

United Therapeutics Corporation

Tyvaso DPI growth highlights opportunity in PH-ILD: Thoughts post the 4Q23 call

Reiterate Rating: UNDERPERFORM | PO: 183.00 USD | Price: 219.18 USD

Recent litigation highlights treat from competition

United Therapeutics announced a strong 4Q23 update beating consensus on both revenue (\$614.7M; +\$39.7M cons.) and EPS (\$4.36; +\$0.19 cons.). Overall product sales came in above consensus as well with Tyvaso total sales of \$350.6 (\$213.7M DPI; \$136.9M nebulizer) vs \$323.4M cons. (+\$27.2M cons.), Orenitram (\$84.1M; +\$1.7M cons.), and Unituxin (\$54.2M; +\$8M cons.). The company also reported Remodulin earnings slightly below consensus (\$115.1M; -\$4.8M cons.), and Adcirca sales in line with consensus (\$6.8M). With the FDA still reviewing Liquidia's NDA for the approval of Yutrepia in PH-ILD (see report) and the injunction for a launch in PAH still awaiting to be lifted, we think Tyvaso DPI, specifically in PH-ILD, can continue to drive growth for United but note competitive pressure is approaching. We continue to see a legal resolution between Liquidia and United Therapeutics, resulting in a launch of Yutrepia in PAH and potentially PH-ILD, despite United's recent efforts to delay the launch further by suing the FDA. We think it is notable the company did not address the newest lawsuit during the webcast or Q&A, which in our view underscores United's concern over the threat of DPI competition despite their commentary to the contrary. While we continue to see Tyvaso DPI as a key growth driver for the company, we anticipate competition to erode the market over time, reiterate Underperform, new PO \$183 (from \$180).

Tyvaso DPI growth likely to continue from PH-ILD

United continues to see Tyvaso DPI growth in PH-ILD as a revenue growth driver and highlighted the modeled split of Tyvaso DPI usage as 50% PAH/ 50% PH-ILD. We expect this split to move towards higher usage in PH-ILD over time given the fewer treatment options in PH-ILD.

Organ programs innovative but far from derisking data

The company also discussed the broad, early stage organ manufacturing programs and anticipated progress in 2024 including completing the final preclinical xenokidney transplant (mid-24) and introducing animals to the designated pathogen free facility (1Q24). We look for additional derisking data to add to our model.

Model Updates

We update our model for 4Q23 reporting and increased our revenue assumptions, resulting in a new PO of \$183 (from \$180). We now model 2024 and 2025 EPS of \$20.70 (from \$19.12) and \$19.95 (from \$17.38), respectively. United has \$4.9B in cash and cash equivalents. **See our catalyst calendar below (Exhibit 1):**

Estimates (Dec) (US\$)	2022A	2023A	2024E	2025E	2026E
EPS	15.00	19.81	20.70	19.95	18.47
EPS Change (YoY)	49.1%	32.1%	4.5%	-3.6%	-7.4%
Consensus EPS (Bloomberg)			21.73	24.09	26.66
DPS	0	0	0	0	0
Valuation (Dec)					
P/E	14.3x	10.8x	10.3x	10.7x	11.6x
EV / EBITDA*	8.5x	7.1x	6.6x	6.9x	7.6x
Free Cash Flow Yield*	6.5%	7.3%	9.5%	9.3%	8.5%
* For full definitions of <i>IQ</i> method SM measures, see page 6.					

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Refer to important disclosures on page 7 to 9. Analyst Certification on page 4. Price
Objective Basis/Risk on page 4.

Timestamp: 21 February 2024 04:05PM EST

21 February 2024

Equity

Key Changes		
(US\$)	Previous	Current
Price Obj.	180.00	183.00
2024E Rev (m)	2,396.7	2,466.4
2025E Rev (m)	2,399.4	2,474.9
2026E Rev (m)	2,394.8	2,413.6
2024E EPS	19.12	20.70
2025E EPS	17.38	19.95
2026E EPS	16.29	18.47

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Stock Data

219.18 USD
183.00 USD
21-Feb-2024
B-3-9
204.44 USD - 261.54 USD
10,455 USD / 47.7
98.3%
71.98 USD
UTHR / NAS
UTHR US / UTHR.OQ
16.0%
-15.2%
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".

PAH: pulmonary arterial hypertension

NDA: New Drug Application

PH-ILD: pulmonary hypertension and interstitial lung disease

DPI: dry powder inhaler

iQprofile[™] United Therapeutics Corporation

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<i>iQ</i> method sM − Bus Performance*					
(US\$ Millions)	2022A	2023A	2024E	2025E	2026
Return on Capital Employed	14.8%	17.3%	15.9%	13.5%	11.2%
Return on Equity	16.6%	18.3%	16.0%	13.3%	10.9%
Operating Margin	50.6%	50.9%	51.0%	48.3%	44.6%
Free Cash Flow	664	748	971	950	865
<i>iQ</i> method [™] – Quality of Earnings*					
(US\$ Millions)	2022A	2023A	2024E	2025E	2026
Cash Realization Ratio	1.1x	1.0x	1.1x	1.1x	1.1>
Asset Replacement Ratio	2.7x	4.3x	3.3x	2.5x	2.5>
Tax Rate	23.5%	22.7%	22.3%	22.3%	22.3%
Net Debt-to-Equity Ratio	-3.4%	-15.2%	-22.1%	-30.9%	-37.0%
Interest Cover	30.2x	20.0x	22.1x	22.1x	20.9>
Income Statement Data (Dec)					
(US\$ Millions)	2022A	2023A	2024E	2025E	2026
Sales	1,936	2,328	2,466	2,475	2,414
% Change	14.9%	20.2%	6.0%	0.3%	-2.5%
Gross Profit	1,790	2,072	2,220	2,203	2,148
% Change	14.1%	15.8%	7.1%	-0.8%	-2.5%
EBITDA	1,031	1,238	1,321	1,268	1,155
% Change	70.2%	20.1%	6.7%	-4.0%	-8.9%
Net Interest & Other Income	(29)	89	90	110	138
Net Income (Adjusted)	727	985	1,047	1,014	944
% Change	52.9%	35.4%	6.3%	-3.1%	-6.9%
Free Cash Flow Data (Dec) (US\$ Millions)	2022A	2023A	2024E	2025E	2026
Net Income from Cont Operations (GAAP)	727	985	1,047	1,014	944
Depreciation & Amortization	51	53	64	72	
Change in Working Capital					
Deferred Taxation Charge	(141)	(98)	29	1	(5)
	NA	(98) NA	NA	1 NA	(5) NA
Other Adjustments, Net	NA 165	(98) NA 38	NA 40	1 NA 42	(5) NA 44
Capital Expenditure	NA 165 (139)	(98) NA 38 (230)	NA 40 (209)	1 NA 42 (179)	(5) NA 44 (196)
Capital Expenditure Free Cash Flow	NA 165 (139) 664	(98) NA 38 (230) 748	NA 40 (209) 971	1 NA 42 (179) 950	(5) NA 44 (196) 865
Capital Expenditure Free Cash Flow % Change	NA 165 (139) 664 39.0%	(98) NA 38 (230) 748 12.6%	NA 40 (209) 971 29.9%	1 NA 42 (179) 950 - 2.2%	(5) NA 44 (196) 865 - 8.9 %
Capital Expenditure Free Cash Flow % Change Share / Issue Repurchase	NA 165 (139) 664 39.0% 94	(98) NA 38 (230) 748 12.6%	NA 40 (209) 971 29.9% 0	1 NA 42 (179) 950 -2.2%	(5) NA 44 (196) 865 - 8.9%
Capital Expenditure Free Cash Flow % Change Share / Issue Repurchase Cost of Dividends Paid	NA 165 (139) 664 39.0% 94	(98) NA 38 (230) 748 12.6% 105	NA 40 (209) 971 29.9% 0	1 NA 42 (179) 950 -2.2% 0	(5) NA 44 (196) 865 - 8.9% C
Capital Expenditure Free Cash Flow % Change Share / Issue Repurchase	NA 165 (139) 664 39.0% 94	(98) NA 38 (230) 748 12.6%	NA 40 (209) 971 29.9% 0	1 NA 42 (179) 950 -2.2%	(5) NA 44 (196) 865 - 8.9% 0
Capital Expenditure Free Cash Flow % Change Share / Issue Repurchase Cost of Dividends Paid Change in Debt Balance Sheet Data (Dec)	NA 165 (139) 664 39.0% 94 0 (8)	(98) NA 38 (230) 748 12.6% 105 0 (103)	NA 40 (209) 971 29.9% 0 0 (400)	1 NA 42 (179) 950 -2.2% 0 0 (100)	(5) NA 44 (196) 865 - 8.9% C (100)
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Capital Expenditure Free Cash Flow % Change Share / Issue Repurchase Cost of Dividends Paid Change in Debt Balance Sheet Data (Dec) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets	NA 165 (139) 664 39.0% 94 0 (8) 2022A 961 220 2,199	(98) NA 38 (230) 748 12.6% 105 0 (103) 2023A 1,208 279 2,064	NA 40 (209) 971 29.9% 0 0 (400) 2024E 1,764 296 2,081	1 NA 42 (179) 950 - 2.2% 0 0 (100) 2025E 2,614 297 2,082	(5) NAM 44 (196) 865 -8.9% C (100) 2026 3,379 289 2,075
Capital Expenditure Free Cash Flow % Change Share / Issue Repurchase Cost of Dividends Paid Change in Debt Balance Sheet Data (Dec) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets Property, Plant & Equipment	NA 165 (139) 664 39.0% 94 0 (8) 2022A 961 220 2,199 862	(98) NA 38 (230) 748 12.6% 105 0 (103) 2023A 1,208 279 2,064 1,045	NA 40 (209) 971 29.9% 0 (400) 2024E 1,764 296 2,081 1,196	1 NA 42 (179) 950 -2.2% 0 (100) 2025E 2,614 297 2,082 1,309	(5) NAA 44 (196) 865 -8.9% C (100) 2026 3,379 289 2,075 1,433
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Capital Expenditure Free Cash Flow % Change Share / Issue Repurchase Cost of Dividends Paid Change in Debt Balance Sheet Data (Dec) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets Property, Plant & Equipment Other Non-Current Assets Total Assets Short-Term Debt Other Current Liabilities Long-Term Debt Other Non-Current Liabilities	NA 165 (139) 664 39.0% 94 0 (8) 2022A 961 220 2,199 862 1,803 6,045 0 343 800 105	(98) NA 38 (230) 748 12.6% 105 0 (103) 2023A 1,208 279 2,064 1,045 2,571 7,167 0 804 300 78	NA 40 (209) 971 29.9% 0 (400) 2024E 1,764 296 2,081 1,196 2,564 7,902 0 529 200 97	1 NA 42 (179) 950 -2.2% 0 (100) 2025E 2,614 297 2,082 1,309 2,558 8,860 0 530 100 97	(5) NAA 44 (196) 865 -8.9% 0 0 (100) 2026I 3,379 289 2,075 1,433 2,578 9,754 0 519 0 97
Capital Expenditure Free Cash Flow % Change Share / Issue Repurchase Cost of Dividends Paid Change in Debt Balance Sheet Data (Dec) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets Property, Plant & Equipment Other Non-Current Assets Total Assets Short-Term Debt Other Current Liabilities Long-Term Debt Other Non-Current Liabilities Total Liabilities	NA 165 (139) 664 39.0% 94 0 (8) 2022A 961 220 2,199 862 1,803 6,045 0 343 800 105 1,248	(98) NA 38 (230) 748 12.6% 105 0 (103) 2023A 1,208 279 2,064 1,045 2,571 7,167 0 804 300 78 1,182	NA 40 (209) 971 29.9% 0 (400) 2024E 1,764 296 2,081 1,196 2,564 7,902 0 529 200 97 825	1 NA 42 (179) 950 - 2.2% 0 0 (100) 2025E 2,614 297 2,082 1,309 2,558 8,860 0 530 100 97 727	79 (5) NA 44 (196) 865 -8.9% 0 (100) 2026i 3,379 289 2,075 1,433 2,578 9,754 0 519 0 97
Capital Expenditure Free Cash Flow % Change Share / Issue Repurchase Cost of Dividends Paid Change in Debt Balance Sheet Data (Dec) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets Property, Plant & Equipment Other Non-Current Assets Total Assets Short-Term Debt Other Current Liabilities Long-Term Debt Other Non-Current Liabilities	NA 165 (139) 664 39.0% 94 0 (8) 2022A 961 220 2,199 862 1,803 6,045 0 343 800 105	(98) NA 38 (230) 748 12.6% 105 0 (103) 2023A 1,208 279 2,064 1,045 2,571 7,167 0 804 300 78	NA 40 (209) 971 29.9% 0 (400) 2024E 1,764 296 2,081 1,196 2,564 7,902 0 529 200 97	1 NA 42 (179) 950 -2.2% 0 (100) 2025E 2,614 297 2,082 1,309 2,558 8,860 0 530 100 97	(5) NAA 44 (196) 865 -8.9% 0 0 (100) 2026I 3,379 289 2,075 1,433 2,578 9,754 0 519 0 97

Company Sector

Biotechnology

Company Description

United is a commercial biopharmaceutical company focused on the development and commercialization of treatments for pulmonary arterial hypertension, PAH, generating the majority of revenues from treprostinil: Remodulin (IV/ SC), Tyvaso (inhaled), and Orenitram (oral). The pipeline is predominately focused on PAH, and programs that range from updated formulations/ delivery devices for its current assets to novel MoAs. United also derives modest sales from its oncology treatment Unituxin.

Investment Rationale

We rate United Underperform given our concerns over the increasing competitive dynamics facing the core commercial portfolio, with Remodulin, Tyvaso, and Orenitram facing looming generic or novel competitors-with Adcirca sales already rapidly declining due to generics. At the same time, the pipeline has experienced multiple setbacks, with remaining assets either high-risk or early.

Stock Data

Average Daily Volume 328,403

Quarterly Earnings Estimates

	2023	2024
Q1	4.86A	5.43E
Q2	5.24A	5.38E
Q3	5.38A	5.33E
04	4.36A	4.56E



* For full definitions of $\emph{\textbf{\textit{IQ}}}\textit{method}^{\text{SM}}$ measures, see page 6.

Our new PO consists of \$21/share (vs \$18 prior) for Remodulin, \$12/share (\$11 prior) for Orenitram, \$7/share (\$8 prior) for Unituxin, \$59/share for Tyvaso, \$1/share for other pipeline programs, and \$84/share for cash.

Exhibit 1: United Catalyst Calendar

United plans to present data at multiple upcoming healthcare conferences.

Company	Asset	Indication	Event	Timing	Importance
United	Ralinepag	PAH	ADVANCE OUTCOMES trial completion	2025	High
United	PAH portfolio	PAH	Present at ACC	April 6-8, 2024	Moderate
United	PAH portfolio	PAH	Present at ISHLT	April 10-13, 2024	Moderate
United	PAH portfolio	PAH	Present at ATS	May 17-22, 2024	Moderate
United	Tyvaso	IPF	TETON 1 and 2 enrollment completion	YE24	Moderate
United	Tyvaso	IPF	TETON data	2025	High

Source: BofA Global Research, company reports

BofA GLOBAL RESEARCH



Price objective basis & risk

United Therapeutics Corporation (UTHR)

Our 12-month price objective for United of \$183/share is based on our net present value (NPV) analysis. We forecast sales for each of the approved products, Remodulin, Tyvaso, Orenitram, Adcirca, and Unituxin. We assume a WACC of 13%, in line with peer commercial companies of similar size and risk and varying terminal values for each asset based on its characteristics and patent life. Given these assumptions, we estimate a value of \$21/share for Remodulin, \$59/share for Tyvaso, \$12/share for Orenitram, \$7/share Unituxin, \$1/share for the pipeline, and \$84/share for net cash.

Upside risks: 1) better-than-expected PAH sales despite generic and branded competition, 2) successful launch of next-generation Remodulin and Tyvaso delivery devices near-term that meaningfully improves growth, 3) robust uptake of Orenitram following the updated FREEDOM-EV label, 4) stabilizing or improving gross to net adjustments, and 5) success of a number of pipeline programs, resulting in accelerated approval, development, and commercialization.

Downside risks: 1) faster-than-expected erosion of sales across the commercial portfolio due to generics or branded competition, with similarly increasing gross-to-net adjustments, 2) efforts to launch a next-generation drug delivery device may experience further setbacks, delaying their launches, and 3) other development programs, including those evaluating the portfolio in other categories of PH, may experience limited success.

Analyst Certification

I, Greg Harrison, 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 - Biopharmaceuticals Coverage Cluster

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Investment rating	Company	BofA 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	BTAI US	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	Alec W. Stranahan
	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	LQDA	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

US - Biopharmaceuticals Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
•	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
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NEUTRAL				
	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
	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	EXAI US	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	Alec W. Stranahan
	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
	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
	z.mea merapeanes corporation	3.1110	3	



*IQ*method[™] Measures Definitions

Business Performance	Numerator	Denominator
Return On Capital Employed	NOPAT = (EBIT + Interest Income) \times (1 $-$ Tax Rate) + Goodwill Amortization	Total Assets — Current Liabilities + ST Debt + Accumulated Goodwill Amortization
Return On Equity	Net Income	Shareholders' Equity
Operating Margin	Operating Profit	Sales
Earnings Growth	Expected 5 Year CAGR From Latest Actual	N/A
Free Cash Flow	Cash Flow From Operations — Total Capex	N/A
Quality of Earnings	Numerator	Denominator
Cash Realization Ratio	Cash Flow From Operations	Net Income
Asset Replacement Ratio	Capex	Depreciation
Tax Rate	Tax Charge	Pre-Tax Income
Net Debt-To-Equity Ratio	Net Debt = Total Debt - Cash & Equivalents	Total Equity
Interest Cover	EBIT	Interest Expense
Valuation Toolkit	Numerator	Denominator
Price / Earnings Ratio	Current Share Price	Diluted Earnings Per Share (Basis As Specified)
Price / Book Value	Current Share Price	Shareholders' Equity / Current Basic Shares
Dividend Yield	Annualised Declared Cash Dividend	Current Share Price
Free Cash Flow Yield	Cash Flow From Operations – Total Capex	Market Cap = Current Share Price × Current Basic Shares
Enterprise Value / Sales	EV = Current Share Price × Current Shares + Minority Equity + Net Debt +	Sales
	Other LT Liabilities	

EV / EBITDA Enterprise Value Basic EBIT + Depreciation + Amortization

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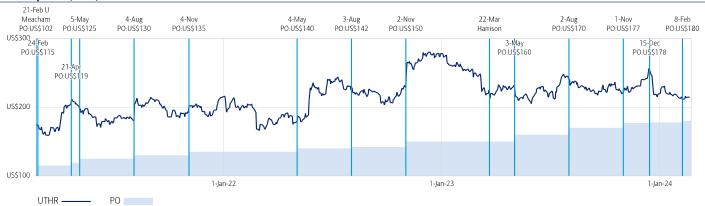
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B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

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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%	≤ /0%
Neutral	≥ 0%	≤ 30%
nderperform	N/A	≥ 20%

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