MAIA BIOTECHNOLOGY

Telomere Targeting Immunotherapies for Cancer

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MAIA Biotechnology (NYSE American: MAIA) is an immuno-oncology company focused on the development and commercialization of first-in-class drugs intended to meaningfully improve and extend the lives of people with hard-to-treat cancers. Our new science for cancer therapy utilizes a novel dual mechanism of action: telomere targeting and immunogenicity. Our lead program is ateganosine (formerly known as THIO), a first-in-class anticancer agent currently being studied in two late-stage clinical trials for the treatment of non-small cell lung cancer (NSCLC).

Ongoing pivotal Phase 3 clinical trial: High probability of technical success for interim and full analysis.

Multiple Catalysts and Value Drivers

❑ Ateganosine, a Potential Breakthrough Therapy:

- **Only direct telomere-targeting anticancer agent in clinical development anywhere**
- **Substantial commercial opportunity in a projected $70B global immunotherapy market by 2030**[1]

❑ Two Late-Stage Clinical Trials Ongoing:

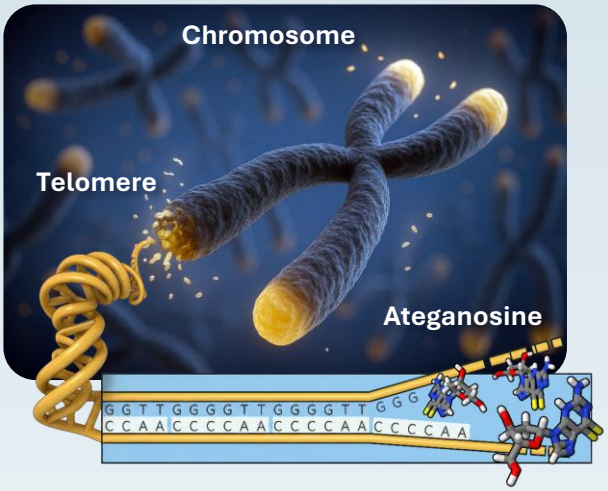
- **Pivotal Phase 3 THIO-104 Trial:** Ateganosine + checkpoint inhibitor (CPI) Libtayo® vs. Investigator's Choice in third-line (3L) NSCLC
  - ✓ **Large population, high unmet clinical need:** Patients resistant to immune and chemotherapy (~50,000 US patients per year)
  - ✓ **Potential early full commercial approval** based on Overall Survival (OS) interim analysis
  - ✓ **Potential full commercial approval** based on OS final analysis
- **Phase 2 THIO-101 Expansion Trial:** Ateganosine + Libtayo in 3L NSCLC
  - ✓ **Potential for accelerated approval**
  - ✓ **Regeneron:** ongoing clinical supply agreement for Libtayo

❑ Late-Stage Clinical Progress, Clear Regulatory Pathway:

- **Unprecedented interim measures of efficacy in third-line NSCLC:**
  - ✓ **90.5% disease control rate (DCR)** (25%-35% DCR for standard of care)[2]
  - ✓ **38% overall response** (4-6x SoC)[3]
  - ✓ **24+ months overall survival** (exceeds all known benchmarks)
  - ✓ **U.S. FDA Fast Track Designation** for 3L NSCLC patients resistant to chemotherapy and CPIs

❑ Strong and Growing IP Portfolio

- **FDA New Chemical Entity (NCE):** 5-year marketing exclusivity for ateganosine, if approved.
- **Five patent families**: 3 issued US patents, 9 issued foreign patents, 4 US and 11 foreign pending patent applications
- **Current patents/provisional applications provide broad coverage:**
  - ✓ Telomere targeting compounds (2034+)
  - ✓ Immunogenic treatment strategy: ateganosine + CPI (2041)



Dual mechanism of action

Telomere-Targeting

- Ateganosine is guanine-analog small molecule that is incorporated into telomeres by the enzyme telomerase (present in over 80% of human cancers)
- Telomeric structure and function are compromised, leading to selective cancer cell death

Immunogenic Effect

- Micronuclei are produced containing Ateganosine-modified telomeric DNA fragments that reach immune cells, activates both innate (cGAS/STING) and adaptive (T-cell) immune responses, further promoting cancer cell death
- The sequential treatment of ateganosine followed by immune checkpoint inhibitors (CPI) resulted in profound and persistent tumor regression in advanced, in vivo, cancer models

NYSE American: MAIA

Share Price[1]	**$1.28**	**Float**[2,3]	**51.3M**
Market Cap[1]	**$77M**	**Insider Holdings**[2]	**14%**
Shares Outstanding[2]	**60.8M**	**Cash**[2]	**$34.4M**

1. July 23, 2026
2. March 31, 2025
3. Defined as: (total common shares) – (common shares held by Directors & Officers)

[1] Research and Markets, March 2026. [2] THIO-101 Part C 3L study: 19 of 21 patients in efficacy evaluable population who had at least one tumor scan after starting treatment . [3] THIO-101 Parts A and B

Robust Pipeline

Ateganosine (THIO) Telomere Targeting Agent

Clinical Trial	Indication	Treatment	Status	Preclinical	Phase 1	Phase 2	Phase 3	Rights
THIO-104	NSCLC	Ateganosine → Libtayo®	Ongoing Phase 3					Worldwide rights owned by MAIA
THIO-101	NSCLC	Ateganosine → Libtayo®	Ongoing Phase 2			Clinical supply agreement with REGENERON		
THIO-102-CRC	CRC	Ateganosine → tislelizumab	Planned Phase 2			Clinical supply agreement with BeOne		
THIO-102-SCLC	SCLC	Ateganosine → tislelizumab	Planned Phase 2			Clinical supply agreement with BeOne		
THIO-102-HCC	HCC	Ateganosine → tislelizumab	Planned Phase 2			Clinical supply agreement with BeOne		

Additional future trial with Roche in planning.

2nd Generation Telomere Targeting Agents

Agent	Indication	Status	Preclinical	Phase 1	Phase 2	Phase 3	Rights
MAIA-2021-020	Multiple Tumor Types	IND Enabling					Developed in-house fully-owned by MAIA
MAIA-2022-012	Multiple Tumor Types	IND Enabling					
MAIA-2021-029	Multiple Tumor Types	IND Enabling					

❑ Clinical Opportunities in Multiple Indications

- **Ateganosine + CPI trials planned for additional cancer indications**
  - ✓ **BeOne Medicines:** clinical supply agreement for tislelizumab - colorectal cancer (CRC), liver (HCC), and small cell lung cancer (SCLC)
  - ✓ **Roche:** master agreement for atezolizumab for a future clinical trial

❑ Valuable Regulatory Designations

- **3 U.S. FDA Orphan Drug Designations:** HCC, SCLC, brain (malignant gliomas)
- **1 U.S. FDA Rare Pediatric Disease Designation:** children's brain cancers

❑ 2nd Generation Telomere Targeting Agents

- **84 new molecules engineered**; same mechanism of action as ateganosine
- Following ateganosine to commercial stage within 4-5 years

❑ Well-Capitalized for Continuing Development, Strong Signals of Confidence:

- **$33M raised in most recent underwritten public offering (March 2026):**
  - ✓ Six new institutional investors contributed 90% of gross proceeds
  - ✓ Full funding secured for pivotal Phase 3 trial through completion
  - ✓ Participation by Board members in nearly all transactions since inception
  - ✓ Directors and officers hold a 20.5% stake in MAIA (July 2026)

Cancer Fast Facts

- **Diagnosis:** ~40% of people alive today will have cancer during their lifetime
- **Mortality:** ~30% will die from cancer
- **NSCLC:** #1 tumor type: Mortality 1.7M / Sales $34B (2023)
- **Colorectal cancer (CRC):** #2 cancer type: Mortality 1M / Sales $20B (2023)

Treatment: Ateganosine + CPI
(3-week cycles)

Day 1
Ateganosine **60mg**
Day 2
Ateganosine **60mg**
Day 3
Ateganosine **60mg**
Day 4
Immune **Activation**
Day 5
CPI

Vlad Vitoc, MD, MBA

Founder, Chairman, and Chief Executive Officer

- 25+ years in Pharma/Biotech: Commercial, Medical,
- 12 compounds launched across 20+ tumor types
- Leadership roles at Bayer (Nexavar), Astellas (Tarceva, Xtandi), Cephalon (Treanda), Novartis (Zometa), and Incyte (Jakafi)

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