

Investor Presentation

Activating Innate Immunity.

Protecting & Extending Life.



Symbol

NASDAQ: VBIO

Period

April 2026

Presenter

Michael Handley CEO

Company Overview

Harnessing the innate immune system — our first line of defense against pathogens, cancer, and diseases of aging

Entolimod™ Lead Asset

Most advanced TLR5 compound in the world

\$140M+ Prior Investment

Institutional & government-backed capital deployed

300+ Humans Dosed

Extensive clinical safety and efficacy dataset

Pre-BLA Late Stage

Lead asset approaching regulatory submission

Valion Bio (Nasdaq: VBIO) is a late-stage biopharma company developing Entolimod — the world's most advanced TLR5 agonist — for acute radiation syndrome under the FDA Animal Rule pathway, oncology supportive care, and immuno-oncology. The company acquired a \$140M+ de-risked asset including an active IND, FDA Fast Track, and Orphan Drug designation. Its wholly owned CDMO subsidiary, Velocity Bioworks, provides domestic biomanufacturing and a path to non-dilutive revenue.

01. The world's most advanced innate immunity modifying agent — Entolimod.
02. Advancing it to commercialization for the treatment of multiple human conditions.
03. Building a pipeline of innate immune system modifying therapies that improve clinical outcomes and save lives.

The Problem We Solve

Cancer Treatment Toxicity Remains Severely Underaddressed

60%

of cancer patients receive chemo
or radiation

Cancer Treatment Toxicity

Neutropenia and GI damage drive hospitalizations. CRT is the primary limiter in cancer care — not the disease itself.

ZERO

SNS stockpile agents with dual
tissue protection

Radiation Countermeasures

G-CSF only stimulates bone marrow. No approved agent simultaneously protects and stimulates both bone marrow and GI tissue.

\$183B

global immunotherapy
market 2025

Immune System Decline

Immunosenescence affects hundreds of millions globally. No approved therapeutic mitigates reverses immunosenescence exists anywhere in the world.

* Wagle NS, Nogueira L, et al. "Cancer treatment and survivorship statistics, 2025." CA: A Cancer Journal for Clinicians. Published online May 30, 2025. doi:10.3322/caac.70011.

TLR5 Platform: Large Market Opportunity

A Clinically Validated Innate Immunity Platform with Two Near-Term Value Drivers



Oncology Supportive Care

\$22.3B

- 50-70% of chemoradiotherapy (CRT) patients develop neutropenia*
- Dual-tissue protection vs. G-CSF (bone marrow only)
- Physician-sponsored trials — Q3 2026
- 6 institutional sites committed
- <\$3M full Phase 2 program cost



Acute Radiation Syndrome

\$5.5B

- OR = 7.9 survival benefit ($p < 0.0001$)
- \$35.6M in prior federal contracts
- BARDA TechWatch x2 complete (2026)
- NIAID contract signed Mar 26, 2026
- Non-dilutive capital pathway

*Li X, Wang J, Zhang Y, et al. A retrospective study on the analysis of influencing factors of neutropenia in endometrial cancer with adjuvant chemoradiotherapy. Radiat Oncol. 2024;19(1):75. Published 2024 Jun 18. doi:10.1186/s13014-024-02469-8

**Coherent MI, "Global Acute Radiation Syndrome Market to reach USD 7.80 Billion by 2032," August 2025.

TLR5 Platform: Large Market Opportunity

\$330B+ Combined Addressable Market Across Four Immunology Verticals



1 - Coherent MI, "Global Acute Radiation Syndrome Market to reach USD 7.80 Billion by 2032," August 2025.

2 - Cancer Supportive Care Drugs Market Size, Share and Trends 2026 to 2035, <https://www.precedenceresearch.com/cancer-supportive-care-drugs-market>

3 - Immuno-Oncology Drugs Global Market Report 2026, <https://www.giiresearch.com/report/tbrc1955471-immuno-oncology-drugs-global-market-report.html>

4 - Immunotherapy Drugs Market Size, <https://www.gminsights.com/industry-analysis/immunotherapy-drugs-market>

TLR5 Platform: Competitive Differentiation

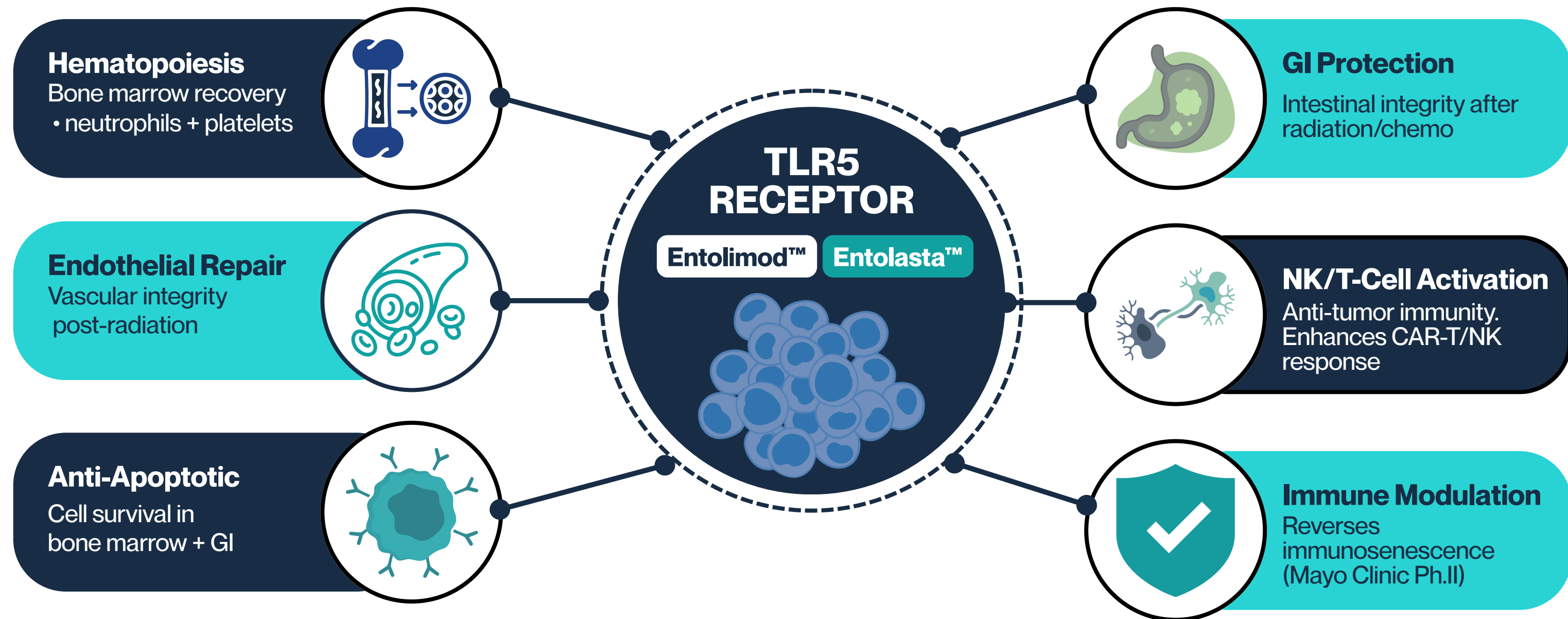
Why Entolimod Wins: A Structurally Differentiated Asset

- 01.** Only Dual-Tissue Protection & Treatment
Simultaneous bone marrow and GI protection & treatment — no other approved or investigational agent delivers both.
- 02.** Survival Benefit: OR = 7.9
Statistically significant odds ratio in ARS survival studies, establishing compelling efficacy data.
- 03.** 25-Hour Post-Exposure Window
Uniquely effective after radiation exposure — critical for real-world emergency deployment scenarios.
- 04.** \$35.6M in Government Contracts
Prior BARDA/NIAID/DTRA/NASA/Army funding validates scientific and strategic importance of the asset.
- 05.** NIAID Non-Clinical Testing Agreement
Entered into an agreement to test Entolimod in government and DoW in vivo models

TLR5 Platform: One Receptor. Multiple Disease States.

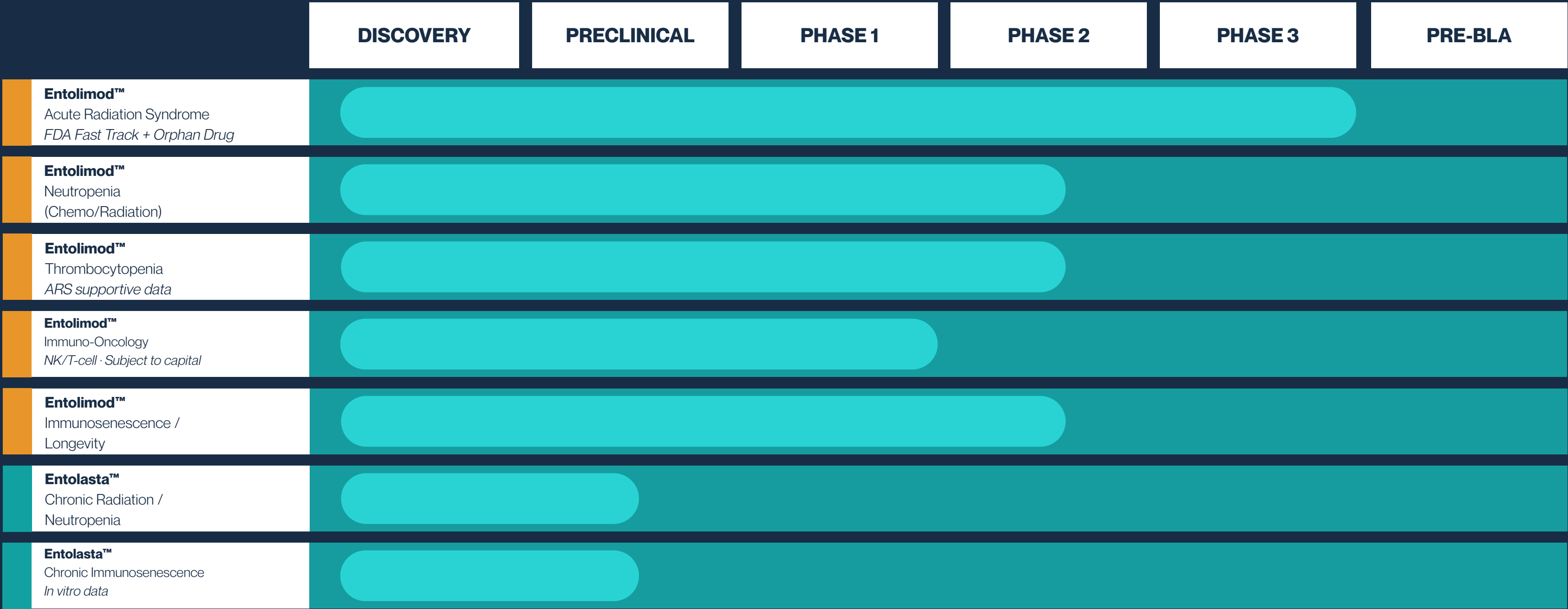
Pleiotropic action — one mechanism drives multiple high-value indications simultaneously

Targeted activation drives a coordinated biological response across multiple tissue systems — enabling one mechanism to address multiple clinical indications.



One Platform: Development Pipeline

Two assets · Multiple indications · **\$140M+** prior investment





Oncology Supportive Care: Our Primary Focus

A Near-Term Revenue Path

50%

of patients receiving myelosuppressive CRT develop neutropenia, a life-threatening reduction in white blood cells.

\$22.3B

Oncology supportive care market is dominated by G-CSF agents that address only bone marrow suppression — a therapeutic gap Entolimod is uniquely positioned to fill.

Mechanism / Benefit	Entolimod	G-CSF (SOC)
Hematopoietic Protection	✓ Yes	✓ Yes
GI / Mucosal Protectio	✓ Yes	✗ No
Thrombopoiesis	✓ Yes	✗ No
NK Cell Activation (IO)	✓ Yes	✗ No
Single-Dose Protocol	✓ Yes	✗ No (Neulasta only)
ARS / Radiation Use	✓ Yes	✗ No



ARS: Acute Radiation Syndrome

A Non-Dilutive Funding Engine via the Animal Rule

Pre-BLA

The FDA's Animal Rule enables approval of medical countermeasures when human efficacy trials are ethically not feasible — a pathway well-suited to Entolimod's ARS program.

\$5.5B

Government procurement opportunity through the Strategic National Stockpile (SNS) represents a capital-efficient, non-dilutive route to initial revenue.

01.

Animal Rule Pathway

Established regulatory precedent for biodefense countermeasures where controlled human exposure trials cannot be conducted.

02.

BARDA / NIAID Engagement

Active dialogue with federal biodefense agencies; \$35.6M in prior government contracts validates strategic and scientific relevance.

03.

SNS Procurement

Approval triggers mandatory stockpile procurement — a pull-through revenue mechanism that does not require commercial infrastructure.

Additional Value Drivers Require No New Mechanism

Immuno-Oncology Combinations

Entolimod's NK and T-cell activation creates a compelling rationale for combination with CAR-NK/T therapies which is in the **\$120B–\$421B immuno-oncology market**. No new IND required to initiate combination studies.

Longevity & Immunosenescence

The **\$183B longevity market** represents a structurally underserved opportunity. Entolimod has completed a Mayo Clinic Phase II trial targeting age-related immune decline — a category with no approved therapies.

Strong Competitive Positioning

Entolimod vs. Established G-CSF Standard of Care

Property	Entolimod	Neupogen (filgrastim)	Neulasta (pegfilgrastim)	Leukine (sargram.)	Nplate (romiplo.)
Hematopoietic Protection	✓	✓	✓	✓	✗
GI Mucosal Protection	✓	✗	✗	✗	✗
Thrombopoiesis	✓	✗	✗	✗	✓
NK/T Cell Activation	✓	✗	✗	✗	✗
Single-Dose Protocol	✓	✗	✓	✗	✗
Prophylactic + Therapeutic	✓	✓	✓	✓	✗
ARS / Radiation Countermeasures	✓	✓	✓	✓	✓

Velocity Bioworks

Vertically Integrated, Government-Compliant Biomanufacturing

Domestic Supply Chain

Meets U.S. government requirements for federally funded biodefense procurement and SNS stockpiling.

CDMO Revenue Potential

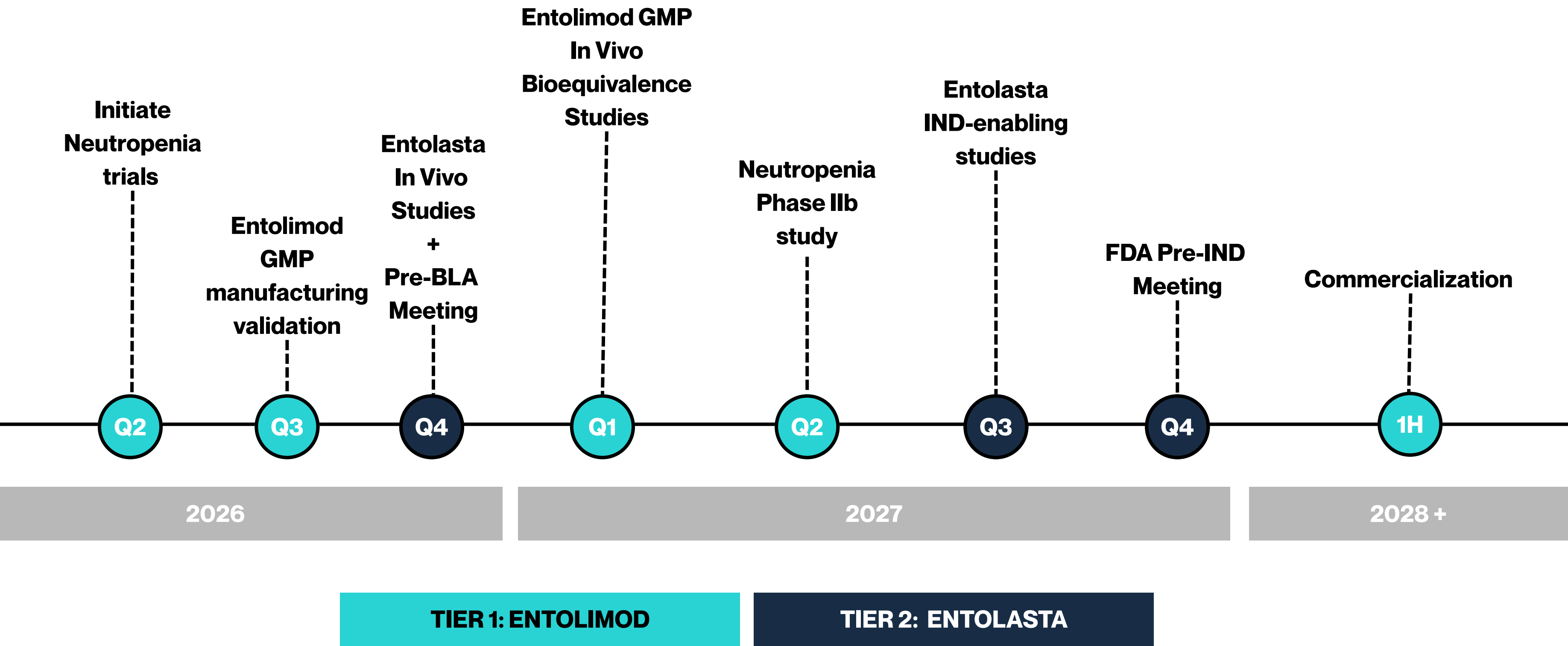
Excess capacity can be monetized via contract manufacturing services — a non-dilutive revenue stream independent of clinical outcomes.

200× Scale-Up Achieved

Manufacturing process successfully scaled from research to commercial-grade production volumes.

Catalyst Roadmap: Multiple Significant Milestones

Primary events that will drive shareholder value



Path to Revenue Generation

Three Distinct, Parallel Routes to Commercialization

1. Government / ARS

ARS Program → BARDA Contract
→ FDA Approval (Animal Rule) →
SNS Procurement

- Non-dilutive pathway.
- Strategic National Stockpile purchases does not require commercial infrastructure/spend.
- Multiple Customers (BARDA, DoW, JSOC, etc.)

2. Commercial / Oncology.

Neutropenia Trials → Phase II/III
Data → NDA Submission →
Commercial Launch

- A \$22B fragmented market with established payer coverage and physician familiarity.
- Differentiated profile (GI + H) vs. G/M-CSF supports premium positioning and accelerated formulary adoption.

3. Velocity Bioworks

Clinical and Commercial →
Biomanufacturing for other Biotech
Companies

- \$50MM+ in capacity
- From bench-top to potentially commercial scale
- Analytical and storage capabilities

Financial Snapshot

Investment Phase: Platform Build With Clear Runway to Key Catalysts

Positioned as an investment-phase platform build — current capital deployed toward milestones that management expects will substantively re-rate the asset.



\$12.6M

Solid Cash Position

Balance sheet as of most recent reporting period



\$50M

Equity Line

Committed facility available as needed



~18mo

Operational Runway

Sufficient to reach several material catalysts.

A Management Team Focused on Execution

Experienced Operators With Institutional Biotech and Government Credentials



Michael Handley

Chief Executive Officer & Director

25+ years in biopharma commercialization and regulatory leadership. Instrumental in 17 U.S. product approvals generating billions in revenue. Foundational career at Amgen and Genentech; former CEO of Statera Biopharma. Wharton Executive Education.



Lisa Wolf

Chief Financial Officer

CPA with 30+ years in public company finance, SEC reporting, and capital markets execution. Architected Valion Bio's 2025 financial transformation — Velocity acquisition, \$50M equity line, and biopharma pivot.



Curt Dewitz

Vice President, Corp & Business Strategy

Over 25 years transactional experience in Public/Private companies, mergers, reverse mergers, B2B and B2C Sales, Venture Capital, Product Placement, Biotech and Medical Device launch. Mr. Dewitz has raised and facilitated more than \$500 million in Capital, over \$700 million in acquisitions and has taken and helped facilitate taking 21 companies public in the past 15 years.

Investment Highlights

Activating Innate Immunity. Protecting Life.

01.

De-Risked Platform

\$140M+ in prior investment and 300+ humans dosed establishes an extensive safety and efficacy foundation — far beyond typical early-stage biotech risk.

02.

Oncology-First Strategy

Clear near-term commercial pathway in a \$22B market with differentiated efficacy vs. entrenched but mechanistically limited G-CSF standard of care.

03.

Non-Dilutive Funding Pathway

BARDA engagement and SNS procurement pathway provide a capital-efficient route to initial revenue that preserves shareholder equity.

04.

Integrated Manufacturing

Velocity Bioworks provides domestic, scalable, vertically integrated manufacturing — a strategic and regulatory asset that competitors cannot easily replicate.

05.

Multiple Near-Term Catalysts

BARDA funding decision, neutropenia trial initiation, and Mayo Clinic Phase II readouts represent sequential, near-term value inflection points across 12–24 months.

[CONTACT US](#)

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