

Health Care

2024 Year Ahead for the health care sector

Industry Overview

Top Biopharma/Biotech picks: LLY, MRK, GILD

We think valuation looks reasonable across Pharma (18X) and Biotech (14X) with the resurgence of M&A demonstrating a more proactive stance towards filling patent cliffs (i.e. LOEs). The large cap Biopharma sector continues to diverge into the 'haves' and the 'have-nots' based primarily on the strength of new product cycles.

Top SMID Bio/Spec pharma picks: PCVX, TEVA, ITCI, TARS

SMID cap biopharma enters 2024 with an improved backdrop aided by M&A interest (from large pharma), strong R&D productivity and improving access to capital. Our top picks reflect the names with the most compelling R&D pipeline catalysts and/or new product launches including: PCVX, ITCI, TEVA and TARS.

Top SMid Biotech Picks: ARGX, MRUS, RARE and SRPT

Strong M&A momentum could continue into 2024 and a more favorable macro backdrop could propel the biotech sector, but full recovery could still take some time (2H24/2025). Focus will remain on high-quality, de-risked assets with strong clinical validation.

Top MCO pick: HUM; Top HC Fac Pick: THC

We think that both MCOs and hospitals can work in 2024. MCOs put numerous headwinds behind them (redeterminations, MA trend, MA rates, elections). Hospitals enter Year 2 of 3-year recovery in pricing, vols and labor.

Top Tools picks: TMO, AVTR, QGEN

We expect Tools markets to rebound as headwinds (destocking, biopharma spend, China) start to fade. However, many stocks are already "pricing in" a full recovery, limiting upside until fundamentals improve further. Top picks are TMO, AVTR, QGEN.

Top Medtech picks: ISRG, BSX, SYK

We start 2024 at one of the lowest relative valuations in a decade, creating a much lower bar for stocks to work. EPS revisions likely drive stocks in 2024 as it's not clear what changes medtech multiples in 2024. Top picks: ISRG, BSX, and SYK.

Top HC Distribution and IT pick: CVS

CVS (top 2024 pick) reset expectations and is positioned for a "controlled acceleration" of earnings into 2025. Adoption for digital health solutions may congregate around tools to control GLP-1 spend. Distributors remain our biggest focus group with MCK having the best total portfolio and COR having catch-up optionality.

Top Euro Pharm/Biotech Novo, AZN, NVS

We remain positive on the European Pharma sector into 2024 given continued innovation-driven growth, full pipelines and attractive valuation.

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Equity **United States** Health Care

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Exhibit 1: Stocks mentioned

Prices and ratings for stocks mentioned in this report

BofA Ticker	Bloomberg ticker	Company name	Price	Rating
ARGX	ARGX US	Argenx	US\$ 388.72	C-1-9
AZN	AZN US	AstraZeneca	US\$ 68.78	B-1-7
AZNCF	AZNLN	AstraZeneca	10864p	A-1-7
AVTR	AVTR US	Avantor, Inc.	US\$ 21.88	B-1-9
BSX	BSX US	Boston Scientific	US\$ 58.17	B-1-9
CVS	CVS US	CVS Health	US\$ 80.51	B-1-7
LLY	LLY US	Eli Lilly	US\$ 614.5	B-1-7
GILD	GILD US	Gilead Sciences Inc.	US\$ 84.48	B-1-7
HUM	HUM US	Humana Inc	US\$ 466.54	B-1-7
ITCI	ITCI US	Intra-Cellular	US\$ 69.04	C-1-9
ISRG	ISRG US	Intuitive Surgical	US\$ 323.27	B-1-9
MRK	MRK US	Merck & Co.	US\$ 117.01	A-1-7
MRUS	MRUS US	Merus	US\$ 29.44	C-1-9
NVS	NVS US	Novartis	US\$ 105.57	A-1-7
NVSEF	NOVN SW	Novartis	CHF 89.84	A-1-7
QGEN	QGEN US	Qiagen	US\$ 43.8	B-1-9
XQGNF	QIA GY	Qiagen N.V.	EUR 39.59	B-1-9
SRPT	SRPT US	Sarepta	US\$ 94.28	C-1-9
SYK	SYK US	Stryker	US\$ 298.05	B-1-7
TARS	TARS US	Tarsus Pharma	US\$ 19.74	C-1-9
THC	THC US	Tenet Healthcare	US\$ 74.17	C-1-9
TEVA	TEVA US	Teva Pharmaceuticals	US\$ 10.88	C-1-9
RARE	RARE US	Ultragenyx Pharm	US\$ 47.09	C-1-9
PCVX	PCVX US	Vaxcyte	US\$ 64.34	C-1-9

Source: BofA Global Research

BofA GLOBAL RESEARCH

Price objective basis & risk

Argenx SE (ARGX)

Our price objective of \$552 is based on our DCF-derived model with valuations assigned for efgartigimod in Myasthenia Gravis (\$304), Immune Thrombocytopenia (\$5), and Chronic Inflammatory Demyelinating Polyneuropathy (\$157), pipeline and corporate expenses (\$35) and cash. We assign 9% WACC for MG, 10% for ITP, and CIDP. Our DCF valuation is based on estimates out to 2038. We assume peak penetrations of 10%-35% in US depending on the indication.

Upside risks to our PO are (1) better-than-expected efficacy in efgartigimod indications, (2) faster-than-anticipated timeline to approval, (3) additional indications advancing in clinical development, (4) positive data from its partnerships, and (5) higher-than-expected pricing at launch.

Downside risks to our PO are (1) competitors have better-than-expected efficacy, (2) failure to achieve clinically meaningful results in ongoing studies, and (3) unexpected safety events in ongoing trials.

AstraZeneca (AZNCF / AZN)

Our PO of GBP145 (US\$88) is based on c19x FY25E PE, ahead of our target sector multiple of c16x due to potential for premium growth (11% 25-28E EPS CAGR vs sector c7%) and significant pipeline optionality.

Our target sector multiple of c16x 25E PE is based on: 1) A 40% premium to the market average multiple which implies c15x 25E PE, a premium which is in line with the long-term historical trend for periods of growth for the sector during times of broader market uncertainty, 2) Regression analysis of historical sector forward PEs and three-year-



forward EPS CAGR implies a target PE of c16x 25E PE based on sector growth of c7%, 3) Our DCF valuations imply c17x 25E PE

Upside risks to our PO are better-than-expected EPS momentum driven by better execution on product launches and pipeline success.

Downside risks to our PO are pipeline failure, risk of litigation, adverse currency moves, greater margin pressure driving EPS miss and a failure to inflect key product launches.

Avantor, Inc. (AVTR)

Our \$24 PO is based on 17x our 2024 adj EBITDA estimates in-line with LST peer average.

Risks to our PO are headwinds from the global COVID-19 pandemic, variability in customer R&D funding, increasing competition, supplier concentration, M&A integration, slower than expected geographic expansion, slower than expected deleveraging, and unfavorable currency swings.

Boston Scientific (BSX)

Our PO of \$60 is derived from 28x our 2024E EPS estimate, which is a premium to the large cap medtech comp group. We believe this multiple is justified given our view of BSX's accelerating earnings growth outlook based on opportunities to drive above average top line growth.

Downside risks to our PO are: 1) Watchman slowdown if ABT becomes more competitive than expected, 2) supply chain/inflationary pressures impact margins more than expected, 3) BSX sees a major setback in a clinical trial or product pipeline failure, 4) unexpected COVID related headwinds.

CVS Health (CVS)

Our \$95 price objective is based on about 11x our CY24 EPS estimate. This multiple is below the five-year average on an absolute basis and near the lower end of the historical range of 10.0x-17.5x. This also represents a bigger discount to the S&P500 vs. the last five years. The discount reflects margin pressure across CVS's core Pharmacy Services and Retail Pharmacy segments and uncertainty around drug prices.

Downside risks to our PO are failure to generate expected benefits from the Aetna combination (or have any regulatory issues in a highly regulated business), growing competitive risks in the pharmacy benefit market (including competitive pricing around rebates), business disruption tied to Covid any potential impact from ongoing opioid-related investigations, any issues with the closing and integration of the pending Signify Health/Oak Street transactions, costs and mitigation efforts needed to address the lost Stars ratings for CVS' MA plans, potential regulatory risk across the HCB and Pharmacy Services businesses, a slowdown in 340B, and slowing prescription/insurance trends. Upside risks to our PO are any potential prescription volume pickup, faster and stronger than expected synergies from Aetna, biosimilar contributions, and improving front-end performance (including better attach rates post-Covid).

Eli Lilly and Company (LLY)

Our \$700 price objective is based on a probability-adjusted net present value (NPV) analysis of franchise verticals including Endocrinology (\$393/share), Oncology (\$127/share), Cardiovascular (\$4/share), Neuroscience (\$12/share), Immunology (\$28/share), other pharmaceutical products and early pipeline assets (\$150/share), as well as approximately -\$15/share in net cash. We use a WACC ranging from 5% for approved products to 9% for pipeline products, depending on the stage of development. We apply terminal values ranging from -12% (cardiology) to 1% (endocrinology) based on projected sales decline following loss of exclusivity within each business vertical.



Risks to our price objective are 1) better-than-expected launches of competing products, 2) emerging clinical data for pipeline assets that does not confirm prior observations, 3) failure to effectively commercialize approved products, 4) potential drug pricing system restructuring in the US.

Gilead Sciences Inc. (GILD)

Our \$95 price objective is based on a sum-of-the parts net present value (NPV) analysis. We forecast sales of key franchises or products to 2030 using a weighted average cost of capital (WACC) of 8%, and include a terminal value where appropriate. Under these assumptions, we value the HIV franchise at \$80/share, HCV and HDV at \$7/share, the Kite platform at \$8/share, remdesivir at \$2/share, Trodelvy at \$9/share, with the pipeline at \$5/share and net cash at -\$15/share.

Upside risks: 1) stronger-than-expected sales of Biktarvy in HIV and faster uptake of Descovy in PrEP, 2) greater durability of HCV revenues, 3) rapid uptake of Kite, 4) and success of the oncology pipeline may lead investors to assign further value to these programs.

Downside risks: 1) moderating sales of Biktarvy, Genvoya, Odefsey, and Descovy due to competition, which may include long-acting injectable formulations, 2) greater than expected erosion of HCV revenues, 3) limited upside from Gilead's CAR-Ts, 4) the oncology pipeline may have limited clinical success or be meaningfully delayed.

Humana Inc (HUM)

Our \$640 PO is based on 20.2x our 2024 EPS estimate, a premium to its 5-year average of 17.1x justified by the strong growth trajectory we expect for HUM's core business, Medicare Advantage.

Upside risks are potential for share repurchase and several non-healthcare catalysts, margin normalization, and the rebound in risk coding.

Downside risks are regular industry sensitivity points (cost trend, MA rates), as well as unknowns from a new administration.

Intra-Cellular Therapies (ITCI)

Our \$82 price objective (PO) is based on a risk-adjusted sum-of-the-parts analysis. 1) Caplyta risk-adjusted sales climb to \$2bn by 2027E, before loss-of-exclusivity (LOE) in 2034, 2) no terminal value, 3) operating margin reaching low-60s percentage, 4) 9% discount rate.

Downside risks to our PO: 1) lower-than-expected commercial uptake of Caplyta in schizophrenia, continued COVID disruption keeping a lid on script growth, 2) BPD commercial execution risk, 3) potential setbacks on ITCI's execution on pipeline clinical development plan, e.g. adjunctive MDD, mixed features.

Upside risks to our PO: 1) better-than-expected commercial uptake of Caplyta in schizophrenia, 2) bipolar depression launch significantly above our estimates, 3) further pipeline validation beyond our assumptions, for e.g. Caplyta in adjunctive MDD, mixed features

Intuitive Surgical (ISRG)

Our \$400 PO is based on roughly 53x our 2025E EPS. We think the premium multiple relative to average large cap peers is justified given ISRG's expected mid-teens top-line growth over the next several years, nearly 3x that of the medtech market, and ISRG is well ahead vs competition in one of the most significant growth markets in medtech (soft tissue robotics). ISRG pipeline also justifies our multiple as ISRG is spending over



\$500m a year in R&D and it's a matter of time before the fruits of these investments show up in estimates.

Downside risks are 1) lower surgical volumes due to covid, 2) slowdown in hospital capital spending, 3) other competitive entrants and 4) supply chain headwinds.

Merck & Co. (MRK)

Our \$130 price objective (PO) is based on the intrinsic value of Merck standalone. We use a 50/50 blended average of our P/E multiple applied to 2024E EPS (we think the current 17x vs.18x peer average makes sense to reflect continued strength of Merck's core growth franchises but broader Keytruda concentration risk concerns) and risk-adjusted DCF (7% WACC and -2% terminal growth rate).

Risks to our PO are 1) impressive competitor readouts results in key immuno-oncology (I/O) indications, 2) more rapid declines across the diabetes franchise than expected, 3) negative outcomes from the company's later-stage assets in ongoing development, and 4) pressures from headline risks facing the sector (including drug pricing reform).

Merus (MRUS)

Our \$38 PO is based on a probability adjusted net present value analysis. Our valuation consists of \$16/sh for petosemtamab in 2L+ head and neck squamous cell cancer (HNSCC) and \$7/sh for peto' in 1L HNSCC. The remainder of our valuation comes from pipeline (\$8/sh) and cash (\$7/sh). Our discounted cash flow (DCF)-based model goes out to 2040. We assume 11% WACC for peto in 2L+, 13% in 1L and 14% for pipeline expenses, and assume no terminal value

Upside risks to our PO are 1) positive clinical data for lead programs, 2) potential for accelerated approval in 2L+ HNSCC and potentially 1L, 3) successful partnership for commercialization of zenocutuzumab, and 4) better-than-expected market penetration.

Downside risks to our PO are 1) negative results from upcoming clinical data readouts, 2) unexpected safety signals from lead assets, 3) failure to obtain accelerated approval in HNSCC, 4) failure to partner zenocutuzumab, and 5) lower than expected commercial uptake.

Novartis (NVSEF / NVS)

Our CHF109/USD125 PO is based on a 15x 25E PE, a c6% discount to our target sector multiple of c16x with 7% 25-28E EPS CAGR in line with sector, but due to lack of growth post 2028 caused by patent expiries and insufficient visibility on mid-to-late stage pipeline to address this.

Our target sector multiple of c16x 25E PE is based on: 1) A 40% premium to the market average multiple which implies c15x 25E PE, a premium which is in line with the long-term historical trend for periods of growth for the sector during times of broader market uncertainty, 2) Regression analysis of historical sector forward PEs and three-year-forward EPS CAGR implies a target PE of c16x 25E PE based on sector growth of c7%, 3) Our DCF valuations imply c17x 25E PE.

Upside risks to our price objective are favourable currency moves, faster product launches, positive earnings momentum positive pipeline surprises, value-accretive M&A.

Downside risks are new competition to growth franchises, negative currency movements, early generic competition, pipeline failure, risk of litigation, failure to execute on product launches, regulatory changes, pricing pressure, significant changes in the US political environment, or value-destructive M&A.

Qiagen (QGEN / XQGNF)



Our \$52.00/€48 PO is based on about 17x FY25e EV/EBITDA. in-line with LST peers. The company has made progress in revamping its business and the stronger core endmarkets.

Downside risks to our PO are lingering covid headwind, execution missteps, competition, changes in customer R&D funding levels or priorities, IP disputes, technology shifts, and F/X swings.

Sarepta Therapeutics (SRPT)

Our \$164 PO is based on a probability-adjusted net present value (NPV) analysis that includes \$19/share for Exondys, \$8/share for Vyondys, \$22/share for Amondys, \$77/share for micro-dystrophin gene therapy, \$36/share for LGMD assets. The remainder of our valuation comes from pipeline and cash. Our discounted cash flow (DCF) analysis assumes sales out to 2035, with weighted average cost of capital (WACC) of 9-13%.

Upside risks to our PO are 1) better-than-expected market uptake from its exon skipping assets, 2) SRP-9001 US label expansion, and 3) EU approval of SRP-9001 and other assets.

Downside risks to our PO are 1) failure and delay in approval for exon skipping assets, 2) unexpected safety or durability findings in gene therapy programs, 3) other micro dystrophin competitors, and 4) higher-than-expected royalty payments.

Stryker (SYK)

Our \$315 PO is based on 27x our 2024 EPS which is a premium to medtech but in line with where higher-quality, higher-growth names trade today on 2024 EPS.

Downside risks to our PO are a slowdown in hospital capital spending, supply chain disruption, or more inflation pressure on costs and materials. Upside risks to our PO are new product launches and continued share gains driving upside to revenue growth. Moderating inflation/improving supply chains could also drive upside.

Tarsus Pharmaceuticals (TARS)

Our \$42 price objective (PO) is based on a risk-adjusted DCF of TP-03 lead program. Key assumptions: 1) we forecast cash flows through 2038 patent life of TP-03. 2) 100% probability of success for TP-03 and 90% probability of achieving market expansion. 3) TP-03 generates \$513m in 2030E risk-adjusted sales, 4) discount rate of 10% and no terminal value.

Downside risks to our PO are (1) failure of TP-03 to show desired results in clinical trials, (2) slower-than-expected commercial uptake of TP-03, (3) potential dilutive cash raises to commercialize the drug.

Upside risks to our PO are (1) better-than-expected clinical data and/or commercial uptake of TP-03, (2) acquisition at a premium price.

Tenet Healthcare (THC)

Our \$95 PO is based on 8.4x our 2024 EBITDA less non-controlling interests estimate, above the high end of the company's historical 5.5x-8.5x range. While growth in the Acute care business will likely continue to be impacted by labor headwinds, the company's strong cost control should drive earnings and position the company well heading into the expected ramp in volumes as COVID normalizes. Meanwhile, continued repositioning into Ambulatory Surgery Centers (ASCs) will help both the organic growth and FCF profile.

Downside risks to our PO are: 1) Volume trends rebound slower than expected following



COVID-19, 2) Government reimbursement reductions, 3) Margin pressure/integration issues at recently acquired assets, 4) Above average leverage, 5) labor costs pressures.

Upside risks to our PO are: 1) Volumes are better than expected, 2) Continued acuity strength and pricing growth, 3) Better than expected cost controls.

Teva Pharmaceuticals (TEVA)

Our \$13 price objective (PO) is based on a '24E EV/EBITDA multiple of 8x, which is slightly above the peer group avg of 6.7x reflecting key new product launches following resolution of opioid litigation. Our valuation factors in \$4.7bn in contingent legal liabilities related to opioid litigation resolution (\$3.2bn) and generic price fixing (\$1.5bn). The \$3.2bn estimate for present value of opioid resolution cost is based on \$4.35bn gross liability, with a 13-year payout.

Upside risks: 1) Ability to execute BD (business development) activity to drive mid-SD revenue growth in '23-27 timeframe, 2) surprise high value new generic product launch.

Downside risks: 1) annual opioid costs may limit BD activity thus hindering TEVA's aspiration of achieving mid-SD revenue growth in '23-27 timeframe, 2) increased price erosion to key spec pharma brands

Ultragenyx Pharmaceuticals (RARE)

Our DCF-derived PO of \$84 for RARE consists of \$11/share for Dojolvi in LC-FAOD, \$20/share for Crysvita in XLH and TIO, \$0.5/share for Mepsevii in MPS7, \$15/share for Angelman, \$42/share for gene therapy assets and the remainder for cash and RARE's pipeline. We use a 9% WACC for approved products, 11-12% for clinical-stage products, such as gene therapy programs.

Upside risks to our price objective are: 1) better than expected uptake for its approved products, 2) positive data for clinical stage assets, and 3) accelerated approval for its drug candidates.

Downside risks are: 1) low penetration into rare disease populations, 2) negative data for clinical stage assets, 3) unexpected safety risks associated with clinical stage drug candidates, 4) unexpected generic competition.

Vaxcyte Inc (PCVX)

Our \$80 price objective (PO) is based on a risk-adjusted DCF analysis. Key assumptions: 1) we forecast cash flows through 2034, with VAX-24 launching in 2026E, 2) we see 55% likelihood to market for VAX-24, 3) we expect VAX-24 to generate \$4bn in nominal sales by 2034E, 4) we apply a discount rate of 11.5% and +1% terminal growth rate. Downside risks to our PO are (1) failure of VAX-24 to show desired results in clinical trials, (2) slower-than-expected commercial uptake, (3) potential dilutive cash raises to develop and commercialize the drug.

Upside risks to our PO are (1) better-than-expected clinical data and/or commercial uptake of VAX-24, (2) acquisition at a premium price.

Analyst Certification

I, Kevin Fischbeck, CFA, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.



US - Biotechnology Coverage Cluster

Investment rating	Company	Bof A Ticker	Bloomberg symbol	Analyst
BUY				
	4D Molecular Therapeutics, Inc.	FDMT	FDMT US	Tazeen Ahmad
	Alnylam Pharmaceuticals	ALNY	ALNY US	Tazeen Ahmad
	Amicus Therapeutics	FOLD	FOLD US	Tazeen Ahmad
	Annexon Biosciences	ANNX	ANNX US	Tazeen Ahmad
	Apellis Pharmaceuticals	APLS	APLS US	Tazeen Ahmad
	Argenx SE	ARGX	ARGX US	Tazeen Ahmad
	Arvinas	ARVN	ARVN US	Tazeen Ahmad
	Ascendis Pharma	ASND	ASND US	Tazeen Ahmad
	Biocryst Pharmaceuticals Inc	BCRX	BCRX US	Tazeen Ahmad
	BioNTech	BNTX	BNTX US	Tazeen Ahmad
	Denali Therapeutics	DNLI	DNLI US	Tazeen Ahmad
	Inozyme Pharma, Inc.	INZY	INZY US	Tazeen Ahmad
	Merus	MRUS	MRUS US	Tazeen Ahmad
	Neurocrine Biosciences	NBIX	NBIX US	Tazeen Ahmad
	PepGen Inc	PEPG	PEPG US	Tazeen Ahmad
	Prothena Corporation	PRTA	PRTA US	Tazeen Ahmad
	Rhythm Pharmaceuticals	RYTM	RYTM US	Tazeen Ahmad
	Sarepta Therapeutics	SRPT	SRPT US	Tazeen Ahmad
	Ultragenyx Pharmaceuticals	RARE	RARE US	Tazeen Ahmad
NEUTRAL				
	Acadia Pharmaceuticals	ACAD	ACAD US	Tazeen Ahmad
	Incyte Corporation	INCY	INCY US	Tazeen Ahmad
	SAGE Therapeutics	SAGE	SAGE US	Tazeen Ahmad
UNDERPERFORM				
	Achilles Therapeutics	ACHL	ACHL US	Tazeen Ahmad
	Fate Therapeutics	FATE	FATE US	Tazeen Ahmad
	Fulcrum Therapeutics	FULC	FULC US	Tazeen Ahmad
	Pharvaris	PHVS	PHVS US	Tazeen Ahmad
	PTC Therapeutics	PTCT	PTCT US	Tazeen Ahmad

EMEA - Pharma & Biotech Coverage Cluster

Investment rating	Company	Bof A Ticker	Bloomberg symbol	Analyst
BUY				
	AstraZeneca	AZN	AZN US	Sachin Jain, CFA
	AstraZeneca	AZNCF	AZNLN	Sachin Jain, CFA
	Genmab	GNMSF	GMAB DC	Sachin Jain, CFA
	Genmab	GMAB	GMAB US	Sachin Jain, CFA
	Grifols S.A.	GIFLF	GRF SM	Graham Parry
	Grifols S.A B	GRFS	GRFS US	Graham Parry
	Grifols S.A B	GIFOF	GRF/P SM	Graham Parry
	Merck KGaA	MKGAF	MRK GY	Sachin Jain, CFA
	Merck KGaA	MKKGY	MKKGY US	Sachin Jain, CFA
	Novartis	NVSEF	NOVN SW	Graham Parry
	Novartis	NVS	NVS US	Graham Parry
	Novo Nordisk	NONOF	NOVOB DC	Sachin Jain, CFA
	Novo Nordisk	NVO	NVO US	Sachin Jain, CFA
	Sandoz Group AG	SDZXF	SDZ SW	Graham Parry
	Sandoz Group AG	SDZNY	SDZNY US	Graham Parry
	Sanofi	SNYNF	SANFP	Graham Parry
	Sanofi	SNY	SNY US	Graham Parry
NEUTRAL				
	Bayer	BAYZF	BAYN GY	Sachin Jain, CFA
	Bayer	BAYRY	BAYRY US	Sachin Jain, CFA
	H. Lundbeck A/S	HLUKF	HLUNB DC	Sachin Jain, CFA
	Idorsia	IDRSF	IDIA SW	Sachin Jain, CFA
	lpsen	IPSEF	IPN FP	Sachin Jain, CFA
	Roche Holdings	RHHBF	ROG SW	Sachin Jain, CFA
	Roche Holdings	RHHBY	RHHBY US	Sachin Jain, CFA



EMEA - Pharma & Biotech Coverage Cluster

Investment rating	Company	Bof A Ticker	Bloomberg symbol	Analyst
UNDERPERFORM				
	GSK Plc	GSK	GSK US	Graham Parry
	GSK Plc	GLAXF	GSK LN	Graham Parry
	Orion	ORINF	ORNBV FH	Graham Parry
	UCB	UCBJF	UCB BB	Graham Parry
	UCB	UCBJY	UCBJY US	Graham Parry

US - Facilities, Hospitals and Managed Healthcare Coverage Cluster

Investment rating	Company	Bof A Ticker	Bloomberg symbol	Analyst
BUY				
	Acadia Healthcare	ACHC	ACHC US	Kevin Fischbeck, CFA
	Addus HomeCare	ADUS	ADUS US	Joanna Gajuk
	Agilon Health	AGL	AGL US	Adam Ron
	Chemed Corporation	CHE	CHE US	Joanna Gajuk
	Elevance Health Inc	ELV	ELV US	Kevin Fischbeck, CFA
	Encompass Health	EHC	EHC US	Kevin Fischbeck, CFA
	HCA	HCA	HCA US	Kevin Fischbeck, CFA
	Humana Inc	HUM	HUM US	Kevin Fischbeck, CFA
	Option Care Health	OPCH	OPCH US	Joanna Gajuk
	Oscar Health	OSCR	OSCR US	Adam Ron
	Privia Health	PRVA	PRVA US	Adam Ron
	Select Medical Corp.	SEM	SEM US	Kevin Fischbeck, CFA
	Service Corp.	SCI	SCIUS	Joanna Gajuk
	Surgery Partners, Inc	SGRY	SGRY US	Kevin Fischbeck, CFA
	Tenet Healthcare	THC	THC US	Kevin Fischbeck, CFA
	The Cigna Group	CI	CLUS	Kevin Fischbeck, CFA
	UnitedHealth Group	UNH	UNH US	Kevin Fischbeck, CFA
	Universal Health Services	UHS	UHS US	Kevin Fischbeck, CFA
	US Physical Therapy	USPH	USPH US	Joanna Gajuk
NEUTRAL				
TEO I RAL	Alignment Healthcare	ALHC	ALHC US	Adam Ron
	AMN Healthcare	AMN	AMN US	Kevin Fischbeck, CFA
	Apollo Medical	AMEH	AMEH US	Adam Ron
	Brookdale	BKD	BKD US	Joanna Gajuk
	Centene Corporation	CNC	CNC US	Kevin Fischbeck, CFA
	Molina Healthcare, Inc.	MOH	MOH US	Kevin Fischbeck, CFA
	Monina Health Icare, Inc.	MOH	MOH 03	Reviii Fiscilleck, CFA
UNDERPERFORM				
	AdaptHealth Corp.	AHCO	AHCO US	Joanna Gajuk
	Agiliti Health Inc	AGTI	AGTI US	Kevin Fischbeck, CFA
	Cross Country Healthcare	CCRN	CCRN US	Kevin Fischbeck, CFA
	DaVita Inc	DVA	DVA US	Kevin Fischbeck, CFA
	Enhabit Home Health & Hospice	EHAB	EHAB US	Joanna Gajuk
	Pediatrix Medical Group, Inc.	MD	MD US	Kevin Fischbeck, CFA

US - Medical Technology & Devices Coverage Cluster

Investment rating	Company	Bof A Ticker	Bloomberg symbol	Analyst
BUY				
	Abbott Laboratories	ABT	ABT US	Travis Steed
	Axonics	AXNX	AXNX US	Travis Steed
	Bausch & Lomb	BLCO	BLCO US	Craig Bijou
	Becton Dickinson	BDX	BDX US	Travis Steed
	Boston Scientific	BSX	BSX US	Travis Steed
	Dexcom	DXCM	DXCM US	Travis Steed
	Inari Medical	NARI	NARI US	Travis Steed
	Inspire Medical	INSP	INSP US	Travis Steed
	Insulet	PODD	PODD US	Travis Steed
	Intuitive Surgical	ISRG	ISRG US	Travis Steed



US - Medical Technology & Devices Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
	Medtronic	MDT	MDT US	Travis Steed
	Paragon 28	FNA	FNA US	Craig Bijou
	Procept BioRobotics Corporation	PRCT	PRCT US	Craig Bijou
	RxSight	RXST	RXST US	Craig Bijou
	Shockwave Medical	SWAV	SWAV US	Travis Steed
	Si-Bone	SIBN	SIBN US	Craig Bijou
	Stryker	SYK	SYK US	Travis Steed
	The Cooper Companies	COO	COO US	Craig Bijou
NEUTRAL				
	Baxter International Inc	BAX	BAX US	Travis Steed
	Conmed	CNMD	CNMD US	Travis Steed
	Edwards Lifesciences	EW	EW US	Travis Steed
	GE HealthCare	GEHC	GEHC US	Craig Bijou
	Integer Holdings Corporation	ITGR	ITGR US	Craig Bijou
	Teleflex Incorporated	TFX	TFX US	Craig Bijou
	Zimmer Biomet	ZBH	ZBH US	Travis Steed
UNDERPERFORM				
	Embecta	EMBC	EMBC US	Travis Steed
	Globus Medical	GMED	GMED US	Craig Bijou
	Integra Lifesciences	IART	IART US	Craig Bijou
	Nevro	NVRO	NVRO US	Travis Steed
	Outset Medical	OM	OM US	Travis Steed
	Silk Road Medical	SILK	SILK US	Travis Steed
	Tandem Diabetes Care	TNDM	TNDM US	Travis Steed

${\bf US-Life\,Science, Diagnostic\,Tools\,and\,Animal\,\,Health\,\,Coverage\,\,Cluster}$

Investment rating	Company	Bof A Ticker	Bloomberg symbol	Analyst
BUY				
	Avantor, Inc.	AVTR	AVTR US	Michael Ryskin
	Bruker Corporation	BRKR	BRKR US	Derik de Bruin
	Certara	CERT	CERT US	Michael Ryskin
	Charles River Laboratories	CRL	CRL US	Derik de Bruin
	Elanco Animal Health	ELAN	ELAN US	Michael Ryskin
	Exact Sciences	EXAS	EXAS US	Derik de Bruin
	Guardant Health	GH	GHUS	Derik de Bruin
	ICON plc	ICLR	ICLR US	Derik de Bruin
	IQVIA Holdings Inc	IQV	IQV US	Derik de Bruin
	LabCorp	LH	LHUS	Derik de Bruin
	Maravai	MRVI	MRVI US	Michael Ryskin
	Qiagen	QGEN	QGEN US	Derik de Bruin
	Qiagen N.V.	XQGNF	QIA GY	Derik de Bruin
	Quest Diagnostics	DGX	DGX US	Derik de Bruin
	Stevanato Group S.p.A.	STVN	STVN US	Derik de Bruin
	Thermo Fisher Scientific	TMO	TMO US	Derik de Bruin
	West Pharmaceutical Services	WST	WST US	Derik de Bruin
	Zoetis Inc.	ZTS	ZTS US	Michael Ryskin
NEUTRAL				
	10x Genomics, Inc.	TXG	TXG US	Michael Ryskin
	Agilent Technologies	A	A US	Derik de Bruin
	Danaher Corporation	DHR	DHR US	Michael Ryskin
	Evotec SE	EVO	EVO US	Michael Ryskin
	Hologic, Inc.	HOLX	HOLXUS	Derik de Bruin
	IDEXX Laboratories	IDXX	IDXX US	Michael Ryskin
	Mettler-Toledo	MTD	MTD US	Derik de Bruin
	NeoGenomics Inc.	NEO	NEO US	Derik de Bruin
	Revvity Inc	RVTY	RVTY US	Derik de Bruin
	Schrodinger, Inc.	SDGR	SDGR US	Michael Ryskin
	Waters Corp.	WAT	WAT US	Derik de Bruin
UNDERPERFORM				
	Align Technology	ALGN	ALGNUS	Michael Ryskin

US - Life Science, Diagnostic Tools and Animal Health Coverage Cluster

Investment rating	Company	Bof A Ticker	Bloomberg symbol	Analyst
	Catalent, Inc.	CTLT	CTLT US	Derik de Bruin
	Fortrea	FTRE	FTRE US	Derik de Bruin
	Ginkgo Bioworks Holdings, Inc	DNA	DNA US	Derik de Bruin
	Illumina, Inc.	ILMN	ILMN US	Michael Ryskin
	Myriad Genetics	MYGN	MYGN US	Derik de Bruin
	Phibro Animal Health	PAHC	PAHC US	Michael Ryskin

US - Healthcare Technology & Distribution Coverage Cluster

Investment rating	Company	Bof A Ticker	Bloomberg symbol	Analyst
BUY				
	Accolade	ACCD	ACCD US	Allen Lutz, CFA
	American Well Corp	AMWL	AMWL US	Allen Lutz, CFA
	Cencora Inc	COR	CORUS	Allen Lutz, CFA
	CVS Health	CVS	CVS US	Allen Lutz, CFA
	Definitive Healthcare Corp	DH	DH US	Allen Lutz, CFA
	dentalcorp	YDNTL	DNTL CN	Allen Lutz, CFA
	Envista	NVST	NVST US	Allen Lutz, CFA
	HealthEquity Inc	HQY	HQY US	Allen Lutz, CFA
	Hims & Hers	HIMS	HIMS US	Allen Lutz, CFA
	McKesson	MCK	MCK US	Allen Lutz, CFA
	Omnicell Inc.	OMCL	OMCL US	Allen Lutz, CFA
	Patterson Companies	PDCO	PDCO US	Allen Lutz, CFA
	Progyny	PGNY	PGNY US	Allen Lutz, CFA
	R1 RCM	RCM	RCM US	Allen Lutz, CFA
NEUTRAL				
	Cardinal Health	CAH	CAHUS	Allen Lutz, CFA
	Dentsply Sirona, Inc.	XRAY	XRAY US	Allen Lutz, CFA
	Doximity Inc	DOCS	DOCS US	Allen Lutz, CFA
	Teladoc Health	TDOC	TDOC US	Allen Lutz, CFA
UNDERPERFORM				
	GoodRx	GDRX	GDRX US	Allen Lutz, CFA
	Henry Schein	HSIC	HSIC US	Allen Lutz, CFA
	Owens & Minor	OMI	OMIUS	Allen Lutz, CFA
	Premier, Inc.	PINC	PINC US	Allen Lutz, CFA
	Walgreens Boots Alliance	WBA	WBA US	Allen Lutz, CFA

US - Specialty Pharma & Biotechnology Coverage Cluster

nvestment rating	Company	Bof A Ticker	Bloomberg symbol	Analyst
BUY				
	Arcellx, Inc.	ACLX	ACLX US	Jason M. Gerberry
	Arrowhead Pharmaceuticals	ARWR	ARWR US	Jason M. Gerberry
	bluebird bio	BLUE	BLUE US	Jason M. Gerberry
	Exelixis	EXEL	EXEL US	Jason M. Gerberry
	Immunovant, Inc.	IMVT	IMVT US	Jason M. Gerberry
	Intra-Cellular Therapies	ITCI	ITCI US	Jason M. Gerberry
	lonis	IONS	IONS US	Jason M. Gerberry
	Jazz Pharmaceuticals	JAZZ	JAZZ US	Jason M. Gerberry
	Lyra Therapeutics	LYRA	LYRA US	Jason M. Gerberry
	Oculis Holding AG	OCS	ocs us	Jason M. Gerberry
	Relay Therapeutics	RLAY	RLAY US	Jason M. Gerberry
	Tarsus Pharmaceuticals	TARS	TARS US	Jason M. Gerberry
	Teva Pharmaceuticals	TEVA	TEVA US	Jason M. Gerberry
	Vaxcyte Inc	PCVX	PCVX US	Jason M. Gerberry
	Xenon Pharmaceuticals	XENE	XENE US	Jason M. Gerberry
EUTRAL				
	Alkermes	ALKS	ALKS US	Jason M. Gerberry
	Amphastar Pharmaceuticals	AMPH	AMPH US	Jason M. Gerberry



US - Specialty Pharma & Biotechnology Coverage Cluster

Investment rating	Company	Bof A Ticker	Bloomberg symbol	Analyst
	Axsome Therapeutics	AXSM	AXSM US	Jason M. Gerberry
	Galapagos	GLPG	GLPG US	Jason M. Gerberry
	ProKidney Corp	PROK	PROK US	Jason M. Gerberry
	Roivant	ROIV	ROIV US	Chi M. Fong
UNDERPERFORM				
	Bausch Health Cos Inc	BHC	BHC US	Jason M. Gerberry
	FibroGen Inc.	FGEN	FGEN US	Jason M. Gerberry
	Harmony Biosciences	HRMY	HRMY US	Jason M. Gerberry
	Organon	OGN	OGN US	Jason M. Gerberry
	Viatris Inc.	VTRS	VTRS US	Jason M. Gerberry

US - Biopharmaceuticals Coverage Cluster

Investment rating	Company	Bof A Ticker	Bloomberg symbol	Analyst
BUY				
	89bio, Inc	ETNB	ETNB US	Geoff Meacham
	Acumen Pharma	ABOS	ABOS US	Geoff Meacham
	Agios Pharmaceuticals	AGIO	AGIO US	Greg Harrison, CFA
	Amylyx Pharmaceuticals	AMLX	AMLX US	Geoff Meacham
	BioMarin	BMRN	BMRN US	Geoff Meacham
	BioXcel Therapeutics	BTAI	BTAIUS	Greg Harrison, CFA
	BridgeBio Pharma	BBIO	BBIO US	Greg Harrison, CFA
	Caribou	CRBU	CRBU US	Geoff Meacham
	CRISPR Therapeutics	CRSP	CRSP US	Geoff Meacham
	Eli Lilly and Company	LLY	LLY US	Geoff Meacham
	Gilead Sciences Inc.	GILD	GILD US	Geoff Meacham
	HUTCHMED	HCM	HCM US	Alec W. Stranahan
	Immatics	IMTX	IMTX US	Alec W. Stranahan
	Insmed Incorporated	INSM	INSM US	Jason Zemansky
	Intellia Therapeutics	NTLA	NTLA US	Greg Harrison, CFA
	Janux Therapeutics	JANX	JANX US	Geoff Meacham
	Keros	KROS	KROS US	Greg Harrison, CFA
	Kiniksa Pharmaceuticals, Ltd.	KNSA	KNSA US	Geoff Meacham
	Krystal Biotech	KRYS	KRYS US	Alec W. Stranahan
	Kura Oncology	KURA	KURA US	Jason Zemansky
	Liquidia Corporation	LODA	LQDA US	Greg Harrison, CFA
	Lyell Immunopharma	LYEL	LYEL US	Geoff Meacham
	MeiraGTx	MGTX	MGTX US	Alec W. Stranahan
	Merck & Co.	MRK	MRK US	Geoff Meacham
	Mineralys Therapeutics	MLYS	MLYS US	Greg Harrison, CFA
	Neumora Therapeutics	NMRA	NMRA US	Geoff Meacham
	Rani Therapeutics	RANI	RANI US	Geoff Meacham
	Regenxbio, Inc.	RGNX	RGNX US	Alec W. Stranahan
	Revolution Medicines	RVMD	RVMD US	Alec W. Stranahan
	Rocket Pharmaceuticals, Inc.	RCKT	RCKT US	Greg Harrison, CFA
	Royalty Pharma	RPRX	RPRX US	Geoff Meacham
	Sana Biotechnology	SANA	SANA US	Geoff Meacham
	SpringWorks	SWTX	SWTX US	Alec W. Stranahan
	Syndax Pharmaceuticals	SNDX	SNDX US	Jason Zemansky
	Travere Therapeutics Inc	TVTX	TVTX US	Greg Harrison, CFA
	Turnstone Biologics	TSBX	TSBX US	Geoff Meacham
	Vertex Pharmaceuticals Inc.	VRTX	VRTX US	Geoff Meacham
	Werewolf Therapeutics	HOWL	HOWL US	Jason Zemansky
	Xencor	XNCR	XNCR US	Alec W. Stranahan
MELITRAL		-		
NEUTRAL	A L L \ /: _	ADDV	ADDIALC	Carllandaria
	AbbVie	ABBV	ABBV US	Geoff Meacham
	Alector, Inc	ALEC	ALEC US	Greg Harrison, CFA
	Amgen Inc.	AMGN	AMGN US	Geoff Meacham
	Arcus Biosciences	RCUS	RCUS US	Jason Zemansky
	Beam Therapeutics	BEAM	BEAM US	Greg Harrison, CFA
	Biogen Inc.	BIIB	BIIB US	Geoff Meacham
	Bristol-Myers Squibb	BMY	BMY US	Geoff Meacham



US - Biopharmaceuticals Coverage Cluster

Investment rating	Company	Bof A Ticker	Bloomberg symbol	Analyst
	Cytokinetics, Incorporated	CYTK	CYTK US	Jason Zemansky
	Editas Medicine	EDIT	EDIT US	Greg Harrison, CFA
	Erasca	ERAS	ERAS US	Alec W. Stranahan
	Esperion	ESPR	ESPR US	Jason Zemansky
	Exscientia	EXAI	EXAIUS	Alec W. Stranahan
	IGM Biosciences	IGMS	IGMS US	Greg Harrison, CFA
	Johnson & Johnson	JNJ	JNJ US	Geoff Meacham
	Kymera Therapeutics	KYMR	KYMR US	Geoff Meacham
	Moderna	MRNA	MRNA US	Geoff Meacham
	Pfizer	PFE	PFE US	Geoff Meacham
	Recursion Pharmaceuticals, Inc.	RXRX	RXRX US	Alec W. Stranahan
	Tyra Biosciences	TYRA	TYRA US	Greg Harrison, CFA
	Vir	VIR	VIR US	Geoff Meacham
	Y-mAbs Therapeutics, Inc	YMAB	YMAB US	Alec W. Stranahan
UNDERPERFORM				
	AlloVir, Inc.	ALVR	ALVR US	Jason Zemansky
	CureVac	CVAC	CVAC US	Geoff Meacham
	Day One Biopharmaceuticals	DAWN	DAWN US	Alec W. Stranahan
	LianBio	LIAN	LIAN US	Geoff Meacham
	Novavax	NVAX	NVAX US	Alec W. Stranahan
	Regeneron Pharmaceuticals Inc.	REGN	REGN US	Geoff Meacham
	Reneo Pharmaceuticals	RPHM	RPHM US	Jason Zemansky
	TG Therapeutics	TGTX	TGTX US	Alec W. Stranahan
	United Therapeutics Corporation	UTHR	UTHR US	Greg Harrison, CFA

Disclosures

Important Disclosures

Equity Investment Rating Distribution: Health Care Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	234	60.94%	Buy	115	49.15%
Hold	80	20.83%	Hold	36	45.00%
Sell	70	18.23%	Sell	29	41.43%

Equity Investment Rating Distribution: Global Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	1895	53.62%	Buy	1083	57.15%
Hold	832	23.54%	Hold	454	54.57%
Sell	807	22.84%	Sell	383	47.46%

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Investment rating Total return expectation (within 12-month period of date of initial rating) Ratings dispersion guidelines for coverage cluster^{R2}

Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Undernerform	N/A	> 20%

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