

Liquidia Corporation

Launch on deck upon full Yutrepia approval: Thoughts post the 4Q23 call

Reiterate Rating: BUY | PO: 20.00 USD | Price: 13.65 USD

Looking for injunction to be lifted and full approval

Liquidia announced an encouraging 4Q23 update, as the company prepares for the anticipated full approval and launch of Yutrepia. As we wait for the injunction to be lifted to allow for a launch in PAH and a full approval to allow for a launch in PH-ILD (after loss of exclusivity March 31), we believe Liquidia remains ready to launch Yutrepia. With a strong DPI market opportunity (see report), we currently model \$686M peak sales for Yutrepia in PAH and a launch in 2024. We continue to look for an FDA decision towards a full approval in PH-ILD to add the indication to our model. We also anticipate continued progress from the L606 program, including interim data from the open-label trial in PH-ILD (2024) and phase 3 initiation by YE24. Along with the '793 legal resolution (see report), we look for the injunction to be lifted and allow for a launch of Yutrepia in PAH. Reiterate Buy, new PO \$20 (from \$17).

L606 broadens portfolio in PAH and PH-ILD

While we wait for additional clinical progress to add L606 to our model, we note Liquidia continues to execute on the development of L606 as a potential twice daily nebulizer treatment for both PAH and PH-ILD. With enrollment opened for the open-label, prospective, multicenter ASCENT study evaluating L606 in PH-ILD and plans to complete enrollment in 2024 (N=60), we anticipate data at upcoming conferences to further support development. The company also plans to initiate a global phase 3 placebo controlled efficacy trial in PH-ILD by YE24 to potentially support approval in PAH and PH-ILD under the 505(b)(2) regulatory pathway.

Model Updates

We update our model for 4Q23 reporting and adjust our OpEx assumptions for the Yutrepia program, resulting in a new PO of \$20 (from \$17). We now model 2024 and 2025E EPS of -\$1.16 (from -\$1.15) and -\$0.33 (from -\$0.40), respectively. Liquidia has \$83.7M in cash and cash equivalents as of December 31 not including two transactions in January totaling \$100M.

See our catalyst calendar below (Exhibit 1):

Estimates (Dec) (US\$)	2022A	2023A	2024E	2025E	2026E
EPS	(0.67)	(1.21)	(1.16)	(0.33)	0.50
EPS Change (YoY)	4.3%	-80.6%	4.1%	71.6%	NM
Consensus EPS (Bloomberg)			(0.97)	(0.33)	0.53
DPS	0	0	0	0	0
Valuation (Dec)					
P/E	NM	NM	NM	NM	27.3x
EV / EBITDA*	NM	NM	NM	NM	16.0x
Free Cash Flow Yield*	-3.1%	-4.6%	-7.3%	-2.8%	4.1%
* For full definitions of <i>IQ</i> method SM measures, see page 5.					

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Refer to important disclosures on page 6 to 8. Analyst Certification on page 4. Price
Objective Basis/Risk on page 4.

Timestamp: 13 March 2024 12:20PM EDT

13 March 2024

Equity

Key Changes		
(US\$)	Previous	Current
Price Obj.	17.00	20.00
2024E EPS	-1.15	-1.16
2025E EPS	-0.40	-0.33
2026E EPS	0.45	0.50

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Stock Data

Price	13.65 USD
Price Objective	20.00 USD
Date Established	13-Mar-2024
Investment Opinion	C-1-9
52-Week Range	5.71 USD - 15.15 USD
Mrkt Val (mn) / Shares Out	937 USD / 68.6
(mn)	
Free Float	65.0%
Average Daily Value (mn)	10.19 USD
BofA Ticker / Exchange	LQDA / NAS
Bloomberg / Reuters	LQDA US / LQDA.OQ
ROE (2024E)	-171.3%
Net Dbt to Eqty (Dec-2023A)	-176.9%
ESGMeter™	Low

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

PH-ILD: pulmonary hypertension and interstitial lung disease

DPI: dry powder inhaler

iQprofile[™] Liquidia Corporation

IQmethod "" – Bus Performance"					
(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Return on Capital Employed	-32.8%	-57.2%	-63.4%	-16.1%	29.1%
Return on Equity	-52.7%	-114.0%	-171.3%	-58.8%	65.6%
Operating Margin	-243.3%	-419.6%	-184.0%	-19.8%	23.5%
Free Cash Flow	(29)	(43)	(68)	(26)	38

*iQ*method SM − Quality of Earnings*

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Cash Realization Ratio	NM	NM	NM	NM	0.9x
Asset Replacement Ratio	0.2x	0.6x	0.6x	0.6x	0.6x
Tax Rate	NM	NM	NM	NM	21.0%
Net Debt-to-Equity Ratio	-81.2%	-176.9%	-182.4%	-181.2%	-115.3%
Interest Cover	-16.6x	-11.7x	NA	-11.1x	24.1x

Income Statement Data (Dec)

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Sales	16	17	46	127	233
% Change	24.0%	9.7%	163.7%	175.9%	83.3%
Gross Profit	13	15	38	103	188
% Change	33.0%	11.7%	159.6%	171.7%	82.5%
EBITDA	(35)	(71)	(83)	(23)	56
% Change	-24.6%	-102.7%	-16.1%	71.6%	NM
Net Interest & Other Income	(2)	(5)	1	0	(1)
Net Income (Adjusted)	(41)	(79)	(84)	(26)	43
% Change	-18.6%	-91.4%	-6.6%	69.3%	NM

Free Cash Flow Data (Dec)

2022A	2023A	2024E	2025E	2026E
(41)	(79)	(84)	(26)	43
4	2	2	2	1
(2)	6	4	(12)	(16)
NA	NA	NA	NA	NA
11	29	11	11	12
(1)	(1)	(1)	(1)	(1)
-29	-43	-68	-26	38
14.6%	-46.9%	-58.6%	61.7%	NM
56	25	76	1	1
0	0	0	0	0
9	(22)	0	0	0
	(41) 4 (2) NA 11 (1) -29 14.6% 56	(41) (79) 4 2 (2) 6 NA NA 11 29 (1) (1) -29 -43 14.6% -46.9% 56 25 0 0	(41) (79) (84) 4 2 2 (2) 6 4 NA NA NA 11 29 11 (1) (1) (1) -29 -43 -68 14.6% -46.9% -58.6% 56 25 76 0 0 0	(41) (79) (84) (26) 4 2 2 2 (2) 6 4 (12) NA NA NA NA 11 29 11 11 (1) (1) (1) (1) -29 -43 -68 -26 14.6% -46.9% -58.6% 61.7% 56 25 76 1 0 0 0 0

Balance Sheet Data (Dec)

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Cash & Equivalents	93	84	127	102	142
Trade Receivables	5	4	3	10	21
Other Current Assets	2	2	5	13	23
Property, Plant & Equipment	4	4	4	3	2
Other Non-Current Assets	25	24	24	24	24
Total Assets	129	118	162	152	212
Short-Term Debt	0	0	0	0	0
Other Current Liabilities	9	19	24	27	32
Long-Term Debt	20	0	35	35	35
Other Non-Current Liabilities	10	52	52	52	52
Total Liabilities	39	71	111	115	119
Total Equity	90	47	50	37	93
Total Equity & Liabilities	129	118	162	152	212

^{*} For full definitions of $\emph{\textit{IQ}}\textit{method}^{\text{SM}}$ measures, see page 5.

Company Sector

Biotechnology

Company Description

Liquidia is a near-commercial stage biotechnology company developing treatments for pulmonary arterial hypertension. The lead product, Yutrepia, is currently tentatively approved by the FDA.

Investment Rationale

Our Buy rating is based on the anticipated full approval and launch of Yutrepia. Liquidia developed Yutrepia for the treatment of PAH which is currently tentatively approved by the Food and Drug Administration (FDA). With approval, we believe Liquidia could have a differentiated DPI product in PAH and capture market share.

Stock Data

Average Daily Volume 746,341

Quarterly Earnings Estimates

	2023	2024
Q1	-0.18A	-0.36E
Q2	-0.36A	-0.33E
Q3	-0.24A	-0.27E
Q4	-0.42A	-0.20E



Exhibit 1: Liquidia Catalyst CalendarWe focus on the anticipated approval and subsequent launch of Yutrepia in 2024.

Compan	y Asset	Indication	Event	Timing	Importance
Liquidia	Yutrepia	PAH	Anticipated launch	2024	High
Liquidia	L606	PH-ILD	Complete ASCENT enrollment	2024	Low
Liquidia	L606	PH-ILD	Present interim ASCENT data	2024	Moderate
Liquidia	L606	PH-ILD	Initiate PH-ILD trial	late 2024	Low

Source: BofA Global Research, company reports

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Price objective basis & risk

Liquidia Corporation (LQDA)

Our \$20/share price objective is based on an net present value (NPV) analysis of Yutrepia (\$16/share), collaboration revenues (\$1/share), and net cash (\$2/share). We use a weighted average cost of capital (WACC) of 13%, in line with similar companies in our coverage universe and a -50% terminal growth rate.

Downside risks: 1) additional competition in the market, 2) delayed full approval of Yutrepia.

Upside risk: 1) higher-than-expected uptake of Yutrepia once approved

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

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
	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	LLYUS	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
	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



US - Biopharmaceuticals Coverage Cluster

Investment rating Company		BofA Ticker	Bloomberg symbol	Analyst
NEUTRAL				
	AbbVie	ABBV	ABBV US	Geoff Meacham
	Alector, Inc	ALEC	ALEC US	Greg Harrison, CFA
	Amgen Inc.	AMGN	AMGN US	Geoff Meacham
	Amylyx Pharmaceuticals	AMLX	AMLX 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

*i***@**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

EV / EBITDA Enterprise Value Basic EBIT + Depreciation + Amortization

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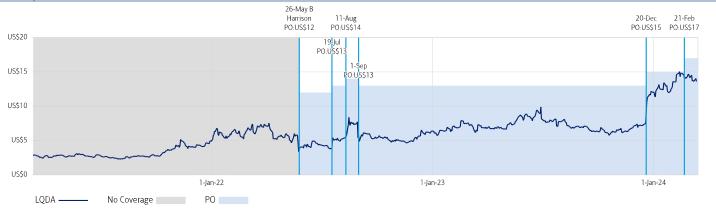
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Disclosures

Important Disclosures

Liquidia Corporation (LQDA) Price Chart



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

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 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%
Underperform	N/A	≥ 20%

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