

OAKWOOD

Healthcare Sector

Tonix Pharmaceuticals Holding Corp.



Recommendation: LONG

Current share price: \$19.43

ROI: 234.5%

Target share price: \$65

Stop Loss: \$13.50

TEAM MEMBERS: S.SIVAKUNALAN, R. HOWARD, A.JAMAL, M.NDUNGU



Company Overview: Business Model & Revenue

- Clinical-stage biopharma developing therapies and vaccines for Central Nervous System, infectious, immunology and rare diseases
- 2020 pursued COVID-19 vaccine and biodefense project
- RDC can employ 80-100 scientists and technical support staff
- Revenue from grants and contracts (government/agency)
- Development and clinical activities in U.S
- Activity primarily on Research and Development
- Clinical stage company with minimal product revenue
- TNXP's R&D expenses exceed product revenue, typical for company focused on drug development

PERIOD END DATE	PRODUCT REVENUE	R&D EXPENSES
SEPTEMBER 30, 2025	\$3.3 Million	\$9.3 Million
JUNE 30, 2025	\$2.0 Million	\$10.8 Million

Company Overview: Economic MOAT & Competitive Advantage

- Tonix repurposes license molecules with novel biologics, shortening development time and lowering regulatory risk
- Targeted program differentiation, where their programs are niche, such as Long COVID, which reduces direct competition at least initially
- They advance their programs to regulatory conditions and late-stage regulatory activity, such as meeting with FDA
- Newly released fibromyalgia drug Tonmya
- Tonix's focus is clinical stage, so the 'MOAT' is mostly a potential, regulatory process, designations, identified mechanism programs
- Financials show focus on R&D
- MOAT is more strategic/regulatory rather than revenue-backed
- Cash/Liquidity, they reported \$190.1 million cash, and existing cash was expected to fund operations into Q1 2026

Financial Statement

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS (unaudited) - USD (\$) \$ in Thousands	3 Months Ended		9 Months Ended	
	Sep. 30, 2025	Sep. 30, 2024	Sep. 30, 2025	Sep. 30, 2024
REVENUE:				
Product revenue, net	\$ 3,290	\$ 2,822	\$ 7,717	\$ 7,512
COSTS AND EXPENSES:				
Cost of revenue	1,367	1,555	5,582	6,582
Research and development	9,289	9,114	27,545	31,675
Selling, general and administrative	25,701	7,707	52,007	24,519
Asset impairment charges				58,957
	36,357	18,376	85,134	121,733
Operating loss	(33,067)	(15,554)	(77,417)	(114,221)
Grant income	982	1,668	2,941	1,668
Gain on change in fair value of warrant liabilities				6,150
Loss on extinguishment of debt	0	0	(2,092)	0
Interest income	1,231	18	2,802	21
Interest expense		(301)	(89)	(954)
Other expense, net	(1,156)	(44)	(3,256)	(592)
Net loss available to common stockholders	\$ (32,010)	\$ (14,213)	\$ (77,111)	\$ (107,928)
Net loss per common share, diluted	\$ (3.59)	\$ (22.68)	\$ (10.42)	\$ (466.17)
Net loss per common share, basic	\$ (3.59)	\$ (22.68)	\$ (10.42)	\$ (466.17)
Weighted average common shares outstanding, basic	8,922,792	626,669	7,403,400	231,523
Weighted average common shares outstanding, diluted	8,922,792	626,669	7,403,400	231,523

Industry Overview: Fragmented Biotech Landscape

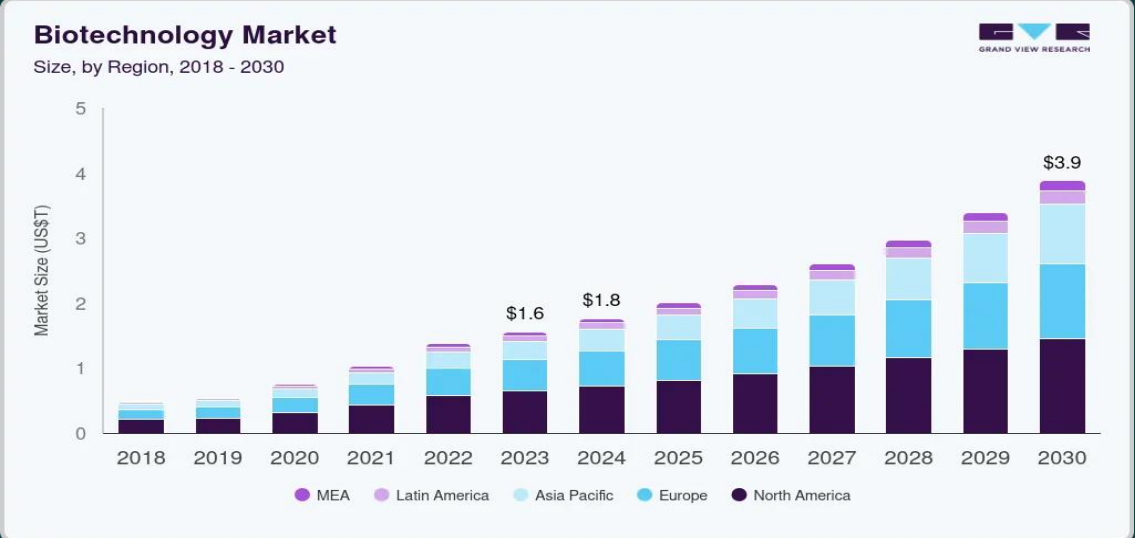
Market Structure:

- Tonix operates in specific, high barrier segments with a mix of large pharma and small biotech competitors
 - Focussed data-driven growth
 - 2024 Market Size: USD 1.55 Trillion
 - NA: market share 41.7%
 - CAGR (2024-2030): 13.96%

Therapeutic Area Breakdown:

- Tonix is well positioned across four sub-sectors in the industry each with differing levels of competition:
 1. **Central Nervous System Disorders:** large pharma (e.g. Johnson & Johnson, Pfizer), specialised biotech's (e.g. Sage Therapeutics for depression)
 2. **Infectious Diseases:** dominated by large pharma (e.g. Pfizer, Roche) and expansion across gene sequencing
 3. **Rare diseases:** companies targeting the same rare disease include Soleno Therapeutics and Pfizer
 4. **Immunology:** companies with approved biologics (e.g. Abb), and developers of novel analgesic's/ anti-inflammatories

Biotechnology Market Size: 2018-2020



Industry Overview: Niche Via Focussed Innovation

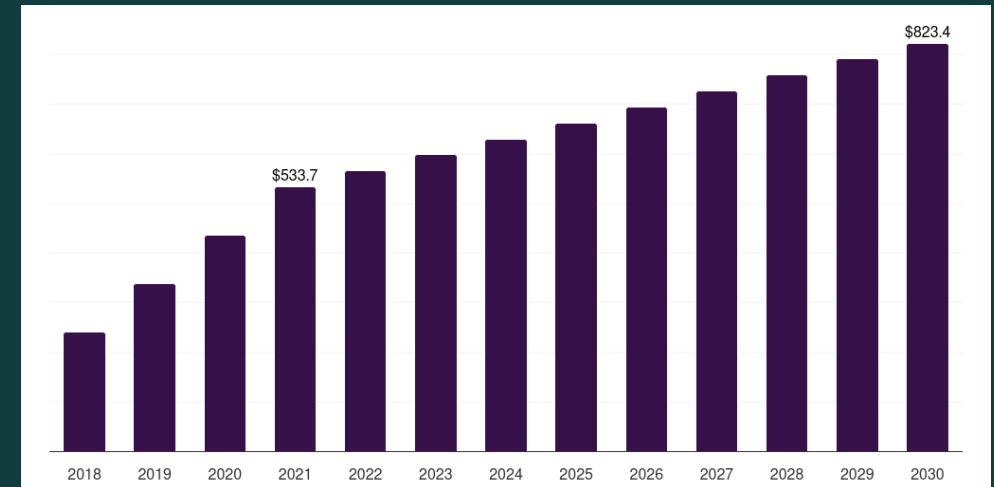
Projected M&A Activity Boom:

- The market is fragmented and in a period of consolidations and strategic partnerships
 - Direct response to loss of exclusivity (LOE) impacting annual returns
 - Mid to late 2020's patents are expiring
 - Tonix Pharmaceuticals is well positioned as has introduced the first new fibromyalgia drug in 15 years
 - Strong investment activity: average funding round valued at \$47.7 million with >98,000 funding rounds

Market Power & Structure:

- Tonix has found a niche within pain management industry
 - Focus on High-Unmet Need: targets indications where current standard of care is insufficient (e.g. Fibromyalgia)
 - IP as Moat: patents protecting their novel formulations (e.g. TNX-102 SL for PTSD) provide market exclusivity
 - PTSD Market Current TAM NA: \$1.29 billion (2024), projected to grow to \$1.63 billion by 2030 at a CAGR of 4%

North America post-traumatic stress disorder treatment market, 2018-2030 (US\$M)



Investment Thesis 1: The Product

TONMYA - (previously TNX-102 SL)

- Achieved **FDA approval** August 15th 2025
- Treats Fibromyalgia – first drug of its kind in **16 years**
- Fibromyalgia causes pain all over the body, as such a drug to treat it will likely be highly **inelastic** in terms of price
- In America, **2.7 million** people are diagnosed and treated for Fibromyalgia with an estimated **10 million** adults who suffer from it
- Roll out of Tonmya began last month and will continue into **Q1 of 2026**.
- Pricing at **\$1860 a month** on the basis of their much better **reduced side effect** profile compared to competitors plus **sleep aspect focus**
- Offer the Tonmya savings program for eligible commercially insured patients
- A modest market penetration of 1% puts the annual revenue at **\$1.24 billion dollars**
- Not just limited to the US, Tonix plans for their market to expand into Japan and China with Tonmya by filing a **CTN** (clinical trial notification) and **IND** (investigational new drug) application

Penetration Rate	Patients (approx)	Annual Revenue (\$B)
1%	55,440	1.24
5%	277,200	6.18
10%	554,400	12.36
15%	831,600	18.54
20%	1,108,800	24.72
25%	1,386,000	30.95
50%	2,772,000	61.92

Other Drugs and Projects

- Currently marketing and selling:
- Zembrace SymTouch (a rapid pain relief sumatriptan injection for migraines)
- And Tosmyra (a nasal spray also for migraines)
- In the 3rd quarter net product revenue as a result of these drugs was **~\$3.3million**
- Several other projects in the pipeline like TNX-1500, TNX-4200, and TNX-801. (etc)
- Diversity → not reliant or vulnerable to one product

Investment Thesis 2: Financials that Indicate Product Success

Financials

- Tonix Pharmaceuticals currently hold **\$190.1 million** in cash according to their 3rd quarter earnings report
- Trading at **\$19.43** currently, their market cap sits at **\$228.9 million** – **just over the cash** they hold and that is only due to very recent bullish movement
- Undervalued just on their cash and capital (**\$42.57 million**) alone, but factoring in Tonmya as well as their other projects truly shows how 'cheap' the current price is
- **Q3 2025** earnings report has shown a significant increase in their general and administrative costs compared to last year over the same period
- Spending going into ensuring the roll out of Tonmya with **investment** in marketing infrastructure and sales force expansion
- Helps to ensure the success of Tonmya initially which would reflect on the Q4 2025 and Q1 2026 reports to act as catalysts

- Furthermore, their large cash holdings serve to ensure the successful rollout of this drug

Institutions

- **20.45%** of TNXP held by **institutions** showing big players moving in
- **Blackrock 7.80%**
- **Vanguard 6.35%**
- Moves by those much more informed show how **undervalued** TNXP currently is as well as the **confidence** these institutions have in Tonmya despite the aggressive pricing

	Three Months Ended September 30,	
	2025	2024
REVENUE:		
Product revenues, net	\$ 3,290	\$ 2,822
COSTS AND EXPENSES:		
Cost of sales	1,367	1,555
Research and development	9,289	9,114
General and administrative	25,701	7,707
Asset impairment charges	-	-
Total operating expenses	36,357	



Valuation: Comparable Company Analysis

Comparable Companies Analysis												
Company	Ticker	Market Data					Financials			Valuation		
		Share Price	Shares Outstanding	Equity Value	Net Debt	Enterprise Value	Revenue	EBITDA	Net Income	EV/Revenue	EV/EBITDA	P/E
Tonix Pharmaceuticals	TNXP	19.64	11.78	231.3592	-189.64	420.9992	10.3	-97.46	-99.22	40.87370874	-4.3197127	-2.33178
Tenaya Therapeutics Inc.	TNYA	1.41	166.51	234.7791	-44.78	279.5591	0	-88.51	-94.26	DIV/0	-3.158503	-2.490761
Editas Medicine Inc.	EDIT	2.42	97.62	236.2404	-146	382.2404	46.38	-112.04	-199.84	8.241492022	-3.4116423	-1.182148
Voyager Therapeutics Inc.	VYGR	4.28	55.6	237.968	-170.56	408.528	31	-136.19	-126.78	13.01873805	-2.9996916	-1.877015
Quince Therapeutics Inc.	QNCX	4.01	55.68	223.2768	-8.3	231.5768	0	-41.68	-56.98	DIV/0	-5.5560653	-3.918512
Humacyte Inc.	HUMA	1.23	187.27	230.3421	31.48	198.8621	2	-97.32	-36.97	126.663758	-2.0433837	-6.230514
High										126.663758	-2.0433837	-1.182148
75th Percentile										69.84124801	-2.9996916	-1.877015
Average										47.19942419	-3.5814998	-3.005122
Median										26.94622339	-3.2850726	-2.41127
25th Percentile										11.82442654	-4.0926951	-3.561574
Low										8.241492022	-5.5560653	-6.230514
Tonix Pharmaceuticals Valuation										EV/Revenue	EV/EBITDA	P/E
Implied Enterprise Value										486.1540692	349.052966	108.52816
Net Debt										-189.64	-189.64	-189.64
Implied Market Value										675.7940692	538.692966	298.16816
Shares Outstanding										11.78	11.78	11.78
Implied Value Per Share										57.36791759	45.7294538	25.311389

- Peer group of clinical-stage biotechs with similar market caps
- All the implied share prices are higher than Tonix's current market price but...
- **EV/Revenue** is the most appropriate multiple for Tonix as it is high growth firm that isn't profitable yet with low revenue
- Implied share price: **\$57.3**, showing Tonix is **undervalued** purely off of current figures
- Comps reflect Tonix **today** and **don't** capture a **major catalyst** like Tonmya or project the future



Valuation: DCF

WACC Analysis: Tonix Pharmaceuticals (13.5%)

- Current Capital Structure: 100% Equity
 - No debt in the capital structure > common for clinical-stage biotech's
 - Potential to strategically add lower-cost debt (e.g. 4-8%) to lower its WACC
- Comparative Perspective: High vs. Established Peers
 - Large pharma (e.g., Pfizer, J&J): 6–10% WACC
 - Key drivers of their lower cost: stability, diversified revenue

Discount Rate (WACC)	13.5%
TV Growth Rate	4
PV of Terminal Value	3
Enterprise Value	709943486
Equity Value	899573486
Shares	11776542
Est. Share Price	\$76.39

Revenue Build

- Strong revenue growth post-2025 down period shows Tonix Pharmaceuticals is leading with Tonmya drug
 - 2025: \$10M (launch year)
 - 2026: \$125M (rapid formulary access)
 - 2027: \$140M (steady-state growth)
- 6x Exit multiple > optimistic compared to industry standard

Year	2023	2024	2025E	2026E	2027E
Revenue	7.8	10.1	10	125	140
% growth	0%	29.5%	1.0%	1126%	12.1%
EBIT	-118.3	-77.9	-112.7	-89.7	-4.5
% of sales	-1516.7%	-77.9	-1104.9%	-71.8%	-3.2%
Taxes	0	0	0	0	0
% of EBIT	0%	0%	0%	0%	0%
D&A	4.3	3.4	3.9	3.9	3.9
% of sales	55.1%	33.7%	37.7%	3.1%	2.8%

Risks, Catalysts and Mitigants

Catalysts (9-12 months)

- Phase 3 results for TNX-102 SL in Fibromyalgia
- Expansion of CNS & rare disease pipeline
- Licensing/partnership opportunities
- Cash runway improvement
- CNS/mind-health sector tailwinds

Event path (0-12 months)

- 0–3M: Trial updates, financial visibility
- 3–6M: Interim CNS readouts
- 6–12M: Phase 3 results + regulatory steps

Risks

Cash Burn & Dilution: High R&D spend requires frequent equity raises.

Lead Asset Dependence (TNX-102 SL) valuation heavily tied to fibromyalgia candidate.

Regulatory Risk (FDA Approval) NDA for TNX-102 SL may face delays or additional data requirements.

Commercialization Risk Market uptake post-approval uncertain; competition and reimbursement risk

Mitigants

Raised \$30M upfront in Dec 2023 registered direct offering; additional 2024 offerings funded development. Demonstrates access to capital to sustain operations and clinical milestones.

Two positive Phase 3 trials completed; proprietary sublingual formulation differentiates product. Pipeline expansion in CNS, immunology, and infectious disease reduces reliance on a single asset.

NDA preparation actively underway; capital allocated to support filing and review process. Management experience and prior FDA engagement reduce uncertainty.

Differentiated sublingual TNX-102 SL formulation targets unmet needs. Tonix owns Tonix Medicines, which provides infrastructure for commercialization.



Appendix 1: DCF Model

DCF	2020	2021	2022	2023	2024	2025	2026	2027
Revenue	0	0	0	7.8	10.1	10	125	140
% growth	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	29.5%	1.0%	1126.0%	12.1%
EBIT	-50.5	-92.4	-112.0	-118.3	-136.7	-112.7	-89.7	-4.5
% margin	#DIV/0!	#DIV/0!	#DIV/0!	-1516.7%	-1353.5%	-1104.9%	-71.8%	-3.2%
Taxes	0	0	0	0	0	0	0	0
% of EBIT	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
EBIAT						-113	-90	-5
D&A						4	4	4
% of sales						37.7%	3.1%	2.7%
CapEx						5	5	5
% of sales						46.6%	3.8%	3.4%
Change in NWC						(18)	(18)	(18)
% of sales						(180.2%)	(14.7%)	(13.1%)
Unlevered FCF						(95)	(72)	13
Present Value of FCF						(84)	(56)	9
Sum of PV of FCF								(131)
Terminal Value								4
Present Value of Terminal Value								3
Enterprise Value								710
+ Cash								190055000
- Debt								425000
Equity Value								899,573,486
Shares								11776542
Share Price							\$	76.39

(In millions apart from per share amounts)

