available; NM-Not Meaningful.

Note: Peers are selected based on Global Industry Classification Standards and market capitalization. The peer group list includes companies with similar characteristics, but may not include all the companies within the same industry and/or that engage in the same line of business.

CFRA

Analyst Research Notes and other Company News

February 05, 2024

06:21 PM ET... CFRA Maintains Buy Opinion on Shares of Vertex Pharmaceuticals Incorporated (VRTX 428.89****):

We lift our target by \$9 to \$484, 26.9x our projected 2025 EPS, above VRTX's five-year historical forward P/E average, justified by its strengthening growth prospects. We raise our 2024 EPS view by \$0.04 to \$17.14 and start 2025's at \$17.96. Q4 EPS of \$4.20 vs. \$3.76 (+12% Y/Y) was \$0.09 above our estimate and \$0.11 above the consensus. Q4 product revenues of \$2.52B came close to expectations (+9% Y/Y), but \$31M below our estimate and \$3M above consensus. Trikafta/Kaftrio sales, which made up 93% of total Q4 product revenues, were +15% Y/Y, driven by robust performance in the U.S. and internationally. This was driven by solid uptake for children ages 2–5 in the U.S., following the treatment's recent launch and label extensions outside of the U.S. for younger patients. VRTX guided for product revenues of \$10.558-\$10.75B in 2024, which we think is comfortably achievable at the midpoint of the range, given the solid momentum for CF products. We pencil in 8% Y/Y growth and product revenues of \$10.66B for 2024. / Sel Hardy

January 17, 2024

01:56 PM ET... CFRA Keeps Buy Opinion on Shares of Vertex Pharmaceuticals Incorporated [VRTX 433.75****]:

We continue to remain bullish on shares of VRTX following the rapid rally (+25%) we saw since December 8, following the FDA approval for Vertex's Casgevy, a milestone gene editing therapy, developed together with CRISPR Therapeutics to treat severe sickle cell disease for people aged 12 years and above. We lift our target to \$475 from \$427, 27.8x our projected 2024 EPS, slightly above VRTX's five-year historical forward P/E average, justified by VRTX's strengthening outlook. We raise our 2023 EPS estimate by \$0.03 to \$15.13 and maintain our 2024 view at \$17.10. We are also encouraged by Casgevy's expanded potential following yesterday's FDA approval of the gene editing therapy for transfusion-dependent beta thalassemia [TDT], a rare blood disease, to treat patients 12 years and older. The company will report its Q4 earnings on February 5 after market close, and we expect a solid quarter with revenue up 11% Y/Y. / Sel Hardy

December 08, 2023

01:45 PM ET... CFRA Retains Buy Opinion on Shares of Vertex Pharmaceuticals Inc. [VRTX 349.91****]:

Today, in line with our expectations, the U.S. FDA approved Vertex's exa-cel [Casgevy], a milestone gene editing therapy, developed together with CRISPR Therapeutics, to treat severe sickle cell disease for people aged 12 years and above. We expect the approval to be followed with a potential launch by year-end. The therapy was first approved in the U.K. during November. According to NIH, 100K people are impacted by this rare blood disease in the U.S. and 20 million people are impacted globally, a considerably large addressable market, in our view. We maintain our target price at \$427, 25.0x our projected 2024 EPS, slightly below VRTX's five-year historical forward P/E average, justified by its strengthening outlook. We lift our 2023 EPS estimate by \$0.15 to \$15.10 and our 2024 view by \$0.52 to \$17.10. / Sel Hardy

November 06, 2023

05:55 PM ET... CFRA Maintains Buy Opinion on Shares of Vertex Pharmaceuticals Incorporated [VRTX 385.16****]:

We lift our target by \$39 to \$427, 25.7x our projected 2024 EPS, slightly above VRTX's five-year historical forward P/E average, justified by its strengthening outlook. We raise our 2023 EPS view by \$0.07 to \$14.95 and 2024's by \$0.08 to \$16.58. Vertex reported a strong set of results, with Q3 EPS of \$4.08 vs. \$4.01, \$0.07 above our estimate and \$0.11 above the S&P Capital IQ consensus. Q3 product revenues of \$2.48B, up 6% Y/Y, came in \$19M higher than our estimate and \$19M below consensus. Trikafta/Kaftrio sales were strong at \$2.8B, up 13% [92% of product revenues], driven by continued robust uptake outside of the U.S. and the launch of the therapy in the U.S. for children ages 2-5 to treat cystic fibrosis [CF]. Vertex raised its product revenue guidance one more time to \$9.85B from \$9.7B-\$9.8B in August, which we think is achievable as we expect the strong momentum for Trikafta/Kaftrio to continue in Q4. We see the December 8 PDUFA date for exacell and March 30 for TDT as the major near-term catalysts. / Sel Hardy

August 02, 2023

06:49 AM ET... CFRA Retains Buy Opinion on Shares of Vertex Pharmaceuticals (VRTX 347.74****):

We up our target by \$5 to \$388, 23.5x our projected 2024 EPS. We boost our 2023 EPS estimate by \$0.18 to \$14.88 and our 2024 estimate by \$0.33 to \$16.50. Q2 EPS of \$3.89 vs. \$3.60 was \$0.01 higher than the S&P Capital IQ consensus and our estimate. Vertex posted Q2 product revenues of \$2.5B, up a remarkable 14% Y/Y, \$73M higher than consensus and \$69M above our estimate. This was due to another quarter of higher-than-anticipated uptake of Trikafta/Kaftrio, Vertex's key triple combination gene therapy for cystic fibrosis internationally and strong performance of Trikafta in the U.S. with its launch to treat children two to five years old. Consequently, Trikafta sales were up by a robust 18% Y/Y, reaching \$2.2B [90% of total product revenue]. We are encouraged by the raised product revenue guidance for 2023 of \$9.7B-\$9.8B, up from \$9.55B-\$9.70B in May, which implies continued strong uptake of Trikafta/Kaftrio globally along with accelerated sales growth of Trikafta in the U.S. in the second half of the year. / Sel Hardy

July 06, 2023

05:54 AM ET... CFRA Keeps Buy Opinion on Shares of Vertex Pharmaceuticals [VRTX 348.00****]:

We raise our target price by \$8 to \$383, reflecting a 23.7x multiple applied to our projected 2024 EPS. We raise our 2023 EPS estimate by \$0.04 to \$14.70 and lift our 2024 estimate by \$0.49 to \$16.17. We think Vertex's stock continues to be attractive at current valuations driven by a number of near and medium-term catalysts. In May, Vertex received both the European Commission's approval of Orkambi [lumacaftor/ivacaftor], the company's single-use oral medicine for cystic fibrosis for children between ages one to two, and the FDA's approval for Kalydeco (ivacaftor) to treat children ages one to four months old with cystic fibrosis. VRTX will be releasing its Q2 earnings on August 1. We expect robust sales growth in Q2, with top-line revenue up 10% Y/Y and EPS growth of 8% Y/Y. We think the FDA decision for the severe sickle cell disease treatment, exa-cel, jointly developed with CRISPR Therapeutics, to be announced on December 8, is key and can be followed with a potential launch by year-end, in our view. / Sel Hardy

May 01, 2023

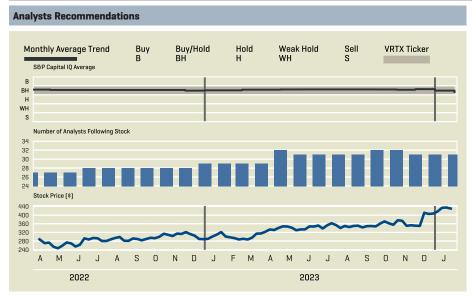
06:07 PM ET... CFRA Maintains Buy Opinion on Shares of Vertex Pharmaceuticals [VRTX 345.00****]:

We raise our 12-month target by \$38 to \$375, reflecting a 23.9x multiple applied to our projected 2024 EPS. We cut our 2023 EPS estimate by \$0.23 to \$14.66 and maintain our 2024 estimate at \$15.68. Q1 EPS of \$3.05 vs. \$3.52 was \$0.05 higher than consensus and \$0.20 lower than our estimate. Q1 product revenues of \$2.378, up a solid 13% Y/Y, were \$38M higher than consensus and \$44M above our estimate driven by stronger-than-expected global uptake of Vertex's triple combination gene therapy for cystic fibrosis, Trikafta/Kaftrio. Total sales generated from Trikafta rose to \$2.18, up 19% Y/Y [88% of total product revenue] as sales performance both in the U.S. and international markets was strong. Based on Trikafta's continued success, Vertex remains confident in its 2023 revenue guidance, which remains unchanged versus Q4, with product revenues expected to be in the \$9.55B-\$9.70B range. We pencil in total sales of \$9.73B, slightly above the higher end of the guidance range, which point to a Y/Y growth of 9%. / Sel Hardy

Note: Research notes reflect CFRA's published opinions and analysis on the stock at the time the note was published. The note reflects the views of the equity analyst as of the date and time indicated in the note, and may not reflect CFRA's current view on the company.







	No. of			
	Recommendations	% of Total	1 Mo.Prior	3 Mos.Prior
Buy	12	39	12	14
Buy/Hold	6	19	6	7
Hold	10	32	10	10
Weak hold	1	3	1	0
Sell	2	6	2	0
No Opinion	0	0	0	0
Total	31	100	31	31

Wall Street Consensus Estimates Estimates Previous Year Current Year Next Year ---0 D 2023 **Fiscal Year** Avg Est. High Est. Low Est. # of Est. Est. P/E 2025 18.36 20.75 14.58 23 22.91 2024 16.80 18.29 24 25.05 15.15 2025 vs. 2024 **4** 9% **13% ▼ -4%** ▼ -9% Q1'25 4.56 4.77 4.36 2 92.17

4.07

12%

 $\label{lem:continuous} \mbox{Forecasts are not reliable indicator of future performance}.$

Q1'24

Q1'25 vs. Q1'24

Note: A company's earnings outlook plays a major part in any investment decision. S&P Global Market Intelligence organizes the earnings estimates of over 2,300 Wall Street analysts, and provides their consensus of earnings over the next two years, as well as how those earnings estimates have changed over time. Note that the information provided in relation to consensus estimates is not intended to predict actual results and should not be taken as a reliable indicator of future performance.

3.61

21%

21

103.42

▼ -11%

Note: For all tables, graphs and charts in this report that do not cite any reference or source, the source is S&P Global Market Intelligence.

4.44

▲ 7%

Wall Street Consensus Opinion

Buy/Hold

Wall Street Consensus vs. Performance

For fiscal year 2024, analysts estimate that VRTX will earn USD 16.80. For fiscal year 2025, analysts estimate that VRTX's earnings per share will grow by 9.31% to USD 18.36.



Glossary

STARS

Since January 1, 1987, CFRA Equity and Fund Research Services, and its predecessor S&P Capital IQ Equity Research has ranked a universe of U.S. common stocks, ADRs (American Depositary Receipts), and ADSs (American Depositary Shares) based on a given equity's potential for future performance. Similarly, we have ranked Asian and European equities since June 30, 2002. Under proprietary STARS (Stock Appreciation Ranking System), equity analysts rank equities according to their individual forecast of an equity's future total return potential versus the expected total return of a relevant benchmark (e.g., a regional index (MSCI AC Asia Pacific Index, MSCI AC Europe Index or S&P 500® Index)), based on a 12-month time horizon. STARS was designed to help investors looking to put their investment decisions in perspective. Data used to assist in determining the STARS ranking may be the result of the analyst's own models as well as internal proprietary models resulting from dynamic data inputs.

S&P Global Market Intelligence's Quality Ranking

[also known as **S&P Capital IQ Earnings & Dividend Rankings**] - Growth and S&P Capital IQ Earnings & Dividend Rankings stability of earnings and dividends are deemed key elements in establishing S&P Global Market Intelligence's earnings and dividend rankings for common stocks, which are designed to capsulize the nature of this record in a single symbol. It should be noted, however, that the process also takes into consideration certain adjustments and modifications deemed desirable in establishing such rankings. The final score for each stock is measured against a scoring matrix determined by analysis of the scores of a large and representative sample of stocks. The range of scores in the array of this sample has been aligned with the following ladder of rankings:

 A+ Highest
 B
 Below Average

 A
 High
 B- Lower

 A
 Above
 C
 Lowest

3+ Average D In Reorganization

NC Not Ranked

EPS Estimates

CFRA's earnings per share (EPS) estimates reflect analyst projections of future EPS from continuing operations, and generally exclude various items that are viewed as special, non-recurring, or extraordinary. Also, EPS estimates reflect either forecasts of equity analysts; or, the consensus (average) EPS estimate, which are independently compiled by S&P Global Market Intelligence, a data provider to CFRA. Among the items typically excluded from EPS estimates are asset sale gains; impairment, restructuring or merger-related charges; legal and insurance settlements; in process research and development expenses; gains or losses on the extinguishment of debt; the cumulative effect of accounting changes; and earnings related to operations that have been classified by the company as discontinued. The inclusion of some items, such as stock option expense and recurring types of other charges, may vary, and depend on such factors as industry practice, analyst judgment, and the extent to which some types of data is disclosed by companies.

12-Month Target Price

The equity analyst's projection of the market price a given security will command 12 months hence, based on a combination of intrinsic, relative, and private market valuation metrics, including Fair Value.

Abbreviations Used in Equity Research Reports

CAGR - Compound Annual Growth Rate

CAPEX - Capital Expenditures

CY - Calendar Year

DCF - Discounted Cash Flow

DDM - Dividend Discount Model

EBIT - Earnings Before Interest and Taxes

EBITDA - Earnings Before Interest, Taxes, Depreciation & Amortization

EPS - Earnings Per Share

EV - Enterprise Value

FCF - Free Cash Flow

FFO - Funds From Operations

FY - Fiscal Year

P/E - Price/Earnings

P/NAV - Price to Net Asset Value

PEG Ratio - P/E-to-Growth Ratio

PV - Present Value

R&D - Research & Development

ROCE - Return on Capital Employed

ROE Return on Equity

ROI - Return on Investment

ROIC - Return on Invested Capital

ROA - Return on Assets

SG&A - Selling, General & Administrative Expenses

SOTP - Sum-of-The-Parts

WACC - Weighted Average Cost of Capital

Dividends on American Depository Receipts (ADRs) and American Depository Shares (ADSs) are net of taxes (paid in the country of origin).

Qualitative Risk Assessment

Reflects an equity analyst's view of a given company's operational risk, or the risk of a firm's ability to continue as an ongoing concern. The Qualitative Risk Assessment is a relative ranking to the U.S. STARS universe, and should be reflective of risk factors related to a company's operations, as opposed to risk and volatility measures associated with share prices. For an ETF this reflects on a capitalization-weighted basis, the average qualitative risk assessment assigned to holdings of the fund.

STARS Ranking system and definition:

★★★★ 5-STARS (Strong Buy):

Total return is expected to outperform the total return of a relevant benchmark, by a notable margin over the coming 12 months, with shares rising in price on an absolute basis.

$\star\star\star\star\star$ 4-STARS (Buy):

Total return is expected to outperform the total return of a relevant benchmark over the coming 12 months.

**** 1-STARS (Hold):

Total return is expected to closely approximate the total return of a relevant benchmark over the coming 12 months.

★★★★★ 2-STARS (Sell):

Total return is expected to underperform the total return of a relevant benchmark over the coming 12 months.

* * * * * 1-STAR (Strong Sell):

Total return is expected to underperform the total return of a relevant benchmark by a notable margin over the coming 12 months, with shares falling in price on an absolute basis.

Relevant benchmarks:

In North America, the relevant benchmark is the S&P 500 Index, in Europe and in Asia, the relevant benchmarks are the MSCI AC Europe Index and the MSCI AC Asia Pacific Index, respectively.



Disclosures

Stocks are ranked in accordance with the following ranking methodologies:

STARS Stock Reports:

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Quantitative Stock Reports:

Quantitative rankings are determined by ranking a universe of common stocks based on 5 measures or model categories: Valuation, Quality, Growth, Street Sentiment, and Price Momentum. In the U.S., a sixth sub-category for Financial Health will also be displayed. Percentile scores are used to compare each company to all other companies in the same universe for each model category. The five (six) model category scores are then weighted and rolled up into a single percentile ranking for that company. For reports containing quantitative rankings refer to the Glossary section seof the report for detailed methodology and the definition of Quantitative rankings.

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STARS Stock Reports:

Global STARS Distribution as of December 31, 2023

Ranking	North America	Europe	Asia	Global
Buy	39.1%	34.9%	41.7%	38.8%
Hold	52.9%	50.5%	52.0%	52.2%
Sell	8.0%	14.6%	6.3%	8.9%
Total	100.0%	100.0%	100.0%	100.0%

Analyst Certification:

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