

Action Summary – 17 October 2024

Analyst Theodore R. O’Neill – New options for recovery sanctioned by NIAAA - reiterate Buy rating and \$8 PT.

- **Improved funding and business outlook.** The National Institute on Alcohol Abuse and Alcoholism (NIAAA) updated its definition of recovery. The new definition emphasizes a broader, non-abstinence approach to recovery, **which aligns directly with Adial’s AD04 program**, which has the potential to offer patients the flexibility of reducing drinking and/or abstinence. NIAAA’s updated definition underscores a growing clinical outcome goal and recognition that effective recovery solutions need not be solely abstinence based, opening the door to therapeutic options that focus on harm reduction and improved quality of life. AD04, Adial’s lead investigational product for alcohol use disorder (AUD), is designed to support patients seeking flexible treatment that could offer a reduction in drinking and/or abstinence recovery paths, making it a promising candidate to meet the evolving market needs. This recognition of the new standard for recovery broadens Adial’s significant commercial and government market potential. We believe that with NIAAA’s focus shifting to include non-abstinence recovery approaches, it will stimulate additional support for programs like AD04, not only within commercial markets but also from government initiatives.
- **Revision of estimates:** For 2024, our EPS estimates drop to a loss of \$3.33 from a loss of \$3.00. For 2025, our estimates are unchanged.
- **Attractive valuation.** Our valuation technique is to sum up all future earnings and discount them to the present. We assume the company reaches breakeven in 2027. That technique yields a value of \$8/share or a market cap of \$50MM. Given the market size and the potential to be a game changing AUD med, even \$8/ share seems conservative to us.

10/16 price: US\$1.03	Market cap: \$7 million	Multiple of book: 1.4x	EV/2025 Sales: NMF
Shares outstanding: 6.4 million	Insider ownership: 10%	3-mo. avg. trading volume: >100,000	Dividend/Yield: NA/NA

GAAP estimates (EPS in dollars – Revenue in USD millions)

Period	EPS	Revenue	Op Margin
1Q23A	(\$2.75)	\$0.00	
2Q23A	\$0.96	\$0.00	
3Q23A	(\$1.14)	\$0.00	
4Q23A	<u>(\$0.82)</u>	<u>\$0.00</u>	
FY23A	<u>(\$3.60)</u>	<u>\$0.00</u>	<u>NMF</u>
1Q24A	(\$2.19)	\$0.00	
2Q24A	(\$0.59)	\$0.00	
3Q24E	(\$0.50)	\$0.00	
4Q24E	<u>(\$0.49)</u>	<u>\$0.00</u>	
FY24E	<u>(\$3.33)</u>	<u>\$0.00</u>	<u>NMF</u>
1Q25E	(\$0.40)	\$0.00	
2Q25E	(\$0.37)	\$0.00	
3Q25E	(\$0.37)	\$0.00	
4Q25E	<u>(\$0.37)</u>	<u>\$0.00</u>	
FY25E	<u>(\$1.51)</u>	<u>\$0.00</u>	<u>NMF</u>

Note: Numbers may not add due to rounding. See our full model at the back of this report.

Cash balance (in USD millions)

• 2022A	• \$4.00
• 2023A	• \$2.83
• 2024E	• \$2.14
• 2025E	• \$1.69

Debt (in USD millions)

• 2022A	• \$0.00
• 2023A	• \$0.00
• 2024E	• \$0.00
• 2025E	• \$0.00

Risks/Valuation

- Risks include a highly regulated and competitive business environment, commercial development, and marketing.
- Our \$8.00 target is derived using a discounted future earnings model.

Company description: Adial Pharmaceuticals is a clinical-stage biopharmaceutical company focused on developing therapies for the treatment and prevention of addiction and related disorders.

Figure 1 – Adial Pharmaceuticals, Inc. – One-Year Trading snapshot



Source: FactSet

ADIL opportunity in the addiction treatment market

We believe AD04 will be a game changer in the treatment of AUD. ADIL's AD04 drug is different. Patients do not have to be abstinent, change their lifestyles and suffer from side effects. It curbs the desire for obsessive drinking and does so with a serotonin-3 blocker. The serotonin-3 is believed to impact the dopamine reward system in the brain. By reducing the amount of serotonin-3, it lowers the cravings that patients have to drink, and it lowers the impulsivity to keep drinking. Because of those two things, patients will drink less. AD04 is an ultra-low dose of ondansetron. It is widely used for nausea and vomiting at much higher doses. It's been on the market since 1991, and because of that, it's got an excellent safety profile.

The company has demonstrated that AD04 is effective if the patient has a certain genotype. This turns any discussion with the patients' doctor into a discussion about their drinking issue being caused by perhaps a medical or genetic condition rather than a behavioral one. Because of that, we think patients are going to be much more receptive to having that discussion and taking the test. And because the treatment is combined with a confirming genetic test, health insurers are more likely to cover the treatment.

Valuation Methodology

We believe ADIL is undervalued, and we support that belief with a discounted future earnings model (see Figure 2).

Discounted Future Earnings – Basis for Price Target

Figure 2 shows the implied value of all future earnings, discounted at 10%. This is based on the projection of reaching breakeven in 2H27 and suggests a stock value of \$7.51, which we round to \$8.00.

Figure 2 – Adial Pharmaceuticals, Inc. – Discounted Future Earnings

		Discounted Earnings: \$7.51	
Year		EPS	Discounted EPS
2024	0	(3.33)	(3.33)
2025	1	(1.51)	(1.37)
2026	2	(0.55)	(0.45)
2027	3	0.00	0.00
2028	4	0.20	0.14
2029	5	0.55	0.34
		Terminal Value:	12.19

Source: Litchfield Hills Research LLC

Guidance and Financial Forecasts

The company provides no guidance. Our financial forecast shows that it will likely need to raise capital in the next 12-24 months.

Figure 3 – Adial Pharmaceuticals, Inc. – Comp Table

FactSet Ticker	Company Name	Closing Price	Market Cap \$MM	EV \$MM	2025 Consensus Multiples				
					Market Cap / Sales	EV /Sales	EV / EBITDA	Price to Book	PE
BIIB-US	Biogen Inc.	\$191.55	27,901	32,891	2.87	3.38	9.09	2.53	11.07
EXAS-US	EXACT Sciences Corp.	\$69.95	12,925	14,730	4.05	4.58	NA	4.27	NA
ALKS-US	Alkermes PLC	\$28.00	4,611	4,279	3.06	2.85	9.49	3.85	10.85
INDV-GB	Indivior PLC (GB Listing)	\$7.66	993	935	0.96	0.93	3.04		5.20
EBS-US	Emergent Biosolutions Inc.	\$9.19	496	1,289				0.19	
MNOV-US	MediciNova Inc. (US Listing)	\$1.81	89	45				1.18	
ANEB-US	Anebulo Pharmaceuticals, Inc.	\$1.90	49	46				18.57	
TRVN-US	Trevena, Inc.	\$2.13	2	22	0.13	1.46			
TTNP-US	Titan Pharmaceuticals	\$4.70	4	0				0.97	
AVERAGE					<u>2.22</u>	<u>2.64</u>	<u>7.20</u>	<u>4.51</u>	<u>9.04</u>

Source: Litchfield Hills Research LLC and FactSet

Figure 4 – Adial Pharmaceuticals, Inc. – Income Statement (\$000)

December ending year	2023A				2023A	2024E				2024E	2025E				2025E
	Q1A	Q2A	Q3A	Q4A	Year	Q1A	Q2A	Q3E	Q4E	Year	Q1E	Q2E	Q3E	Q4E	Year
Total revenue	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Cost of Goods	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Gross Profit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
R&D	676	430	207	(46)	1,267	454	1,013	1,000	1,000	3,467	450	450	450	450	1,800
SG&A	<u>2,244</u>	<u>1,047</u>	<u>1,151</u>	<u>1,178</u>	<u>5,621</u>	<u>1,391</u>	<u>1,275</u>	<u>1,200</u>	<u>1,200</u>	<u>5,065</u>	<u>1,400</u>	<u>1,400</u>	<u>1,400</u>	<u>1,400</u>	<u>5,600</u>
Total Operating Expenses	2,921	1,477	1,358	1,132	6,888	1,845	2,287	2,200	2,200	8,532	1,850	1,850	1,850	1,850	7,400
Operating Income	(2,921)	(1,477)	(1,358)	(1,132)	(6,888)	(1,845)	(2,287)	(2,200)	(2,200)	(8,532)	(1,850)	(1,850)	(1,850)	(1,850)	(7,400)
Other expense incl. disc. ops.	15	<u>2,565</u>	10	(826)	<u>1,765</u>	<u>(4,632)</u>	<u>(171)</u>	<u>0</u>	<u>0</u>	<u>(4,803)</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Pre-Tax Income	(2,906)	1,088	(1,348)	(1,958)	(5,123)	(6,477)	(2,458)	(2,200)	(2,200)	(13,335)	(1,850)	(1,850)	(1,850)	(1,850)	(7,400)
Taxes (benefit)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tax Rate	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Net Income (loss)	(\$2,906)	\$1,088	(\$1,348)	(\$1,958)	(\$5,123)	(\$6,477)	(\$2,458)	(\$2,200)	(\$2,200)	(\$13,335)	(\$1,850)	(\$1,850)	(\$1,850)	(\$1,850)	(\$7,400)
EPS	(\$2.75)	\$0.96	(\$1.14)	(\$0.82)	(\$3.60)	(\$2.19)	(\$0.59)	(\$0.50)	(\$0.49)	(\$3.33)	(\$0.40)	(\$0.37)	(\$0.37)	(\$0.37)	(\$1.51)
Diluted Shares Outstanding	1,059	1,131	1,179	2,400	1,425	2,954	4,183	4,400	4,500	4,009	4,600	5,000	5,000	5,000	4,900

Source: Company reports and Litchfield Hills Research LLC

Figure 5 – Adial Pharmaceuticals, Inc. – Balance Sheet (\$'000)

December ending year	FY2025E	FY2024E	FY2023A	FY2022A
Balance sheet				
Current Assets				
Cash and S.T.I.	\$1,687	\$2,137	\$2,827	\$4,002
Accounts receivable	0	0	0	0
Inventories	0	0	0	0
Other assets	600	400	372	778
Total Current Assets	2,287	2,537	3,199	4,780
Net PP&E	0	0	0	0
Other non-current assets	1,200	1,150	1,538	953
Total Assets	<u>\$3,487</u>	<u>\$3,687</u>	<u>\$4,737</u>	<u>\$5,733</u>
Current Liabilities				
Accounts payable	\$500	\$400	\$127	\$276
Accrued expenses	1,500	400	526	1,138
Other current liabilities	0	0	0	376
Total current liabilities	2,000	800	653	1,791
Conv. and Long Term Debt	0	0	0	0
Other non-current	1,000	0	0	665
Total Liabilities	3,000	800	653	2,456
Stockholders' Equity				
Preferred stock	0	0	0	0
Common stock	20	20	2	1
Additional paid-in-capital	90,000	85,000	72,880	66,950
Retained earnings	(89,533)	(82,133)	(68,798)	(63,675)
Cum. trans. adj. and treasury stock	0	0	0	0
Total stockholders' equity	487	2,887	4,084	3,276
Total Liabilities and equity	<u>\$3,487</u>	<u>\$3,687</u>	<u>\$4,737</u>	<u>\$5,733</u>

Source: Company reports and Litchfield Hills Research LLC

Figure 6 – Adial Pharmaceuticals, Inc. – Cash Flow (\$'000)

	<u>2025E</u>	<u>2024E</u>	<u>2023A</u>	<u>2022A</u>
Net Income	(\$7,400)	(\$13,335)	(\$5,123)	(\$12,731)
Accounts receivable	0	0	0	0
Inventories	0	0	0	0
Other assets	(200)	(28)	407	(379)
PP&E	0	0	0	0
Other non-current	(50)	388	(585)	61
Accounts payable	100	273	(149)	(10)
Accrued expenses	1,100	(126)	(613)	(1,239)
Other current liabilities	0	0	(376)	317
Conv. and Long Term Debt	0	0	0	0
Other non-current	1,000	0	(665)	(579)
Preferred stock	0	0	0	0
Common stock	0	18	1	(20)
Additional paid-in-capital	5,000	12,120	5,930	12,520
Stock subscription receivable	0	0	0	0
Other				
Total Cash Flow	(\$450)	(\$690)	(\$1,175)	(\$2,060)

Source: Litchfield Hills Research LLC

Disclosures:

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