

Acadia Pharmaceuticals

Phase 3 evaluating pimavanserin in NSS fails to meet primary endpoint

Reiterate Rating: NEUTRAL | PO: 30.00 USD | Price: 24.13 USD

ACAD does not plan to continue development of pima'

Acadia (ACAD) reported that the phase 3 ADVANCE-2 trial evaluating pimavanserin in negative symptoms of schizophrenia (NSS) did not meet the primary endpoint. At week 26, the change from baseline on the negative symptom assessment-16 (NSA-16) total score was -11.8 for the pima'-treated arm vs -11.1 on placebo (p-val= 0.4825). The company noted they do not plan to conduct any additional clinical trials with pima'. We did not provide standalone value for the program and note our key opinion leaders (KOLs) had noted low expectations for the readout. We are not surprised by the outcome given NSS has been difficult to treat. In our view, the focus remains on the commercial performance of Daybue in Rett syndrome. In our DCF-based model, we lower our pipeline value to \$1bn (prev. \$1.4bn) which includes ACP-204 in Alzheimer's disease psychosis (ongoing phase 2/3) and ACP-101 in Prader-Willi syndrome (ongoing phase 3). This results in our new \$30 PO (prev. \$33). We reiterate our Neutral rating.

Estimates (Dec) (US\$)	2022A	2023A	2024E	2025E	2026E
EPS	(1.34)	(0.37)	0.95	1.19	1.69
EPS Change (YoY)	-27.6%	72.4%	NM	25.3%	42.0%
Consensus EPS (Bloomberg)			0.65	1.41	2.22
DPS	0	0	0	0	0
Valuation (Dec)					
P/E	NM	NM	25.4x	20.3x	14.3x
EV / EBITDA*	NM	NM	25.3x	19.6x	13.4x
Free Cash Flow Yield*	-2.9%	0.9%	5.1%	6.1%	8.3%

* For full definitions of *IQmethod*SM measures, see page 5.

11 March 2024

Equity

Key Changes

(US\$)	Previous	Current
Price Obj.	33.00	30.00

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Stock Data

Price	24.13 USD
Price Objective	30.00 USD
Date Established	11-Mar-2024
Investment Opinion	C-2-9
52-Week Range	17.71 USD - 33.99 USD
Mrkt Val (mn) / Shares Out (mn)	3,962 USD / 164.2
Free Float	73.6%
Average Daily Value (mn)	41.61 USD
BofA Ticker / Exchange	ACAD / NAS
Bloomberg / Reuters	ACAD US / ACAD.OQ
ROE (2024E)	28.6%
Net Dbt to Eqty (Dec-2023A)	-53.7%
ESGMeter™	Low

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Timestamp: 11 March 2024 05:36PM EDT

iQprofileSM Acadia Pharmaceuticals

iQmethodSM – Bus Performance*

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Return on Capital Employed	-36.0%	-9.5%	25.0%	22.7%	23.9%
Return on Equity	-45.9%	-14.5%	28.6%	25.7%	26.9%
Operating Margin	-43.2%	-10.1%	14.9%	16.9%	22.2%
Free Cash Flow	(114)	36	203	243	327

iQmethodSM – Quality of Earnings*

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Cash Realization Ratio	NM	NM	1.3x	1.3x	1.2x
Asset Replacement Ratio	0x	11.9x	17.9x	26.9x	40.2x
Tax Rate	NM	NM	NM	NM	NM
Net Debt-to-Equity Ratio	-15.5%	-53.7%	-73.4%	-84.2%	-90.7%
Interest Cover	NA	NA	NA	NA	NA

Income Statement Data (Dec)

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Sales	517	726	975	1,108	1,241
% Change	6.8%	40.4%	34.2%	13.6%	12.0%
Gross Profit	507	685	926	1,053	1,179
% Change	9.0%	35.1%	35.3%	13.6%	12.0%
EBITDA	(222)	(73)	146	188	276
% Change	-32.6%	67.0%	NM	29.0%	46.9%
Net Interest & Other Income	13	33	33	33	33
Net Income (Adjusted)	(216)	(61)	157	200	288
% Change	-28.7%	71.6%	NM	26.8%	44.1%

Free Cash Flow Data (Dec)

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Net Income from Cont Operations (GAAP)	(211)	(41)	178	220	308
Depreciation & Amortization	2	0	0	0	0
Change in Working Capital	38	1	1	1	1
Deferred Taxation Charge	NA	NA	NA	NA	NA
Other Adjustments, Net	57	78	28	28	28
Capital Expenditure	0	(3)	(5)	(7)	(10)
Free Cash Flow	-114	36	203	243	327
% Change	10.1%	NM	464.2%	19.6%	34.8%
Share / Issue Repurchase	8	0	0	0	0
Cost of Dividends Paid	0	0	0	0	0
Change in Debt	0	0	0	0	0

Balance Sheet Data (Dec)

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Cash & Equivalents	115	293	532	812	1,175
Trade Receivables	62	62	62	62	62
Other Current Assets	331	195	159	123	87
Property, Plant & Equipment	6	9	14	20	30
Other Non-Current Assets	74	68	68	68	68
Total Assets	588	627	835	1,085	1,423
Short-Term Debt	0	0	0	0	0
Other Current Liabilities	126	127	129	131	132
Long-Term Debt	53	53	53	53	53
Other Non-Current Liabilities	9	0	0	0	0
Total Liabilities	187	180	182	184	186
Total Equity	400	447	653	901	1,237
Total Equity & Liabilities	588	627	835	1,085	1,423

* For full definitions of iQmethodSM measures, see page 5.

Company Sector

Biotechnology

Company Description

Acadia Pharmaceuticals is a biopharmaceutical company based in San Diego, CA focused on the development of therapeutics to treat CNS disorders. Its lead asset Nuplazid (pimavanserin) has been approved for the treatment of Parkinson's Disease Psychosis (PDP). Second asset, Daybue, was recently approved for the treatment of Rett syndrome.

Investment Rationale

We rate ACAD shares Neutral. Lead asset Nuplazid was launched in US in Parkinson's disease psychosis (PDP) in June 2016. Nuplazid treats the symptoms of psychosis without impacting the control of motor symptoms from the underlying Parkinson's Disease. Second drug, Daybue, was recently approved in Rett syndrome. ACAD is also evaluating its next-gen asset, ACP-204, in Alzheimer's disease psychosis and potentially, PDP. ACAD is also exploring ACP-101 in Prader-Willi syndrome related hyperphagia.

Stock Data

Average Daily Volume 1,724,386

Quarterly Earnings Estimates

	2023	2024
Q1	-0.27A	0.06E
Q2	0.01A	0.26E
Q3	-0.40A	0.32E
Q4	0.28A	0.30E



Price objective basis & risk

Acadia Pharmaceuticals (ACAD)

Our DCF-derived PO of \$30 encompasses commercial drug Nuplazid in PDP at \$16/share. Daybue in Rett represents \$16/share to our PO. The remainder of our net present value (NPV) comes from pipeline and cash. We use a weighted-average cost of capital (WACC) of 9% for PDP and Rett, consistent with how we value other drugs in similar stages of development in our coverage universe. We assume a 21% tax rate for ACAD and zero terminal value.

Downside risks to our PO are 1) slower-than-expected commercialization of Nuplazid and Daybue, 2) stronger-than-expected competition from other 5HT2A compounds and other drugs in development for the same indications as Nuplazid and Daybue, and 3) negative results in pipeline indications.

Upside risks are 1) faster-than-expected Nuplazid and Daybue uptake in the US, 2) potential for partnerships or transactions with larger pharma companies, and 3) advances of early-stage pipeline assets in pain and central nervous system (CNS) disorders.

Analyst Certification

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US - Biotechnology Coverage Cluster

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

US - Biotechnology Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
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iQmethodSM Measures Definitions**Business Performance**

Return On Capital Employed

Return On Equity

Operating Margin

Earnings Growth

Free Cash Flow

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

Denominator

Total Assets – Current Liabilities + ST Debt + Accumulated Goodwill

Amortization

Shareholders' Equity

Sales

N/A

N/A

Quality of Earnings

Cash Realization Ratio

Asset Replacement Ratio

Tax Rate

Net Debt-To-Equity Ratio

Interest Cover

Numerator

Cash Flow From Operations

Capex

Tax Charge

Net Debt = Total Debt – Cash & Equivalents

EBIT

Denominator

Net Income

Depreciation

Pre-Tax Income

Total Equity

Interest Expense

Valuation Toolkit

Price / Earnings Ratio

Price / Book Value

Dividend Yield

Free Cash Flow Yield

Enterprise Value / Sales

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

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

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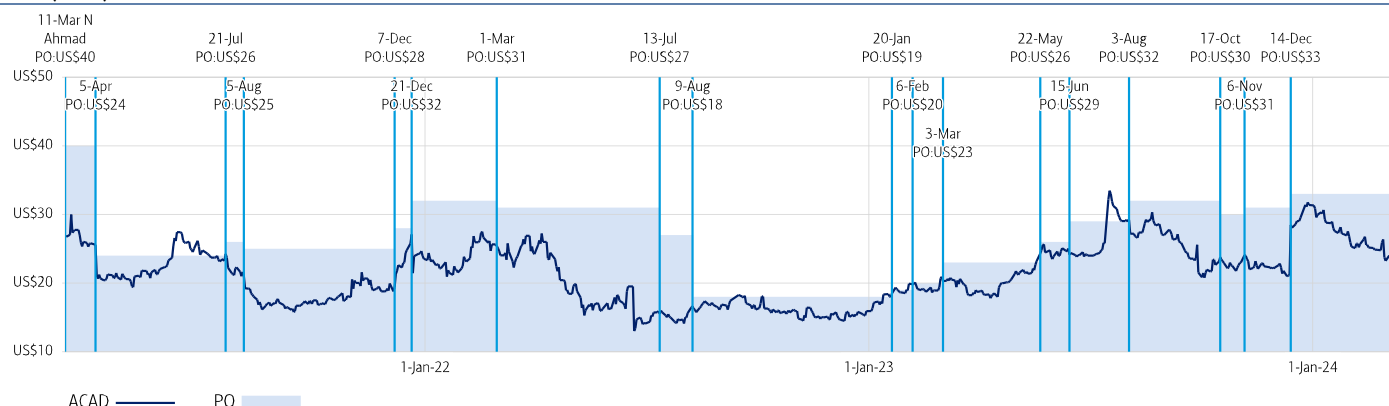
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Acadia Ph (ACAD) Price Chart



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%

^{R1} 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.

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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%

^{R2} 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.

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