

## AstraZeneca

# Fx helps FY24 guide debate; Cons looks broadly OK now.

Reiterate Rating: BUY | PO: 14,500 GBp | Price: 10,758 GBp

## FY23 results 8<sup>th</sup> Feb; Sales \$45.6bn, EPS \$7.24

We forecast FY23 group sales of \$45.6bn, +3% YoY and EPS of \$7.24, +9% (c1% below cons and vs guide for reported growth of approx 6-9%, based on CER guide for low-double digit/low teens less mid-single digit Fx). Key factors in 4Q include: 1) Lynparza PROPEL milestone estimated at \$245m; 2) Calquence small miss (1.5% below), as per recent quarters, with continued solid growth in Imfinzi +54%, Farxiga +37%, Fasenra +11%, Tagrisso +7%, and Enhertu within Alliance revenue. We expect a step up in COGS (inflation, Flumist), with growth in SG&A and R&D sequentially, 4Q margin 25.6%.

## FY24 Guide debate; BofA only 3% below; Fx helped

We expect 24E guide for low double digit to low teens EPS growth, with Fx c1% negative. We think high-sd guide unlikely and would be a downside scenario. Our expected guidance is now only minimal downside to post 3Q cons (13% reported, c14% CER). We have been flagging FY24 guide risk previously, but risk has been reduced by 3 key factors: 1) Cons corrected by c1% (now \$8.26); 2) Fx moves aided by c2%; 3) Tax rate impact from Pillar 2 possibly less risk than we had modelled. Key variables remain: 2) Lower collaboration revenue, with more moderate Enhertu growth and Tezspire; 2) Lower OOI as FY23 benefitted c\$700m from nirsevimab; 3) We model tax rate increase 100bp (vs 150bp prior), with commentary that impact less than other EU majors.

## Best GARP with Best pipe. 24 guide & catalyst path debate

Buy for attractive valuation (14.5x 25E PE) for premium growth prospect (12% FY25-28 EPS CAGR), with best-in-class mid-stage pipeline. We see two near-term clearing events; 1) 24 EPS guide (which we now see as less risky, as above), and 2) Dato filing and approval. Less prominent, but also focus for some, is Gilead's imminent Trodelvy EVOKE-01 (equivalent to AZN's TL-01). While the catalyst path is quieter than FY23; 1) We believe lack of binary events attractive for investors to re-engage; 2) The catalyst path is still busy relative to EU pharma broadly, and discussed below (with most important Imfinzi and Capivasertib beats, Dato 2L lung launch, Enhertu DB06, Tagrisso LAURA). From mid-year we see a big FY25 path coming into focus: Enhertu DB09/11, Camizestrant SERENA-6, first Eplontersen data and potential Dato 1L lung read.

Estimates (Dec) (USD)	2021A	2022A	2023E	2024E	2025E
EPS (Adjusted)	5.29	6.66	7.24	8.03	9.47
EPS Change (YoY)	31.7%	25.8%	8.7%	10.9%	17.9%
Dividend / Share	2.87	2.90	3.05	3.20	3.36
ADR EPS (Adjusted - US\$)	2.65	3.33	3.62	4.01	4.73
ADR Dividend / Share (US\$)	1.44	1.45	1.52	1.60	1.68
<b>Valuation (Dec)</b>					
P/E	27.5x	19.4x	18.9x	17.1x	14.5x
Dividend Yield	2.09%	2.11%	2.22%	2.33%	2.45%
EV / EBITDA*	27.3x	16.3x	13.5x	12.2x	10.9x
Free Cash Flow Yield*	2.52%	4.13%	5.46%	5.65%	6.47%

\* For full definitions of *IQmethod*<sup>SM</sup> measures, see page 7.

>> Employed by a non-US affiliate of BofAS and is not registered/qualified as a research analyst under the FINRA rules.

Refer to "Other Important Disclosures" for information on certain BofA Securities entities that take responsibility for the information herein in particular jurisdictions.

**BofA Securities does and seeks to do business with issuers covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.**

**Refer to important disclosures on page 8 to 11. Analyst Certification on page 6. Price Objective Basis/Risk on page 6.**

12642725

Timestamp: 08 January 2024 07:03AM EST

08 January 2024

## Equity

### Key Changes

(US\$)	Previous	Current
2023E EPS	7.19	7.238
2024E EPS	7.92	8.028
2025E EPS	9.31	9.466

**Sachin Jain, CFA** >>

Research Analyst  
MLI (UK)  
+44 20 7995 9676  
[s.jain@bofa.com](mailto:s.jain@bofa.com)

**Graham Parry** >>

Research Analyst  
MLI (UK)  
+44 20 7996 0735  
[graham.parry@bofa.com](mailto:graham.parry@bofa.com)

**Charlie Haywood** >>

Research Analyst  
MLI (UK)  
[charlie.haywood@bofa.com](mailto:charlie.haywood@bofa.com)

**Joe Bowden** >>

Research Analyst  
MLI (UK)  
[jbowden@bofa.com](mailto:jbowden@bofa.com)

## Stock Data

Price (Common / ADR)	10,758 GBp / 68.38 USD
Price Objective	14,500 GBp / 88.00 USD
Date Established	5-Dec-2022 / 5-Dec-2022
Investment Opinion	A-1-7 / B-1-7
52-Week Range	9,851 GBp-12,390 GBp
Market Value (mn)	166,766 GBp
Shares Outstanding (mn)	1,550.2 / 3,100.3
Average Daily Value (mn)	181.70 USD
Free Float	100.0%
BofA Ticker / Exchange	AZCNF / LSE
BofA Ticker / Exchange	AZN / NYS
Bloomberg / Reuters	AZN LN / AZN.L
ROE (2023E)	28.5%
Net Dbt to Eqty (Dec-2022A)	58.8%
ESGMeter <sup>TM</sup>	High

**ESGMeter is not indicative of a company's future stock price performance and is not an investment recommendation or rating. ESGMeter is independent of BofA Global Research's equity investment rating, volatility risk rating, income rating, and price objective for that company.** For full details, refer to "[BofA ESGMeter Methodology](#)".

# *iQ*profile<sup>SM</sup> AstraZeneca

Key Income Statement Data (Dec)	2021A	2022A	2023E	2024E	2025E
(US\$ Millions)					
Sales	37,417	44,351	45,716	50,456	55,377
EBITDA Adjusted	8,585	14,350	17,273	19,112	21,476
Depreciation & Amortization	(3,867)	(5,326)	(4,270)	(4,606)	(4,434)
EBIT Adjusted	4,718	9,024	13,003	14,506	17,041
Net Interest & Other Income	(1,257)	(1,251)	(990)	(792)	(545)
Tax Expense / Benefit	380	792	(2,562)	(3,040)	(3,597)
Net Income (Adjusted)	7,505	10,308	11,207	12,430	14,656
Average Fully Diluted Shares Outstanding	1,427	1,560	1,560	1,560	1,560

## Key Cash Flow Statement Data

Net Income (Reported)	112	3,288	8,982	10,114	12,303
Depreciation & Amortization	3,867	5,326	4,270	4,606	4,434
Change in Working Capital	2,021	3,757	1,793	77.4	1.24
Deferred Taxation Charge	0	0	0	0	0
Other CFO	(3.00)	(2,503)	(1,159)	(278)	(236)
<b>Cash Flow from Operations</b>	<b>5,997</b>	<b>9,868</b>	<b>13,886</b>	<b>14,519</b>	<b>16,503</b>
Capital Expenditure	(1,091)	(1,091)	(2,286)	(2,523)	(2,769)
(Acquisition) / Disposal of Investments	(8,102)	226	696	(211)	(218)
Other CFI	(1,899)	(2,155)	(1,625)	(325)	0
<b>Cash Flow from Investing</b>	<b>(11,092)</b>	<b>(3,020)</b>	<b>(3,215)</b>	<b>(3,059)</b>	<b>(2,987)</b>
Share Issue / (Repurchase)	(120)	29.0	0	0	0
Cost of Dividends Paid	(3,856)	(4,364)	(4,489)	(4,714)	(4,950)
Increase (decrease) debt	10,095	(1,515)	(4,900)	(4,500)	(2,000)
Other CFF	(2,470)	(973)	0	0	0
<b>Cash Flow from Financing</b>	<b>3,649</b>	<b>(6,823)</b>	<b>(9,389)</b>	<b>(9,214)</b>	<b>(6,950)</b>
<b>Total Cash Flow (CFO + CFI + CFF)</b>	<b>(1,446)</b>	<b>25.0</b>	<b>1,282</b>	<b>2,246</b>	<b>6,565</b>
FX and other changes to cash	(102)	(119)	0	0	0
Change in Cash	(1,548)	(94.0)	1,282	2,246	6,565
Change in Net Debt	11,643	(1,421)	(6,182)	(6,746)	(8,565)
Net Debt	23,208	21,787	15,604	8,858	293

## Key Balance Sheet Data

Property, Plant & Equipment	9,183	8,507	9,953	11,347	13,166
Goodwill	19,997	19,820	19,820	19,820	19,820
Other Intangibles	42,387	39,307	37,502	34,350	30,865
Other Non-Current Assets	7,552	6,256	6,245	6,245	6,245
Trade Receivables	9,644	10,521	10,845	11,969	13,137
Cash & Equivalents	6,586	6,492	7,775	10,021	16,586
Other Current Assets	10,014	5,580	6,367	6,936	7,526
Total Assets	105,363	96,483	98,506	100,687	107,345
Long-Term Debt	28,134	22,965	18,065	13,565	11,565
Other Non-Current Liabilities	15,348	10,167	9,694	9,205	8,751
Short-Term Debt	1,660	5,314	5,314	5,314	5,314
Other Current Liabilities	20,934	20,979	23,883	25,653	27,413
Total Liabilities	66,076	59,425	56,955	53,737	53,043
Total Equity	39,287	37,058	41,551	46,950	54,302
Total Equity & Liabilities	105,363	96,483	98,506	100,687	107,345

## Business Performance\*

Return On Capital Employed	3.56%	10.2%	13.5%	14.9%	17.0%
Return On Equity	27.3%	27.0%	28.5%	28.1%	28.9%
Operating Margin	2.82%	8.47%	27.4%	27.6%	29.7%
Free Cash Flow (MM)	4,906	8,777	11,600	11,997	13,734

## Quality of Earnings\*

Cash Realization Ratio	0.80x	0.96x	1.24x	1.17x	1.13x
Asset Replacement Ratio	1.51x	1.28x	2.72x	2.23x	2.92x
Tax Rate	143%	NM	22.2%	23.1%	22.6%
Net Debt/Equity	59.1%	58.8%	37.6%	18.9%	0.54%
Interest Cover	5.02x	9.71x	12.6x	17.2x	27.2x

\* For full definitions of *iQ*method<sup>SM</sup> measures, see page 7.

## Company Sector

Pharmaceuticals

## Company Description

AstraZeneca is a UK-listed biopharmaceutical company focused on three main disease areas: Oncology, BioPharmaceuticals and Rare Disease. AstraZeneca has a robust, industry leading pipeline across areas including oncology, cardiovascular, renal & metabolism, respiratory & immunology, vaccines & immune therapies, and rare diseases

## Investment Rationale

We believe a robust pipeline progression positions AZN's pipeline as best-in-class, potentially allowing premium long-term growth. We expect multiple product launches and PIII catalysts to drive meaningful sales growth at AZN.

## Stock Data

Shares / ADR	0.50
Price to Book Value	5.2x

## Quarterly Earnings Estimates

	2022	2023
Q1	1.89A	1.92A
Q2	1.72A	2.15A
Q3	1.67A	1.73A
Q4	1.38A	1.43E

## Key Changes

(US\$)	Previous	Current
2023E EPS	3.59	3.62
2024E EPS	3.96	4.01
2025E EPS	4.66	4.73

# Preview

## Exhibit 1: AstraZeneca FY23 and 4Q23 Preview

FY23 preview

	Previous 4Q22A	BofAe 4Q23E	% Chg	Consensus 4Q23E	Previous 2022A	BofAe 2023E	% Chg	Consensus 2023E
<b>USDm</b>								
<b>Oncology</b>								
Tagrisso	1,342	1,470	10	1,459	5,444	5,850	7	5,809
Imfinzi	753	1,192	58	1,172	2,784	4,294	54	4,276
Lynparza Total	689	752	9	735	2,638	2,822	7	2,791
Calquence	588	654	11	698	2,057	2,493	21	2,533
Zoladex	211	224	6	217	927	923	-0	914
Enhertu	27	75	178	96	79	252	219	272
<b>Cardiovascular</b>								
Farxiga	1,177	1,628	38	1,572	4,381	5,986	37	5,929
Brilinta	345	335	-3	335	1,358	1,331	-2	1,333
Onglyza (saxagliptin)	52	38	-26	47	257	219	-15	229
Bydureon (exenatide)	73	45	-38	44	280	168	-40	167
Lokelma	81	105	29	107	289	405	40	408
Crestor	224	239	7	228	1,048	1,099	5	1,088
Seloken/Toprol	157	122	-22	138	862	618	-28	633
<b>Respiratory</b>								
Symbicort	620	543	-12	523	2,538	2,386	-6	2,361
Fasenra	381	418	10	424	1,396	1,551		1,557
Pulmicort	167	178	7	158	645	671	4	650
<b>Rare Disease</b>								
Soliris	844	761	-10	725	3,762	3,190	-15	3,173
Ultomiris	594	800	35	830	1,965	2,941	50	2,947
<b>Others</b>								
Nexium	299	194	-35	218	1,285	930	-28	947
<b>Total Product Sales</b>	<b>10,798</b>	<b>11,227</b>	<b>4</b>	<b>11,360</b>	<b>42,998</b>	<b>43,692</b>	<b>2</b>	<b>43,822</b>
Alliance Revenue	153	386	153	442	607	1,390	129	1,445
Enhertu	186	280	50	297	519	1,021	97	1,042
Tezspire	36	75	111	78	79	254	221	249
Collaboration Revenue	256	317	24	169	746	634	-15	479
<b>Total sales</b>	<b>11,207</b>	<b>11,930</b>	<b>6</b>	<b>11,972</b>	<b>44,351</b>	<b>45,716</b>	<b>3</b>	<b>45,747</b>
COGS (CORE) excl. externalisation costs	-2,462	-2,359	-4	-2,212	-8,588	-8,083	-6	-7,937
% Sales	22.8	21.0		19.5	19.4	17.7		17.4
Gross Profit	8,745	9,571	9	9,759	35,763	37,633	5	37,810
Distribution costs	-156	-155	-1	-148	-534	-549	3	-542
% Sales	1.4	1.3		1.2	1.2	1.2		1.2
R&D (CORE)	-2,526	-2,933	16	-2,779	-9,500	-10,286	8	-10,132
% Sales	22.5	24.6		23.2	21.4	22.5		22.1
S,G&A (CORE)	-3,583	-3,553	-1	-3,672	-12,826	-13,258	3	-13,377
% Sales	32.0	29.8		30.7	28.9	29.0		29.2
Other oper income (CORE)	130	124	-4	53	447	1,296	190	1,230
<b>CORE operating profit</b>	<b>2,610</b>	<b>3,055</b>	<b>17</b>	<b>3,214</b>	<b>13,350</b>	<b>14,837</b>	<b>11</b>	<b>14,990</b>
Margin %	23.3	25.6		26.8	30.1	32.5		32.8
Financial Income/Expense (CORE)	-245	-265	8	-245	-974	-990		-978
<b>Pretax profit (CORE)</b>	<b>2,364</b>	<b>2,790</b>	<b>18</b>	<b>2,969</b>	<b>12,371</b>	<b>13,836</b>	<b>12</b>	<b>14,011</b>
CORE tax	-226	-580	157	-639	-2,058	-2,629	28	-2,688
CORE tax rate (%)	9.6	20.8		21.5	16.6	19.0		19.2
<b>Net Income (CORE)</b>	<b>2,137</b>	<b>2,217</b>	<b>4</b>	<b>2,331</b>	<b>10,308</b>	<b>11,207</b>	<b>9</b>	<b>11,321</b>
Margin %	19.1	18.6		19.5	23.2	24.5		24.7
Minorities	-1	7	-800	1	-5	0		-2
<b>Core EPS</b>	<b>1.38</b>	<b>1.43</b>	<b>4</b>	<b>1.50</b>	<b>6.66</b>	<b>7.24</b>	<b>9</b>	<b>7.30</b>
<b>DPS</b>		<b>0.00</b>			<b>2.90</b>	<b>3.05</b>	<b>5</b>	<b>2.99</b>

Source: BofA Global Research estimates, Company data, Company consensus

BofA GLOBAL RESEARCH

# Models

## Exhibit 2: AstraZeneca Sales Model

Sales forecasts, % changes, 25-28E CAGRs

Year to December (\$m)															Change YoY % CAGR			
	2022A	Q1 23A	Q2 23A	Q3 23A	Q4 23E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2022A	2023E	2024E	25-28E
Tagrisso (Multiple EGFRmut cancers)	5,444	1,424	1,491	1,465	1,470	5,850	6,257	6,581	6,892	7,217	7,434	7,657	7,810	7,966	9	7	7	4
Imfinzi Total	2,784	900	1,076	1,126	1,192	4,294	5,716	6,422	7,193	7,849	8,300	8,613	8,771	7,924	15	54	33	9
Lynparza Total	2,638	651	717	702	752	2,822	3,120	3,367	3,603	3,807	3,527	2,822	2,379	2,055	12	7	11	2
Calquence	2,057	532	653	654	654	2,493	2,842	3,118	3,274	3,437	3,541	3,647	3,720	3,794	66	21	14	4
Zoladex (Prostate cancer)	927	227	233	239	224	923	870	850	848	830	813	799	785	773	-2	-0	-6	-1
Faslodex (Breast cancer)	334	75	78	64	77	294	289	290	237	227	221	217	215	214	-23	-12	-2	-9
Farxiga	4,381	1,299	1,505	1,554	1,628	5,986	6,755	7,287	5,893	4,415	3,565	3,431	3,303	3,182	46	37	13	-21
Farxiga + LCM	4,381	1,299	1,505	1,554	1,628	5,986	6,755	7,422	6,242	5,297	4,600	4,571	4,533	4,484	46	37	13	-15
Brilinta (ACS)	1,358	334	331	331	335	1,331	1,304	783	665	599	539	485	436	393	-8	-2	-2	-12
Lokelma	289	98	100	102	105	405	471	526	586	653	706	741	763	786	65	40	17	10
Roxadustat (Eprex) (Anemia)	197	61	73	74	82	290	400	500	550	575	600	600	600	600	13	47	38	6
Andexxa (anticoag reversal)	150	44	45	40	59	188	225	270	257	244	231	220	209	198	nm	25	20	-5
Crestor (Hyperlipidemia)	1,048	305	280	275	239	1,099	1,106	1,139	1,176	1,216	1,261	1,309	1,338	1,368	-4	5	1	3
Seloken/Toprol (Hypertension)	862	179	164	153	122	618	620	637	656	675	694	715	736	757	-9	-28	0	3
Onglyza (saxagliptin)	257	63	65	53	38	219	194	183	174	167	161	156	153	150	-29	-15	-12	-4
Bydureon (exenatide)	280	45	43	35	45	168	143	121	103	88	75	63	54	46	-27	-40	-15	-15
Symbicort (Asthma)	2,538	688	600	555	543	2,386	2,182	2,059	1,988	1,938	1,906	1,890	1,864	1,848	-7	-6	-9	-3
Fasenra (Asthma)	1,396	338	406	389	418	1,551	1,663	1,688	1,743	1,807	1,879	1,772	1,570	1,417	11	11	7	4
Pulmicort (Asthma)	645	221	124	148	178	671	673	688	705	724	746	769	782	795	-33	4	0	3
Duaklir/Bevespi/Breztri (LAMA/LABA)	58	15	15	13	18	61	64	67	70	74	78	82	86	90	7	5	5	5
Daliresp (COPD)	189	13	17	11	16	57	54	51	49	46	44	42	40	38	-17	-70	-5	-5
Saphnelo (SLE)	116	47	68	76	89	280	400	500	600	700	775	825	875	900	nm	141	43	16
Synagis (RSV infections)	578	198	87	98	-132	251	180	144	137	130	123	117	111	106	41	-57	-28	-5
Soliris (PNH, aHUS)	3,762	834	814	781	761	3,190	2,962	2,666	2,346	1,924	1,346	1,145	973	827	101	-15	-7	-20
Ultomiris (PNH, aHUS)	1,965	651	713	777	800	2,941	3,802	4,258	4,471	4,561	4,652	4,745	4,840	4,937	186	50	29	3
Nexium (Ulcers)	1,285	244	248	244	194	930	905	903	907	916	927	942	959	977	-3	-28	-3	0.9
Orpathys (savolitinib)	33	8	13	12	17	50	100	275	275	275	275	275	275	275	106	52	100	0
Enhertu HER 2+ve late lines; HER 2+ early/Her 2 low	79	37	67	73	75	252	370	674	1,129	1,598	1,858	1,989	2,044	2,098	365	219	47	40
Danicipan (factor D) PNH	0	0	0	0	0	0	60	200	400	600	680	720	760	800	nm	nm	nm	50
Capivasertib AKT BC Breast cancer	0	0	0	0	0	0	139	243	555	1,110	1,734	2,220	2,567	2,775	nm	nm	nm	93
Airsupra (PT027) Asthma	0	0	0	0	50	50	300	600	900	1,200	1,300	1,500	1,600	1,650	nm	nm	500	29
Rilvegostomig (PD1/TIGIT) Lung cancer	0	0	0	0	0	0	0	0	60	135	240	360	420	450	nm	nm	nm	nm
Capivasertib AKT PC Prostate cancer	0	0	0	0	0	0	0	0	139	370	695	880	996	1,065	nm	nm	nm	nm
Tozorakimab (IL33) COPD	0	0	0	0	0	0	0	120	240	400	560	680	760	800	nm	nm	nm	67
Camizestrant Breast cancer	0	0	0	0	0	0	0	106	528	1,319	2,375	2,902	3,166	3,430	nm	nm	nm	182
Baxdrostat rHTN & uHTN	0	0	0	0	0	0	0	0	100	300	450	650	850	1,000	nm	nm	nm	nm
Tezspire Anti-tslp, asthma	4	11	19	21	26	77	135	225	270	360	450	540	630	720	nm	1,828	75	26
Datopotamab deruxtecan (DS-1062) Multi-tumour	0	0	0	0	0	0	40	217	422	707	1,005	1,232	1,383	1,490	nm	nm	nm	67
Eplontersen ATTR PN and ATTR CM	0	0	0	0	0	0	130	195	780	975	1,040	1,089	1,138	1,170	nm	nm	nm	75
Imfinzi liver Liver cancer	0	0	0	0	0	0	180	360	660	900	1,020	1,110	1,200	1,020	nm	nm	nm	42
Volrustomig (MEDI-5752, PD-1/CTLA4) Solid tumours	0	0	0	0	0	0	0	0	140	360	600	880	1,080	1,200	nm	nm	nm	nm
Farxiga LCM LCM	0	0	0	0	0	0	0	135	350	882	1,035	1,140	1,230	1,302	nm	nm	nm	97
Vaxzevria (COVID-19 Vaccine)	1,798	28	0	0	22	50	0	0	0	0	0	0	0	0	-55	-97	-100	nm
Evusheld (COVID LAAB)	2,185	127	-1	0	124	250	0	0	0	0	0	0	0	0	nm	-89	-100	nm
<b>Total Pharma Sales</b>	<b>42,998</b>	<b>10,566</b>	<b>10,882</b>	<b>11,017</b>	<b>11,227</b>	<b>43,692</b>	<b>48,296</b>	<b>52,156</b>	<b>55,953</b>	<b>60,508</b>	<b>63,924</b>	<b>66,539</b>	<b>68,095</b>	<b>68,244</b>	<b>18</b>	<b>2</b>	<b>11</b>	<b>7</b>

Source: BoFA Global Research estimates, Company data

BoFA GLOBAL RESEARCH

**Exhibit 3: AstraZeneca Profit & Loss Model**

P/L forecasts, % changes, 25-28E CAGRs

Year to December (\$m)	2022A	Q1 23A	Q2 23A	Q3 23A	Q4 23E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	Change YoY %			CAGR
															2022A	2023E	2024E	25-28E
Product sales	42,998	10,566	10,882	11,017	11,227	43,692	48,296	52,156	55,953	60,508	63,924	66,539	68,095	68,244	18	2	11	7.0
Alliance Revenue	607	286	341	377	386	1,390	1,716	2,755	3,925	5,164	6,252	6,940	7,331	7,646	nm	129	23	31.4
Collaboration Revenue	746	27	193	97	317	634	444	466	489	514	540	567	595	625	-15	-15	-30	5.0
<b>Total sales</b>	<b>44,351</b>	<b>10,879</b>	<b>11,416</b>	<b>11,491</b>	<b>11,930</b>	<b>45,716</b>	<b>50,456</b>	<b>55,377</b>	<b>60,367</b>	<b>66,185</b>	<b>70,716</b>	<b>74,045</b>	<b>76,021</b>	<b>76,514</b>	19	3	10	8.5
COGS (CORE)	-8,588	-1,763	-1,914	-2,047	-2,359	-8,083	-8,935	-9,649	-10,351	-11,194	-11,826	-12,310	-12,597	-12,625	-9	-6	11	7
% of sales	19.4	16.2	16.8	17.8	19.8	17.7	17.7	17.4	17.1	16.9	16.7	16.6	16.6	16.5				
<b>Gross profit</b>	<b>35,763</b>	<b>9,116</b>	<b>9,502</b>	<b>9,444</b>	<b>9,571</b>	<b>37,633</b>	<b>41,521</b>	<b>45,728</b>	<b>50,016</b>	<b>54,992</b>	<b>58,890</b>	<b>61,736</b>	<b>63,423</b>	<b>63,889</b>	28	5	10	10
Margin %	80.6	83.8	83.2	82.2	80.2	82.3	82.3	82.6	82.9	83.1	83.3	83.4	83.4	83.5				
Distribution costs	-534	-134	-131	-129	-155	-549	-605	-665	-724	-794	-849	-889	-912	-918	20	3	10	8
S,G&A (CORE)	-12,826	-3,054	-3,296	-3,355	-3,553	-13,258	-13,875	-14,398	-14,790	-15,885	-16,972	-17,771	-18,245	-18,363	16	3	5	6
% of sales	28.9	28.1	28.9	29.2	29.8	29.0	27.5	26.0	24.5	24.0	24.0	24.0	24.0	24.0				
R&D (CORE)	-9,500	-2,300	-2,568	-2,485	-2,933	-10,286	-11,100	-12,183	-13,281	-14,561	-15,557	-16,290	-16,725	-16,833	19	8	8	8
% of sales	21.4	21.1	22.5	21.6	24.6	22.5	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0				
Other oper income (CORE)	447	318	784	70	124	1,296	389	382	375	368	362	355	349	342	-70	190	-70	-2
<b>Operating profit- Total sales (CORE)</b>	<b>13,350</b>	<b>3,946</b>	<b>4,291</b>	<b>3,545</b>	<b>3,055</b>	<b>14,837</b>	<b>16,329</b>	<b>18,865</b>	<b>21,596</b>	<b>24,120</b>	<b>25,874</b>	<b>27,141</b>	<b>27,890</b>	<b>28,117</b>	34	11	10	11
Margin %	30.1	36.3	37.6	30.9	25.6	32.5	32.4	34.1	35.8	36.4	36.6	36.7	36.7	36.7				
Financial Income/Expense (CORE)	-974	-240	-262	-223	-265	-990	-792	-545	-424	-307	-186	-44	94	224	13	2	-20	-30
<b>Pretax profit (CORE)</b>	<b>12,371</b>	<b>3,706</b>	<b>4,029</b>	<b>3,311</b>	<b>2,790</b>	<b>13,836</b>	<b>15,537</b>	<b>18,319</b>	<b>21,172</b>	<b>23,813</b>	<b>25,688</b>	<b>27,098</b>	<b>27,984</b>	<b>28,341</b>	37	12	12	12
CORE tax rate (%)	16.6	19.7	17.2	18.8	20.8	19.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.5	0	14	5	0
Minorities	-5	-1	-2	-4	7	0	0	0	0	0	0	0	0	0	67	-100	nm	nm
<b>Net Income (CORE)</b>	<b>10,308</b>	<b>2,974</b>	<b>3,333</b>	<b>2,683</b>	<b>2,217</b>	<b>11,207</b>	<b>12,430</b>	<b>14,656</b>	<b>16,937</b>	<b>19,050</b>	<b>20,550</b>	<b>21,678</b>	<b>22,387</b>	<b>22,531</b>	37	9	11	12
Margin %	23.2	27.3	29.2	23.3	18.6	24.5	24.6	26.5	28.1	28.8	29.1	29.3	29.4	29.4				
D&A	5,326	967	967	967	1,370	4,270	4,606	4,434	4,560	4,698	4,846	5,004	5,167	5,333	38	-20	8	3
EBIT	3,752	2,549	2,456	1,943	5,586	12,534	13,945	16,445	19,772	22,297	24,050	25,318	26,067	26,293	278	234	11	14
Margin %	8.5	23.4	21.5	16.9	46.8	27.4	27.6	29.7	32.8	33.7	34.0	34.2	34.3	34.4				
EBITDA	9,078	3,516	3,423	2,910	6,956	16,804	18,552	20,879	24,332	26,994	28,897	30,322	31,234	31,626	87	85	10	11
Margin %	20.5	32.3	30.0	25.3	58.3	36.8	36.8	37.7	40.3	40.8	40.9	41.0	41.1	41.3				
Shares - ave / basic	1,548	1,549	1,550	1,549	1,548	1,548	1,548	1,548	1,548	1,548	1,548	1,548	1,548	1,548	9	0	0	0
<b>Per share data (USD)</b>																		
<b>CORE EPS (ex-amort &amp; restruct)</b>	<b>6.66</b>	<b>1.92</b>	<b>2.15</b>	<b>1.73</b>	<b>1.43</b>	<b>7.24</b>	<b>8.03</b>	<b>9.47</b>	<b>10.94</b>	<b>12.30</b>	<b>13.27</b>	<b>14.00</b>	<b>14.46</b>	<b>14.55</b>	<b>26</b>	<b>9</b>	<b>11</b>	<b>11.9</b>
GAAP EPS (basic)	2.12	1.16	1.17	0.89	2.57	5.80	6.53	7.95	9.81	11.17	12.14	12.87	13.33	13.42	2,589	173	13	15
DPS (\$)	2.90					3.05	3.20	3.36	3.52	3.70	3.81	3.93	4.04	4.17	1	5	5	4
<b>Per share data (GBP)</b>																		
<b>CORE EPS (ex-amort &amp; restruct)</b>	<b>5.39</b>					<b>5.82</b>	<b>6.30</b>	<b>7.43</b>	<b>8.58</b>	<b>9.65</b>	<b>10.41</b>	<b>10.98</b>	<b>11.34</b>	<b>11.42</b>	<b>40</b>	<b>8</b>	<b>8</b>	<b>11.9</b>
GAAP EPS (basic)	2.12	1.16	1.17	0.89	2.57	5.80	6.53	7.95	9.81	11.17	12.14	12.87	13.33	13.42	2,589	173	13	15
DPS (\$)	2.90					3.05	3.20	3.36	3.52	3.70	3.81	3.93	4.04	4.17	1	5	5	4

Source: BofA Global Research estimates, Company data

BofA GLOBAL RESEARCH

## Price objective basis & risk

### 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.

## Analyst Certification

I, Sachin Jain, 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.

### EMEA - Pharma & Biotech Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
<b>BUY</b>				
	AstraZeneca	AZN	AZN US	Sachin Jain, CFA
	AstraZeneca	AZNCF	AZN LN	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	GIFO	GRF/P SM	Graham Parry
	Merck KGaA	MKGAF	MRK GY	Sachin Jain, CFA
	Merck KGaA	MKKG	MKKG 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	SAN FP	Graham Parry
	Sanofi	SNY	SNY US	Graham Parry
<b>NEUTRAL</b>				
	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
	Ipser	IPSEF	IPN FP	Sachin Jain, CFA
	Roche Holdings	RHHBF	ROG SW	Sachin Jain, CFA
	Roche Holdings	RHHBY	RHHBY US	Sachin Jain, CFA
<b>UNDERPERFORM</b>				
	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

## EMEA - Pharma &amp; Biotech Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
	UCB	UCBJY	UCBJY US	Graham Parry

**iQmethod<sup>SM</sup> Measures Definitions****Business Performance**

Return On Capital Employed

Return On Equity  
Operating Margin  
Earnings Growth  
Free Cash Flow

**Quality of Earnings**

Cash Realization Ratio  
Asset Replacement Ratio  
Tax Rate  
Net Debt-To-Equity Ratio  
Interest Cover

**Valuation Toolkit**

Price / Earnings Ratio  
Price / Book Value  
Dividend Yield  
Free Cash Flow Yield  
Enterprise Value / Sales

EV / EBITDA

**Numerator**

NOPAT = (EBIT + Interest Income) × (1 – Tax Rate) + Goodwill Amortization

Net Income  
Operating Profit  
Expected 5 Year CAGR From Latest Actual  
Cash Flow From Operations – Total Capex

**Numerator**

Cash Flow From Operations  
Capex  
Tax Charge  
Net Debt = Total Debt – Cash & Equivalents  
EBIT

**Numerator**

Current Share Price  
Current Share Price  
Annualised Declared Cash Dividend  
Cash Flow From Operations – Total Capex  
EV = Current Share Price × Current Shares + Minority Equity + Net Debt +  
Other LT Liabilities  
Enterprise Value

**Denominator**

Total Assets – Current Liabilities + ST Debt + Accumulated Goodwill  
Amortization  
Shareholders' Equity  
Sales  
N/A  
N/A

**Denominator**

Net Income  
Depreciation  
Pre-Tax Income  
Total Equity  
Interest Expense

**Denominator**

Diluted Earnings Per Share (Basis As Specified)  
Shareholders' Equity / Current Basic Shares  
Current Share Price  
Market Cap = Current Share Price × Current Basic Shares  
Sales

Basic EBIT + Depreciation + Amortization

*iQmethod<sup>SM</sup>* is the set of BofA Global Research standard measures that serve to maintain global consistency under three broad headings: Business Performance, Quality of Earnings, and valuations. The key features of *iQmethod* are: A consistently structured, detailed, and transparent methodology. Guidelines to maximize the effectiveness of the comparative valuation process, and to identify some common pitfalls.

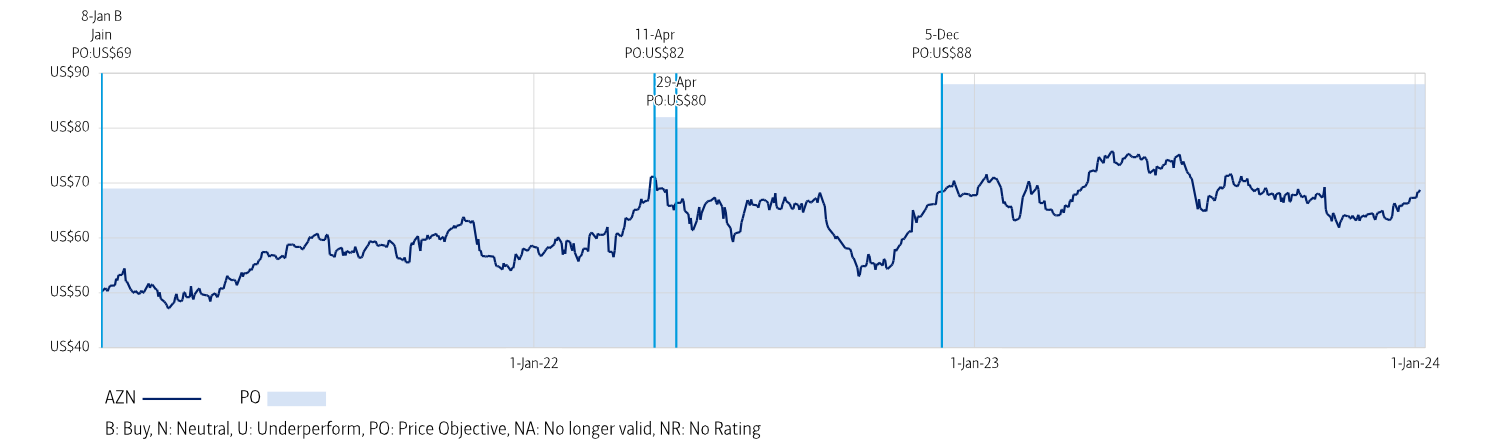
*iQdatabase<sup>®</sup>* is our real-time global research database that is sourced directly from our equity analysts' earnings models and includes forecasted as well as historical data for income statements, balance sheets, and cash flow statements for companies covered by BofA Global Research.

*iQprofile<sup>SM</sup>*, *iQmethod<sup>SM</sup>* are service marks of Bank of America Corporation. *iQdatabase<sup>®</sup>* is a registered service mark of Bank of America Corporation.

# Disclosures

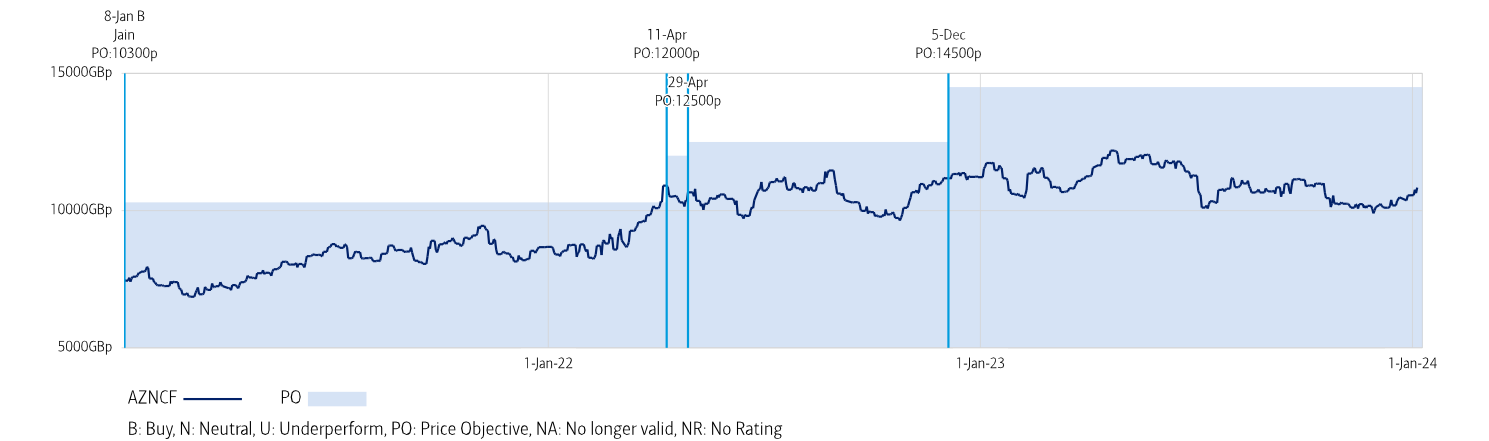
## Important Disclosures

### AstraZeneca (AZN) Price Chart



The Investment Opinion System is contained at the end of the report under the heading "Fundamental Equity Opinion Key". Dark grey shading indicates the security is restricted with the opinion suspended. Medium grey shading indicates the security is under review with the opinion withdrawn. Light grey shading indicates the security is not covered. Chart is current as of a date no more than one trading day prior to the date of the report.

### AstraZeneca (AZNCF) Price Chart



The Investment Opinion System is contained at the end of the report under the heading "Fundamental Equity Opinion Key". Dark grey shading indicates the security is restricted with the opinion suspended. Medium grey shading indicates the security is under review with the opinion withdrawn. Light grey shading indicates the security is not covered. Chart is current as of a date no more than one trading day prior to the date of the report.

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

Coverage Universe	Count	Percent	Inv. Banking Relationships <sup>R1</sup>	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 <sup>R1</sup>	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%

<sup>R1</sup> Issuers that were investment banking clients of BofA Securities or one of its affiliates within the past 12 months. For purposes of this Investment Rating Distribution, the coverage universe includes only stocks. A stock rated Neutral is included as a Hold, and a stock rated Underperform is included as a Sell.





**FUNDAMENTAL EQUITY OPINION KEY:** Opinions include a Volatility Risk Rating, an Investment Rating and an Income Rating. **VOLATILITY RISK RATINGS**, indicators of potential price fluctuation, are: A - Low, B - Medium and C - High. **INVESTMENT RATINGS** reflect the analyst's assessment of both a stock's absolute total return potential as well as its attractiveness for investment relative to other stocks within its Coverage Cluster (defined below). Our investment ratings are: 1 - Buy stocks are expected to have a total return of at least 10% and are the most attractive stocks in the coverage cluster; 2 - Neutral stocks are expected to remain flat or increase in value and are less attractive than Buy rated stocks and 3 - Underperform stocks are the least attractive stocks in a coverage cluster. An investment rating of 6 (No Rating) indicates that a stock is no longer trading on the basis of fundamentals. Analysts assign investment ratings considering, among other things, the 0-12 month total return expectation for a stock and the firm's guidelines for ratings dispersions (shown in the table below). The current price objective for a stock should be referenced to better understand the total return expectation at any given time. The price objective reflects the analyst's view of the potential price appreciation (depreciation).

Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster <sup>R2</sup>
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

<sup>R2</sup> Ratings dispersions may vary from time to time where BofA Global Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

**INCOME RATINGS**, indicators of potential cash dividends, are: 7 - same/higher (dividend considered to be secure), 8 - same/lower (dividend not considered to be secure) and 9 - pays no cash dividend. *Coverage Cluster* is comprised of stocks covered by a single analyst or two or more analysts sharing a common industry, sector, region or other classification(s). A stock's coverage cluster is included in the most recent BofA Global Research report referencing the stock.

Price Charts for the securities referenced in this research report are available on the [Price Charts website](#), or call 1-800-MERRILL to have them mailed.

BofAS or one of its affiliates acts as a market maker for the equity securities recommended in the report: AstraZeneca.

BofAS or an affiliate was a manager of a public offering of securities of this issuer within the last 12 months: AstraZeneca.

The issuer is or was, within the last 12 months, an investment banking client of BofAS and/or one or more of its affiliates: AstraZeneca.

BofAS or an affiliate has received compensation from the issuer for non-investment banking services or products within the past 12 months: AstraZeneca.

The issuer is or was, within the last 12 months, a non-securities business client of BofAS and/or one or more of its affiliates: AstraZeneca.

BofAS or an affiliate has received compensation for investment banking services from this issuer within the past 12 months: AstraZeneca.

BofAS or an affiliate expects to receive or intends to seek compensation for investment banking services from this issuer or an affiliate of the issuer within the next three months: AstraZeneca.

BofAS together with its affiliates beneficially owns one percent or more of the common stock of this issuer. If this report was issued on or after the 9th day of the month, it reflects the ownership position on the last day of the previous month. Reports issued before the 9th day of a month reflect the ownership position at the end of the second month preceding the date of the report: AstraZeneca.

BofAS or one of its affiliates is willing to sell to, or buy from, clients the common equity of the issuer on a principal basis: AstraZeneca.

The issuer is or was, within the last 12 months, a securities business client (non-investment banking) of BofAS and/or one or more of its affiliates: AstraZeneca.

BofA Global Research personnel (including the analyst(s) responsible for this report) receive compensation based upon, among other factors, the overall profitability of Bank of America Corporation, including profits derived from investment banking. The analyst(s) responsible for this report may also receive compensation based upon, among other factors, the overall profitability of the Bank's sales and trading businesses relating to the class of securities or financial instruments for which such analyst is responsible.

## Other Important Disclosures

From time to time research analysts conduct site visits of covered issuers. BofA Global Research policies prohibit research analysts from accepting payment or reimbursement for travel expenses from the issuer for such visits.

Prices are indicative and for information purposes only. Except as otherwise stated in the report, for any recommendation in relation to an equity security, the price referenced is the publicly traded price of the security as of close of business on the day prior to the date of the report or, if the report is published during intraday trading, the price referenced is indicative of the traded price as of the date and time of the report and in relation to a debt security (including equity preferred and CDS), prices are indicative as of the date and time of the report and are from various sources including BofA Securities trading desks.

The date and time of completion of the production of any recommendation in this report shall be the date and time of dissemination of this report as recorded in the report timestamp.

Recipients who are not institutional investors or market professionals should seek the advice of their independent financial advisor before considering information in this report in connection with any investment decision, or for a necessary explanation of its contents.

Officers of BofAS or one or more of its affiliates (other than research analysts) may have a financial interest in securities of the issuer(s) or in related investments.

Refer to [BofA Global Research policies relating to conflicts of interest](#).

**"BofA Securities" includes BofA Securities, Inc. ("BofAS") and its affiliates. Investors should contact their BofA Securities representative or Merrill Global Wealth Management financial advisor if they have questions concerning this report or concerning the appropriateness of any investment idea described herein for such investor. "BofA Securities" is a global brand for BofA Global Research.**

### Information relating to Non-US affiliates of BofA Securities and Distribution of Affiliate Research Reports:

BofAS and/or Merrill Lynch, Pierce, Fenner & Smith Incorporated ("MLPF&S") may in the future distribute, information of the following non-US affiliates in the US (short name: legal name, regulator): Merrill Lynch (South Africa): Merrill Lynch South Africa (Pty) Ltd., regulated by The Financial Service Board; MLI (UK): Merrill Lynch International, regulated by the Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA); BofASE (France): BofA Securities Europe SA is authorized by the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers (AMF). BofA Securities Europe SA ("BofASE") with registered address at 51, rue La Boétie, 75008 Paris is registered under no 842 602 690 RCS Paris. In accordance with the provisions of French Code Monétaire et Financier (Monetary and Financial Code), BofASE is an établissement de crédit et d'investissement (credit and investment institution) that is authorised and supervised by the European Central Bank and the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers. BofASE's share capital can be found at [www.bofamli.com/BofASEdisclosure](http://www.bofamli.com/BofASEdisclosure); BofA Europe (Milan): Bank of America Europe Designated Activity Company, Milan Branch, regulated by the Bank of Italy, the European Central Bank (ECB) and the Central Bank of Ireland (CBI); BofA Europe (Frankfurt): Bank of America Europe Designated Activity Company, Frankfurt Branch regulated by BaFin, the ECB and the CBI; BofA Europe (Madrid): Bank of America Europe Designated Activity Company, Sucursal en España, regulated by the Bank of Spain, the ECB and the CBI; Merrill Lynch (Australia): Merrill Lynch Equities (Australia) Limited, regulated by the Australian Securities and Investments Commission; Merrill Lynch (Hong Kong): Merrill Lynch (Asia Pacific) Limited, regulated by the Hong Kong Securities and Futures Commission (HKSCF); Merrill Lynch (Singapore): Merrill Lynch (Singapore) Pte Ltd, regulated by the Monetary Authority of Singapore (MAS); Merrill Lynch (Canada): Merrill Lynch Canada Inc, regulated by the Canadian Investment Regulatory Organization; Merrill Lynch (Mexico): Merrill Lynch Mexico, SA de CV, Casa de Bolsa, regulated by the Comisión Nacional Bancaria y de Valores; Merrill Lynch (Argentina): Merrill Lynch Argentina SA, regulated by Comisión Nacional de Valores; BofAS Japan: BofA Securities Japan Co., Ltd., regulated by the Financial Services Agency; Merrill Lynch (Seoul): Merrill Lynch International, LLC Seoul Branch, regulated by the Financial Supervisory Service; Merrill Lynch (Taiwan): Merrill Lynch Securities (Taiwan) Ltd., regulated by the Securities and Futures Bureau; BofAS India: BofA Securities India Limited, regulated by the Securities and Exchange Board of India (SEBI); Merrill Lynch (Israel): Merrill Lynch Israel Limited, regulated by Israel Securities Authority; Merrill Lynch (DIFC): Merrill Lynch International (DIFC Branch), regulated by the Dubai Financial Services Authority (DFSA); Merrill Lynch (Brazil): Merrill Lynch S.A. Corretora de Títulos e Valores Mobiliários, regulated by Comissão de Valores Mobiliários; Merrill Lynch KSA Company: Merrill Lynch Kingdom of Saudi Arabia Company, regulated by the Capital Market Authority.

This information: has been approved for publication and is distributed in the United Kingdom (UK) to professional clients and eligible counterparties (as each is defined in the rules of the FCA

and the PRA) by MLI (UK), which is authorized by the PRA and regulated by the FCA and the PRA - details about the extent of our regulation by the FCA and PRA are available from us on request; has been approved for publication and is distributed in the European Economic Area (EEA) by BofA SE (France), which is authorized by the ACPR and regulated by the ACPR and the AMF; has been considered and distributed in Japan by BofA Japan, a registered securities dealer under the Financial Instruments and Exchange Act in Japan, or its permitted affiliates; is issued and distributed in Hong Kong by Merrill Lynch (Hong Kong) which is regulated by HKSCF; is issued and distributed in Taiwan by Merrill Lynch (Taiwan); is issued and distributed in India by BofA India; and is issued and distributed in Singapore to institutional investors and/or accredited investors (each as defined under the Financial Advisers Regulations) by Merrill Lynch (Singapore) (Company Registration No 198602883D). Merrill Lynch (Singapore) is regulated by MAS. Merrill Lynch Equities (Australia) Limited (ABN 65 006 276 795), AFS License 235132 (MLEA) distributes this information in Australia only to 'Wholesale' clients as defined by s.761G of the Corporations Act 2001. With the exception of Bank of America N.A., Australia Branch, neither MLEA nor any of its affiliates involved in preparing this information is an Authorised Deposit-Taking Institution under the Banking Act 1959 nor regulated by the Australian Prudential Regulation Authority. No approval is required for publication or distribution of this information in Brazil and its local distribution is by Merrill Lynch (Brazil) in accordance with applicable regulations. Merrill Lynch (DIFC) is authorized and regulated by the DFSA. Information prepared and issued by Merrill Lynch (DIFC) is done so in accordance with the requirements of the DFSA conduct of business rules. BofA Europe (Frankfurt) distributes this information in Germany and is regulated by BaFin, the ECB and the CBI. BofA Securities entities, including BofA Europe and BofA SE (France), may outsource/delegate the marketing and/or provision of certain research services or aspects of research services to other branches or members of the BofA Securities group. You may be contacted by a different BofA Securities entity acting for and on behalf of your service provider where permitted by applicable law. This does not change your service provider. Please refer to the [Electronic Communications Disclaimers](#) for further information.

This information has been prepared and issued by BofA and/or one or more of its non-US affiliates. The author(s) of this information may not be licensed to carry on regulated activities in your jurisdiction and, if not licensed, do not hold themselves out as being able to do so. BofA and/or MLPF&S is the distributor of this information in the US and accepts full responsibility for information distributed to BofA and/or MLPF&S clients in the US by its non-US affiliates. Any US person receiving this information and wishing to effect any transaction in any security discussed herein should do so through BofA and/or MLPF&S and not such foreign affiliates. Hong Kong recipients of this information should contact Merrill Lynch (Asia Pacific) Limited in respect of any matters relating to dealing in securities or provision of specific advice on securities or any other matters arising from, or in connection with, this information. Singapore recipients of this information should contact Merrill Lynch (Singapore) Pte Ltd in respect of any matters arising from, or in connection with, this information. For clients that are not accredited investors, expert investors or institutional investors Merrill Lynch (Singapore) Pte Ltd accepts full responsibility for the contents of this information distributed to such clients in Singapore.

#### General Investment Related Disclosures:

Taiwan Readers: Neither the information nor any opinion expressed herein constitutes an offer or a solicitation of an offer to transact in any securities or other financial instrument. No part of this report may be used or reproduced or quoted in any manner whatsoever in Taiwan by the press or any other person without the express written consent of BofA Securities.

This document provides general information only, and has been prepared for, and is intended for general distribution to, BofA Securities clients. Neither the information nor any opinion expressed constitutes an offer or an invitation to make an offer, to buy or sell any securities or other financial instrument or any derivative related to such securities or instruments (e.g., options, futures, warrants, and contracts for differences). This document is not intended to provide personal investment advice and it does not take into account the specific investment objectives, financial situation and the particular needs of, and is not directed to, any specific person(s). This document and its content do not constitute, and should not be considered to constitute, investment advice for purposes of ERISA, the US tax code, the Investment Advisers Act or otherwise. Investors should seek financial advice regarding the appropriateness of investing in financial instruments and implementing investment strategies discussed or recommended in this document and should understand that statements regarding future prospects may not be realized. Any decision to purchase or subscribe for securities in any offering must be based solely on existing public information on such security or the information in the prospectus or other offering document issued in connection with such offering, and not on this document.

Securities and other financial instruments referred to herein, or recommended, offered or sold by BofA Securities, are not insured by the Federal Deposit Insurance Corporation and are not deposits or other obligations of any insured depository institution (including, Bank of America, N.A.). Investments in general and, derivatives, in particular, involve numerous risks, including, among others, market risk, counterparty default risk and liquidity risk. No security, financial instrument or derivative is suitable for all investors. Digital assets are extremely speculative, volatile and are largely unregulated. In some cases, securities and other financial instruments may be difficult to value or sell and reliable information about the value or risks related to the security or financial instrument may be difficult to obtain. Investors should note that income from such securities and other financial instruments, if any, may fluctuate and that price or value of such securities and instruments may rise or fall and, in some cases, investors may lose their entire principal investment. Past performance is not necessarily a guide to future performance. Levels and basis for taxation may change.

This report may contain a short-term trading idea or recommendation, which highlights a specific near-term catalyst or event impacting the issuer or the market that is anticipated to have a short-term price impact on the equity securities of the issuer. Short-term trading ideas and recommendations are different from and do not affect a stock's fundamental equity rating, which reflects both a longer term total return expectation and attractiveness for investment relative to other stocks within its Coverage Cluster. Short-term trading ideas and recommendations may be more or less positive than a stock's fundamental equity rating.

BofA Securities is aware that the implementation of the ideas expressed in this report may depend upon an investor's ability to "short" securities or other financial instruments and that such action may be limited by regulations prohibiting or restricting "shortselling" in many jurisdictions. Investors are urged to seek advice regarding the applicability of such regulations prior to executing any short idea contained in this report.

Foreign currency rates of exchange may adversely affect the value, price or income of any security or financial instrument mentioned herein. Investors in such securities and instruments, including ADRs, effectively assume currency risk.

BofA or one of its affiliates is a regular issuer of traded financial instruments linked to securities that may have been recommended in this report. BofA or one of its affiliates may, at any time, hold a trading position (long or short) in the securities and financial instruments discussed in this report.

BofA Securities, through business units other than BofA Global Research, may have issued and may in the future issue trading ideas or recommendations that are inconsistent with, and reach different conclusions from, the information presented herein. Such ideas or recommendations may reflect different time frames, assumptions, views and analytical methods of the persons who prepared them, and BofA Securities is under no obligation to ensure that such other trading ideas or recommendations are brought to the attention of any recipient of this information.

In the event that the recipient received this information pursuant to a contract between the recipient and BofA for the provision of research services for a separate fee, and in connection therewith BofA may be deemed to be acting as an investment adviser, such status relates, if at all, solely to the person with whom BofA has contracted directly and does not extend beyond the delivery of this report (unless otherwise agreed specifically in writing by BofA). If such recipient uses the services of BofA in connection with the sale or purchase of a security referred to herein, BofA may act as principal for its own account or as agent for another person. BofA is and continues to act solely as a broker-dealer in connection with the execution of any transactions, including transactions in any securities referred to herein.

#### BofA ESGMeter Methodology:

ESGMeter is a proprietary metric based on quantitative analysis and fundamental analyst inputs that reflects our assessment of a company's Environmental, Social and Governance-related attributes. The ESGMeter is intended to indicate a company's likelihood of experiencing stronger financial stability (higher return on equity and lower earnings and price volatility) over the next three years relative to peer group. There are three ESGMeter levels - Low, Medium, and High - which indicate whether a company has attributes most likely to translate into superior financial stability (in the case of a High level) or weaker financial stability (in the case of a Low level) over the next three years relative to its peer group. A Medium level suggests that a company exhibits ESG characteristics that are likely associated with financial stability results in line with its peer group over the next three years. Full details of our methodology, financial stability definition and disclaimers are available at [BofA ESGMeter methodology](#). ESGMeter is not indicative of a company's future stock price performance and is not an investment recommendation or rating. ESGMeter is independent of the BofA Global Research fundamental equity analyst's investment rating, volatility risk rating, income rating or price objective for that company.

#### Copyright and General Information:

Copyright 2024 Bank of America Corporation. All rights reserved. iQDatabase® is a registered service mark of Bank of America Corporation. This information is prepared for the use of BofA Securities clients and may not be redistributed, retransmitted or disclosed, in whole or in part, or in any form or manner, without the express written consent of BofA Securities. BofA Global Research information is distributed simultaneously to internal and client websites and other portals by BofA Securities and is not publicly-available material. Any unauthorized use or disclosure is prohibited. Receipt and review of this information constitutes your agreement not to redistribute, retransmit, or disclose to others the contents, opinions, conclusion, or information contained herein (including any investment recommendations, estimates or price targets) without first obtaining express permission from an authorized officer of BofA Securities. Materials prepared by BofA Global Research personnel are based on public information. Facts and views presented in this material have not been reviewed by, and may not reflect information known to, professionals in other business areas of BofA Securities, including investment banking personnel. BofA Securities has established information barriers between BofA Global Research and certain business groups. As a result, BofA Securities does not disclose certain client relationships with, or compensation received from, such issuers. To the extent this material discusses any legal proceeding or issues, it has not been prepared as nor is it intended to express any legal conclusion, opinion or advice. Investors should consult their own legal advisers as to issues of

law relating to the subject matter of this material. BofA Global Research personnel's knowledge of legal proceedings in which any BofA Securities entity and/or its directors, officers and employees may be plaintiffs, defendants, co-defendants or co-plaintiffs with or involving issuers mentioned in this material is based on public information. Facts and views presented in this material that relate to any such proceedings have not been reviewed by, discussed with, and may not reflect information known to, professionals in other business areas of BofA Securities in connection with the legal proceedings or matters relevant to such proceedings.

This information has been prepared independently of any issuer of securities mentioned herein and not in connection with any proposed offering of securities or as agent of any issuer of any securities. None of BofAS or any of its affiliates or their research analysts has any authority whatsoever to make any representation or warranty on behalf of the issuer(s). BofA Global Research policy prohibits research personnel from disclosing a recommendation, investment rating, or investment thesis for review by an issuer prior to the publication of a research report containing such rating, recommendation or investment thesis.

Any information relating to the tax status of financial instruments discussed herein is not intended to provide tax advice or to be used by anyone to provide tax advice. Investors are urged to seek tax advice based on their particular circumstances from an independent tax professional.

The information herein (other than disclosure information relating to BofA Securities and its affiliates) was obtained from various sources and we do not guarantee its accuracy. This information may contain links to third-party websites. BofA Securities is not responsible for the content of any third-party website or any linked content contained in a third-party website. Content contained on such third-party websites is not part of this information and is not incorporated by reference. The inclusion of a link does not imply any endorsement by or any affiliation with BofA Securities. Access to any third-party website is at your own risk, and you should always review the terms and privacy policies at third-party websites before submitting any personal information to them. BofA Securities is not responsible for such terms and privacy policies and expressly disclaims any liability for them.

All opinions, projections and estimates constitute the judgment of the author as of the date of publication and are subject to change without notice. Prices also are subject to change without notice. BofA Securities is under no obligation to update this information and BofA Securities ability to publish information on the subject issuer(s) in the future is subject to applicable quiet periods. You should therefore assume that BofA Securities will not update any fact, circumstance or opinion contained herein.

Subject to the quiet period applicable under laws of the various jurisdictions in which we distribute research reports and other legal and BofA Securities policy-related restrictions on the publication of research reports, fundamental equity reports are produced on a regular basis as necessary to keep the investment recommendation current.

Certain outstanding reports or investment opinions relating to securities, financial instruments and/or issuers may no longer be current. Always refer to the most recent research report relating to an issuer prior to making an investment decision.

In some cases, an issuer may be classified as Restricted or may be Under Review or Extended Review. In each case, investors should consider any investment opinion relating to such issuer (or its security and/or financial instruments) to be suspended or withdrawn and should not rely on the analyses and investment opinion(s) pertaining to such issuer (or its securities and/or financial instruments) nor should the analyses or opinion(s) be considered a solicitation of any kind. Sales persons and financial advisors affiliated with BofAS or any of its affiliates may not solicit purchases of securities or financial instruments that are Restricted or Under Review and may only solicit securities under Extended Review in accordance with firm policies.

Neither BofA Securities nor any officer or employee of BofA Securities accepts any liability whatsoever for any direct, indirect or consequential damages or losses arising from any use of this information.