# MAIA BIOTECHNOLOGY

## TELOMERE TARGETING IMMUNOTHERAPIES FOR CANCER

## NYSE AMERICAN: MAIA

January 2026

# FORWARD-LOOKING STATEMENTS



All statements in this presentation, other than those relating to historical facts, are "forward-looking statements." These forward-looking statements may include, but are not limited to, statements relating to our objectives, plans, and strategies; statements that contain projections of results of operations or of financial condition; statements relating to the industry and government policies and regulations relating to our industry; and all statements (other than statements of historical facts) that address activities, events, or developments that we intend, expect, project, believe, or anticipate will or may occur in the future. Forward-looking statements are not guarantees of future performance and are subject to risks and uncertainties. We have based these forward-looking statements on assumptions and assessments made by our management in 2024, their experience and their perception of historical trends, current conditions, expected future developments, and other factors they believe to be appropriate. Important factors that could cause actual results, developments, and business decisions to differ materially from those anticipated in these forward-looking statements include, among other things: the overall global economic environment; general market, political, and economic conditions in the countries in which we operate: projected capital expenditures and liquidity; changes in our strategy; government regulations and approvals; the application of certain service license;  and litigation and regulatory proceedings. Factors that may cause such differences also include, but are not limited to, those discussed under Risk Factors set forth in our Annual Report on Form 10-K for the year ended December 31, 2024, and other periodic reports filed by the Company from time to time with the Securities and Exchange Commission. You may get these documents for free by visiting EDGAR on the Commission's website at www.sec.gov. We caution you that forward-looking statements are not guarantees of future performance and that our actual results of operations, financial condition and liquidity, and the development of the industry in which we operate may differ materially from the forward-looking statements contained in this presentation 2024, among other factors, the factors referenced in the "Risk Factors" section of our Annual Report on Form 10-K for the year ended December 31, 2024. In addition, even if our results of operations, financial condition and liquidity, and the development of the industry in which we operate are consistent with the forward-looking statements contained in this presentation, they may not be predictive of results or developments in future periods. This presentation shall not constitute an offer to sell or the solicitation of an offer to sell or the solicitation of an offer to buy any of our securities nor shall there be any sale of securities in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such jurisdiction. Any offering of securities can only be made in compliance with applicable securities laws. You should read carefully the factors described in the “Risk Factors" section of our Annual Report on Form 10-K for the year ended December 31, 2024, to better understand the risks and uncertainties inherent in our business and underlying any forward-looking statements. These statements are only current predictions and are subject to known and unknown risks, uncertainties, and other factors that may cause our or our industry's actual results, levels of activity, performance, or achievements to be materially different from those anticipated by the forward-looking statements. You should not rely upon forward-looking statements as predictions of future events. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance, or achievements. Except as required by law, we are under no duty to update or revise any of the forward-looking statements, whether as a result of new information, future events or otherwise, after the date of this prospectus. These forward-looking statements speak only as of the date of this presentation, and we assume no obligation to update or revise these forward-looking statements for any reason.

# INVESTMENT PROFILE

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- **New science for cancer therapy with dual mechanism of action: Telomere Targeting and Immunogenicity**
  - **Ateganosine (THIO):** lead molecule in 2 ongoing clinical trials (Phase 3 and Phase 2)
  - **Second generation compounds in R&D**
- **Phase 3 Trial THIO-104: Ateganosine (THIO) + Libtayo® vs. Investigator's Choice in third-line Non-Small Cell Lung Cancer (NSCLC)**
  - **Large population with high unmet clinical need:** Patients resistant to immune and chemotherapy (~50,000 patients per year in the US)
  - **Overall Survival (OS) interim analysis:** potential early full commercial approval with high probability of technical success (PTS)
  - **OS final analysis:** potential full commercial approval with very high PTS
- **Phase 2 trial THIO-101 expansion: Ateganosine (THIO) + Libtayo in third-line NSCLC**
  - **Unprecedented efficacy to date:**
    - ✓ 88% disease control rate (3x higher than Standard of Care)
    - ✓ 38% overall response (4-6x SoC)
    - ✓ 17.8 months median overall survival (3x SoC)
  - **Potential for accelerated approval**
  - **Regeneron:** continued clinical supply agreement for Libtayo

# INVESTMENT PROFILE



## ❑ Multiple Ateganosine (THIO) + checkpoint inhibitor 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 - signed in 2025 for a future clinical trial

## ❑ Regulatory achievements to date

- **3 U.S. FDA Orphan Drug Designations:** HCC, SCLC and brain (malignant gliomas)
- **1 U.S. FDA Rare Pediatric Disease Designation:** children's brain cancers
- **1 U.S. FDA Fast Track Designation:** third-line NSCLC patients resistant to chemotherapy and checkpoint inhibitors

**Ateganosine (THIO)**
**is the only direct telomere-targeting anticancer agent in clinical development**

# ROBUST PIPELINE

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## Ateganosine (THIO) Telomere Targeting Agent

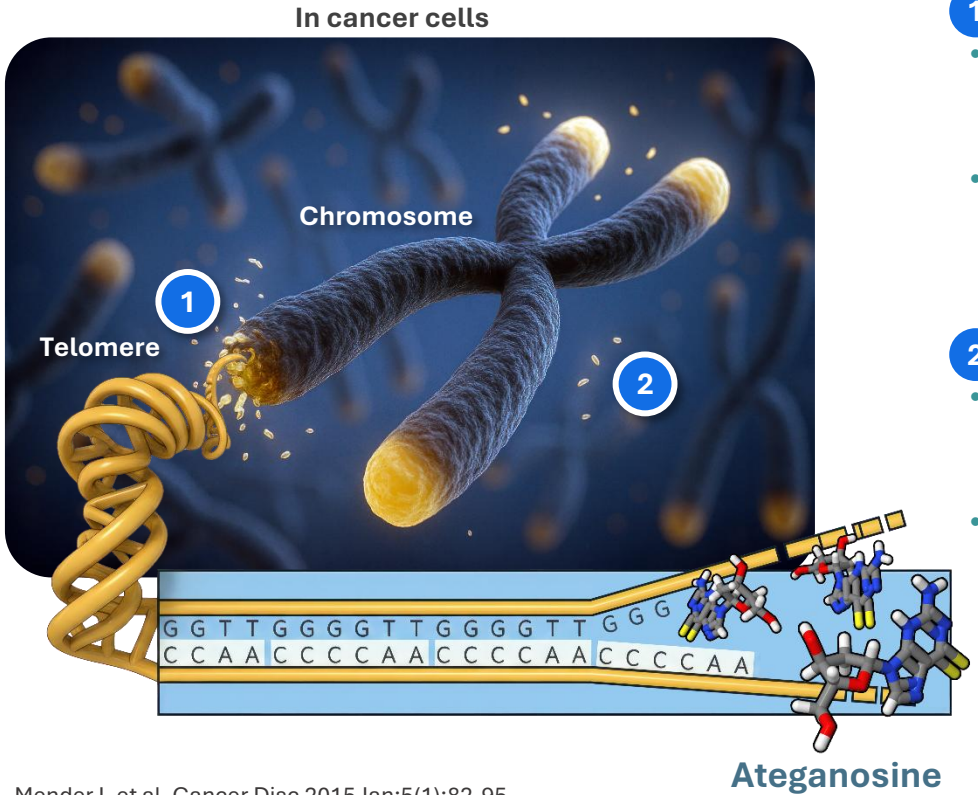
| Clinical Trial | Indication | Treatment | Status | Preclinical | Phase 1 | Phase 2 | Phase 3 | Rights |
|---|---|---|---|---|---|---|---|---|
| THIO-104 | NSCLC | Ateganosine → Libtayo® | Ongoing Phase 3 | | | | | Worldwide rights owned by MAIA |
| THIO-101 | NSCLC | Ateganosine → Libtayo® | Ongoing 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 | | | | | |

## Ateganosine (THIO, 6-thio-2'-deoxyguanosine) has a novel dual mechanism of action




### 1 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[1]

### 2 Immunogenic Effect

- Micronuclei are produced containing **Ateganosine**-modified telomeric DNA fragments that reach immune cells[1]
- 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*[2]

1. Mender I, et al. Cancer Disc 2015 Jan;5(1):82-95.
2. Mender I, et al. Cancer Cell 2020;38:400–11.

# PRECLINICAL STUDIES – RATIONALE FOR TRIALS

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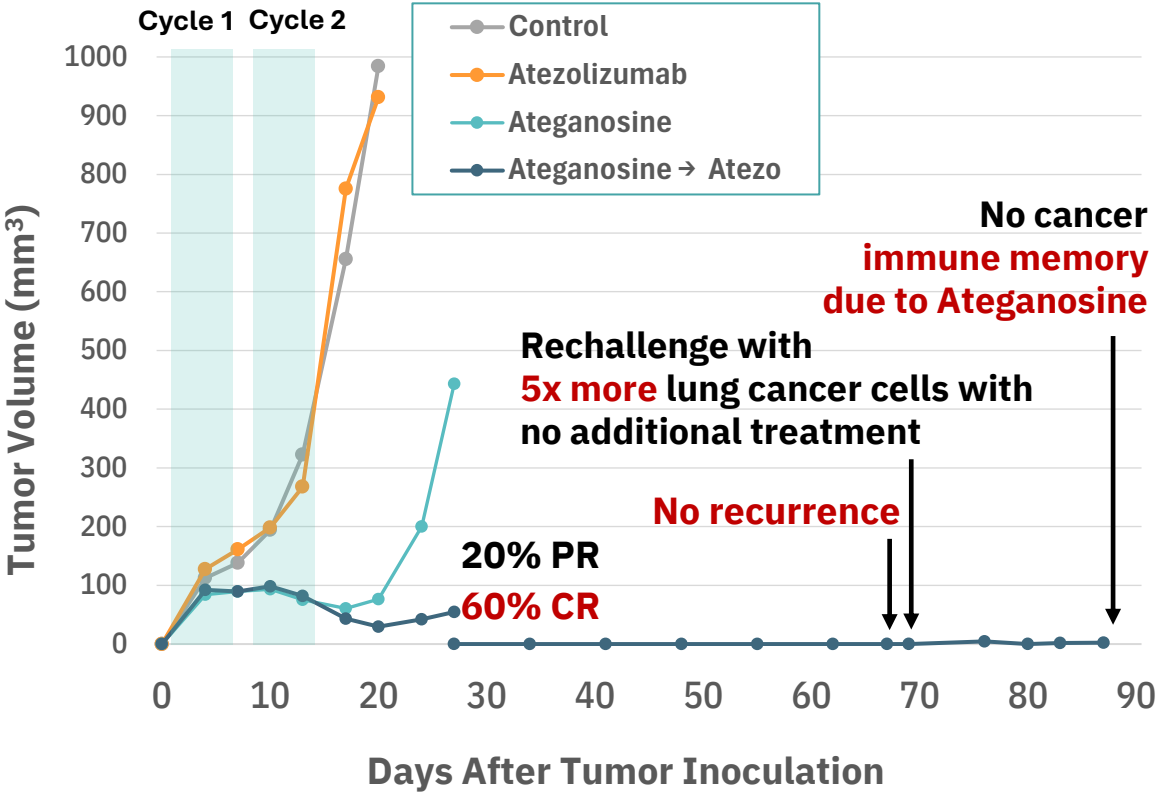



- In Non-Small Cell Lung Cancer (NSCLC), **Ateganosine (THIO)** followed by CPI results in 60% complete response
- Only 2 cycles of therapy were administered on weeks 1 and 2; no further therapy throughout the study
- No recurrence after long-term follow-up
- Anticancer immune memory has been induced: no cancer after rechallenge with 5x more lung cancer (LLC) cells with no additional therapy

***Great potential for expansion:*** *studies in other cancer models (including liver, colorectal, brain and more) have been conducted with similar or better outcomes.*

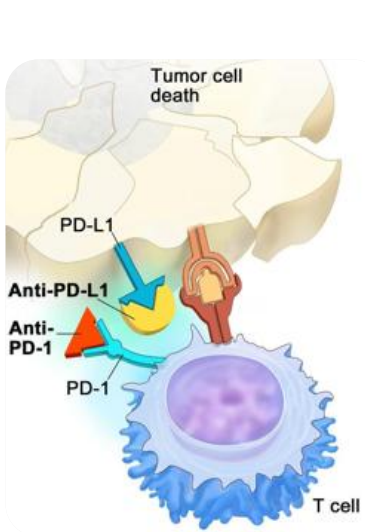
**Source:** Mender et al, Cancer Cell, 2020; Ateganosine (THIO) followed by Tecentriq (atezolizumab; Roche/Genentech) tested first; repeated later with Ateganosine followed by Keytruda (pembrolizumab; Merck); and Libtayo (cemiplimab; Regeneron). Data from preclinical results.

# VAST APPLICABILITY



## Sequential combination with any checkpoint inhibitor (CPI)

**Examples of commercially available CPIs**




LIBTAYO (cemiplimab) REGENERON

TEVIMBRA (tislelizumab) BeOne

TECENTRIQ (atezolizumab) Genentech A Member of the Roche Group

KEYTRUDA (pembrolizumab) MERCK

IMFINZI (durvalumab) AstraZeneca

Jemperli (dostarlimab-gxly) Injection 500 mg GSK

OPDIVO (nivolumab) Bristol Myers Squibb

BAVENCIO avelumab Injection 20 mg/mL EMD SERONO

## Achievements to date

- ✓ **Clinical supply agreement with for cemiplimab with Regeneron** for NSCLC on THIO-101
- ✓ **Clinical supply agreement for tislelizumab with BeOne Medicines** for CRC, SCLC and HCC on THIO-102 planned trials
- ✓ **Master agreement for atezolizumab with Roche** for a future clinical trial
- ✓ **3 U.S. FDA Orphan Drug Designations (ODD)**
  - Hepatocellular Carcinoma (HCC, 90% of primary liver cancers)
  - Small Cell Lung Cancer (SCLC, deadliest lung cancer)
  - Malignant Gliomas (brain cancer)
- ✓ **1 U.S. FDA Rare Pediatric Disease Designation (RPDD)**
  - Pediatric-type diffuse high-grade gliomas
- ✓ **1 U.S. FDA Fast Track Designation (FTD)**
  - Non-Small Cell Lung Cancer

# NSCLC CLINICAL TRIALS

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# THIO-101 PHASE 2 TRIAL (ONGOING)

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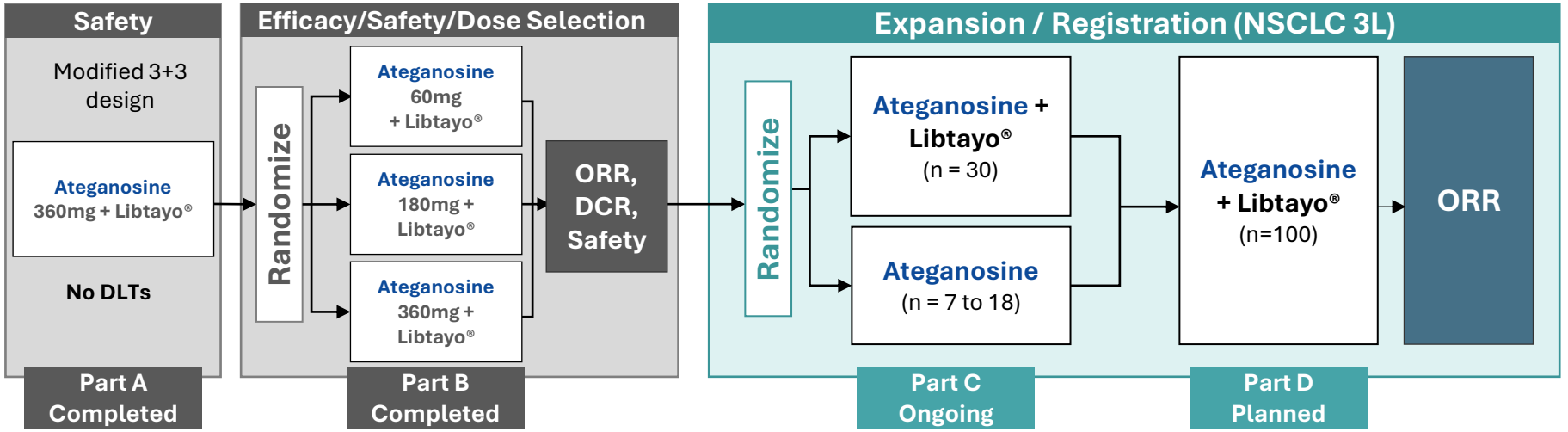
**A Multicenter, Open-label, Dose-Finding Phase 2 Trial Evaluating the Safety and Efficacy of Ateganosine (THIO) Administered in Sequence with Libtayo® (cemiplimab) in NSCLC Patients Who Are Resistant to Checkpoint Inhibitors**




- Total of 79 patients enrolled (24 treated in 60mg dose group, 41 in 180mg, and 14 in 360mg)
- Best dose: 180mg - selected on Nov'23
- Enrollment completed Feb'24

- Up to 148 patients – Part C enrollment started in Jul'25
- Patient population:
  - CPI Resistance (SITC)
  - Chemotherapy Resistance

ClinicalTrials.gov: https://clinicaltrials.gov/study/NCT05208944

**Treatment with ateganosine (THIO) + Libtayo®**

**Ateganosine (THIO)**
**Cycles every 3 weeks**

| Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
|---|---|---|---|---|
| Ateganosine 60mg | Ateganosine 60mg | Ateganosine 60mg | Immune Activation | Libtayo® 350mg |

**Scans every 6 weeks**

# THIO-104 PHASE 3 PIVOTAL TRIAL (ONGOING)

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**A Multicenter, Open-label, Pivotal Phase 3 Trial Evaluating the Efficacy of Ateganosine (THIO) Administered in Sequence with Libtayo® (cemiplimab) in NSCLC Patients Who Are Resistant to Checkpoint Inhibitors and Chemotherapy**

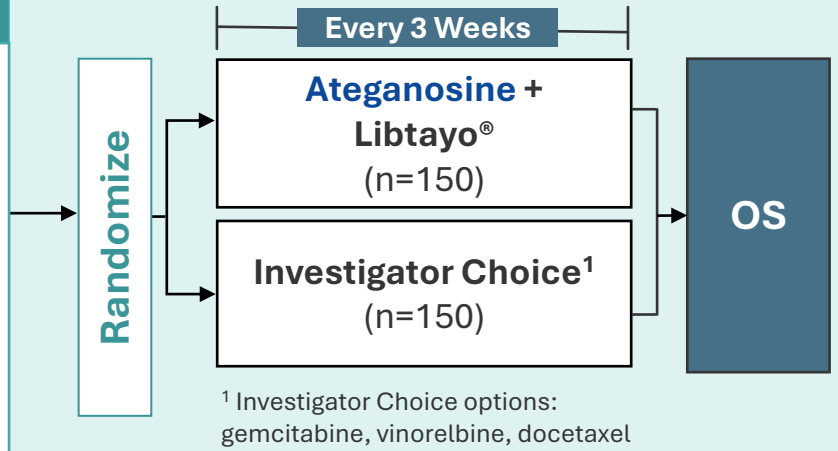
## NSCLC 3L

**Patient Population:**

- CPI Resistance (SITC criteria)
- Prior Platinum Therapy
- 2 prior lines of systemic therapy
- Excluding Driver Mutations
- Exclude untreated or symptomatic CNS mets
- PS 0-1

**Stratified by:**

- Prior docetaxel vs. no prior docetaxel




[1] Investigator Choice options: gemcitabine, vinorelbine, docetaxel

| | |
|---|---|
| **Primary Endpoint** | Overall Survival 7.8m v. 5.8m (HR 0.74) |
| **Secondary Endpoints** | DCR; ORR; DoR; PFS; Safety |

# MARKET ENTRY STRATEGY



**3L NSCLC is an excellent market entry segment:**

- Highly unmet medical need in this immunotherapy-resistant and chemotherapy-resistant population
- No current standard of care for this setting
- Large population
- Limited competition for clinical trials patients
- Best results observed in THIO-101

**THIO-101 (Phase 2, ongoing):**

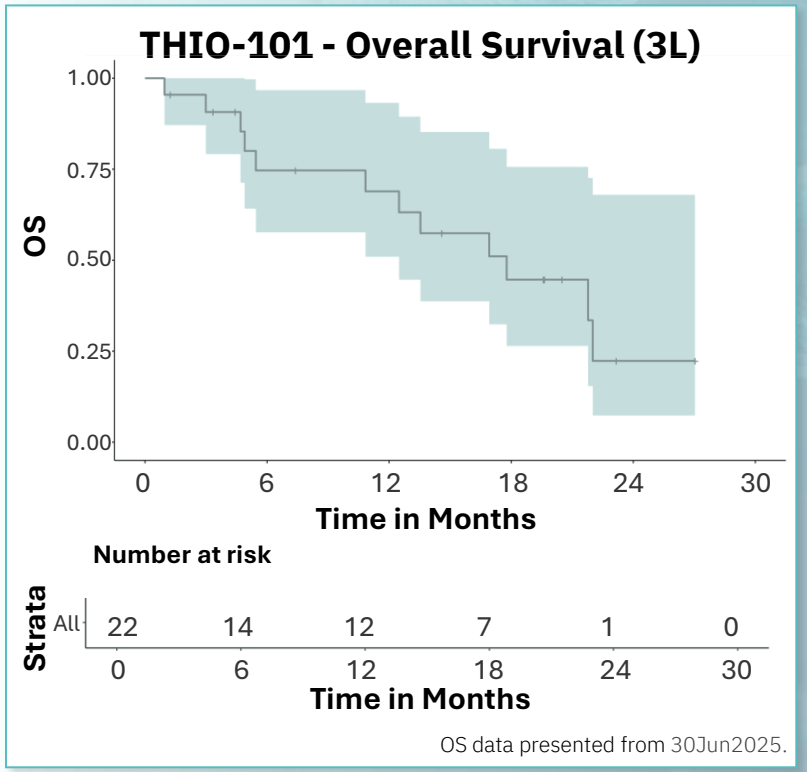
- Median Overall Survival (OS) is at **17.8 months**[1]
  - 95% CI lower bound: 12.5 months
  - 99% CI lower bound: 10.8 months
- The treatment has been generally well-tolerated to date in this heavily pre-treated population[2]

**THIO-104 (Pivotal Phase 3, ongoing):**

- Full approval trial started screening and enrolling in 2025

**Focus on execution:**

- Probability of OS to be > 7.8 months (HR 0.74 vs. chemo) is >99%




OS data presented from 30Jun2025.

1. Clinical data presented from **17Nov2025** data cut and includes all patients who received at least one dose of ateganosine (intent to treat population). This is a snapshot including ongoing subjects and data pending full verification. Due to short duration of treatment and/or follow up, data is subject to change.
2. Details on safety can be found on the announced ASCO 2025 poster available on MAIA's website.

# EXPECTED EFFICACY IN TRIALS IN NSCLC 3L



## THIO-101 Phase 2

| | Ateganosine + Libtayo® (n = 137-148) |
|---|---|
| Target Population | • CPI + Platinum Resistant<br>• Prior treatment with docetaxel |
| ORR | >30%[1] |

## THIO-104 Pivotal Phase 3

| | Ateganosine + Libtayo® (n = 150) | Chemotherapy (n = 150) |
|---|---|---|
| Target Population | • CPI + Platinum Resistant<br>• Stratified: prior docetaxel vs. no prior docetaxel | |
| OS | **Expected:** >12 months<br>**Needed:** 7.8 months | 5.8 months[2] |

1. Chemotherapy has overall response rates of ~6-10% (Girard N, et al. J Thorac Onc 2009;12:1544-1549).
2. Girard N, et al. J Thorac Onc 2009;12:1544-1549.

**Note:** Estimates based on the interim results observed from THIO-101.

# PROBABILITY OF TECHNICAL SUCCESS



## THIO-104 Design

- OS is the primary endpoint
- 90% power to detect HR=0.62, median 9.4 months vs 5.8 months[1] (chemo)
- Interim analysis boundary 1-sided p<0.0074 at 131 deaths
- Final analysis boundary 1-sided p<0.0228 at 186 deaths

## Bayesian Assurance[2] Calculation

**All 3L patients from THIO-101**

**Control:**

- Median OS assumption (literature):
  - ✓ 6.1 months (95% CI: 2.8, 8.9)[3]

**Ateganosine (THIO):**

- Using 3L data from THIO-101 (n=22):
  - ✓ 17.8 months (95% CI: 12.5, 22.5)[4]

**Probability to succeed at the interim analysis = 96%**

**Probability to succeed at the final analysis = 99%**

1. Girard N, et al. J Thorac Onc 2009;12:1544-1549.
2. O'Hagan A, Stevens JW, Campbell MJ. Assurance in clinical trial design. Pharmaceutical Statistics 2005; 4:187–201.
3. A.T. Freeman et al. Curr Oncol. 2020 May 1;27(2):76–82 (https://pmc.ncbi.nlm.nih.gov/articles/PMC7253749/ )
4. Observed median OS from THIO-101 as of 30-Jun-2025.

# PLANNED TRIALS IN OTHER TUMOR TYPES

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# THIO-102 TRIALS (PLANNED)

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## Multicenter, Open-label, Phase 2 Trials Evaluating the Safety and Efficacy of Ateganosine (THIO) Administered in Sequence with Tislelizumab in CRC, SCLC and HCC

| | **Part A/B:** Safety/Efficacy Signal (n=~40) | | | | **Part C:** Pivotal Phase 2 (n=~80) |
|---|---|---|---|---|---|
| **THIO-102-CRC** Colorectal Cancer (CRC) | Ateganosine → | Immune Activation → | Tislelizumab → | ORR → | Expansion |
| **THIO-102-SCLC** Small Cell Lung Cancer (SCLC) | Ateganosine → | Immune Activation → | Tislelizumab → | ORR → | Expansion |
| **THIO-102-HCC** Hepatocellular Carcinoma (HCC) | Ateganosine → | Immune Activation → | Tislelizumab → | ORR → | Expansion |

**Treatment with Ateganosine (THIO) + tislelizumab**

**Ateganosine (THIO)**
**Cycles every 3 weeks**

| Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
|---|---|---|---|---|
| Ateganosine | Ateganosine | Ateganosine | Immune Activation | tislelizumab |

**Scans every 6 weeks**

**Note:** Clinical trials currently in planning stage. Names of trials, indications and number of patients are subject to review and may be updated before trial initiation. Trials in solid tumors, such as Breast, Prostate, Gastric, Pancreatic and Ovarian may be pursued via investigator sponsored trials.

# COLORECTAL RATIONALE

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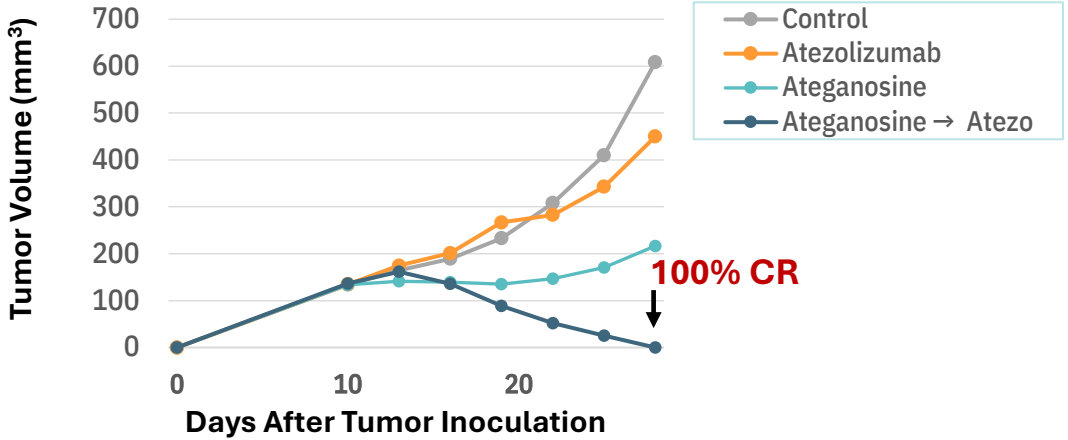
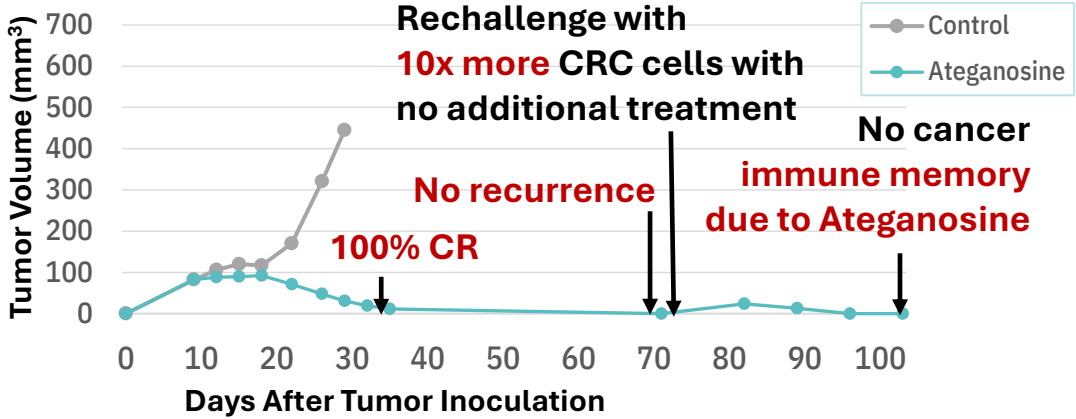
## Preclinical Studies in Colorectal Cancer (CRC)

- Ateganosine (THIO) followed by CPI results in 100% complete response
- Only 2 cycles of therapy were administered on weeks 1 and 2; no further therapy throughout the study
- No recurrence after long-term follow-up
- Anticancer immune memory has been induced: no cancer after rechallenge with 10x more CRC cells with no additional therapy



# SCLC & HCC – AWARDED ORPHAN DRUG DESIGNATIONS

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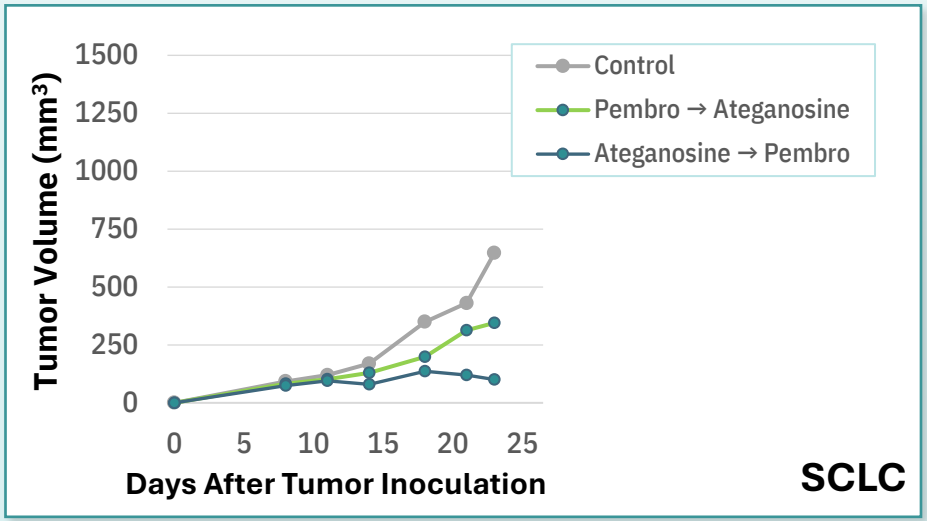
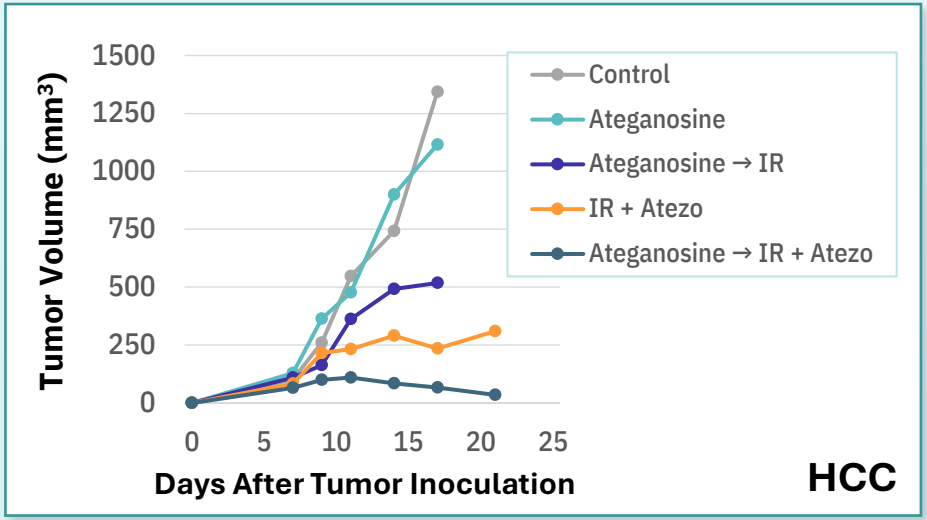
## Preclinical Studies in Small Cell Lung Cancer (SCLC)

- Ateganosine (THIO) is synergistic with anti-PD-1 agent Pembrolizumab in Small Cell Lung Carcinoma (H2081) *in vivo* in humanized murine cancer model
- Treatment with Ateganosine followed by Pembrolizumab results in highly potent anticancer effect, as compared to Pembrolizumab alone
- Ateganosine converts immunologically "cold non-responsive" SCLC tumor into "hot and responsive" to Pembrolizumab

## Preclinical Studies in Hepatocellular Carcinoma (HCC)

- Ateganosine is highly synergistic and effective in combination with anti-PD-L1 agent Atezolizumab and Ionizing Radiation (IR 10Gy) in HCC53N Hepatocellular Carcinoma
- Treatment with Ateganosine in combination with IR and Atezolizumab results in a complete regression of aggressive HCC tumors. The combination of IR and Atezolizumab is just partially efficacious



# EXCELLENT EFFICACY IN HCC MODELS

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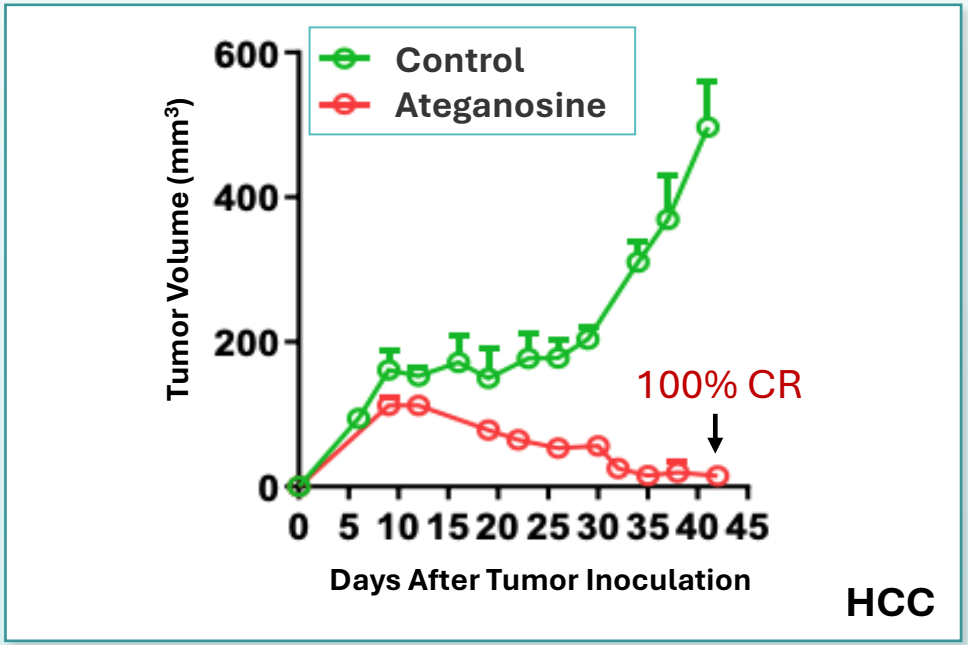
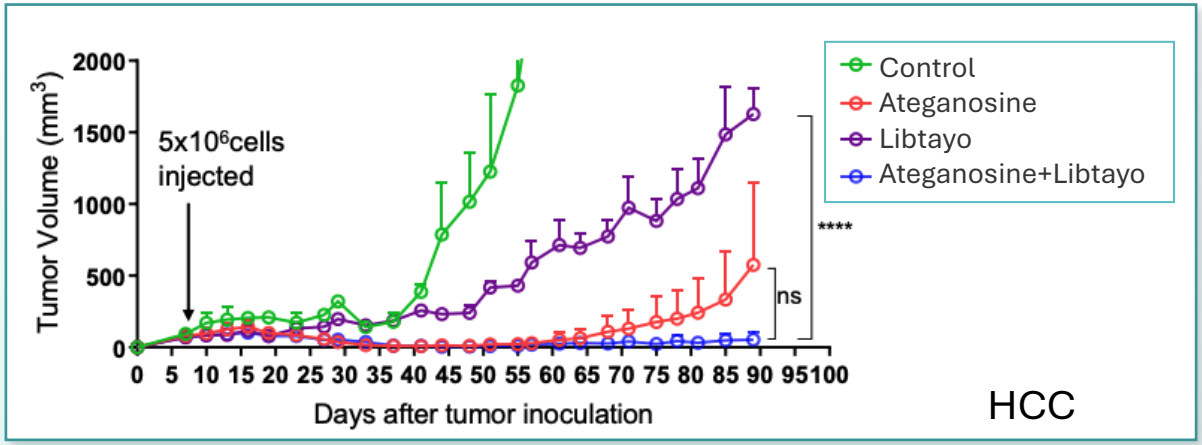
**Ateganosine (THIO)** achieved **complete and durable responses in Hepatocellular Carcinoma (HCC)**, the dominant histology in primary liver cancer (90%), in *in vivo* models

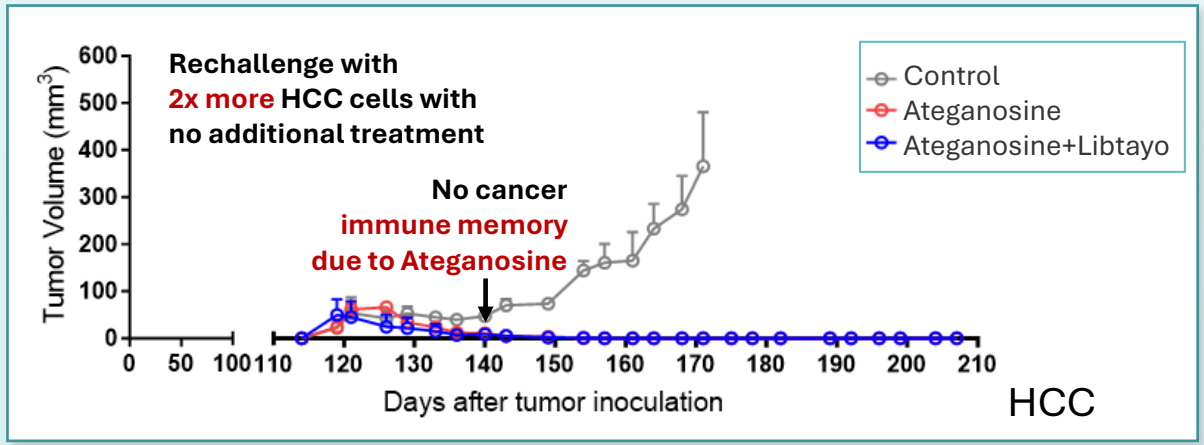


# HCC ANTI-CANCER IMMUNE MEMORY



- When combined with immunotherapy checkpoint inhibitor Libtayo®, duration of response was further potentiated
- Upon rechallenge with two times more cancer cells and no additional treatment, tumor growth was completely prevented
- Administration of ateganosine (THIO) alone and in combination with Libtayo® generated anti-cancer immune memory



# INVESTMENT OPPORTUNITY

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# EXPERIENCED MANAGEMENT TEAM

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## Vlad Vitoc, MD, MBA

***Founder and CEO***

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

## Sergei Gryaznov, PhD

***Chief Scientific Officer***

- 26+ years as Scientist
- Expert Drug Discovery and Development, Oncology with 120+ publications
- Head of the J&J Oligonucleotide Center of Excellence Worldwide
- Expert of telomeres and telomerase in cancer, co-inventor of ateganosine (THIO)

## Jeffrey Himmelreich, MBA

***Head of Finance***

- 20+ years of financial expertise
- CFO for privately held and publicly traded companies in the healthcare and manufacturing industries
- Active CPA licensed in the state of Pennsylvania and is a Chartered Global Management Accountant

NOVARTIS astellas Pfizer BAYER janssen Incyte
Cephalon Oncology geron PHARMACIA exicure

# Goal: New Chemical Entity (NCE) Marketing Exclusivity

- Ateganosine (THIO) has never been previously approved by the FDA for commercialization
- Robust exclusivity
  - **US:** Upon FDA approval - 5 years NCE (with additional 2 years based on Hatch Waxman for potential generic challenge), 2 years Rare Pediatric Disease designation, and 7 years Orphan Drug Designation (ODD); MAIA has obtained ODD for HCC, SCLC, Malignant Gliomas (including GBM).
  - **EU, Japan, other markets:** 10 years

**Robust and Growing Patent Portfolio for THIO**

- 10 issued patents and Europe validated in 19 countries
- 36 pending patent applications

**Current patents/provisional applications broadly cover the following key areas:**

- Telomere targeting compounds (2034+)
- Ateganosine's immunogenic treatment strategy: sequential combination with CPIs (2041)

**Next generation – Composition of matter patents**

- MAIA-001, Multiple Tumor Types, exclusivity to 2043
- MAIA-002, Multiple Tumor Types, exclusivity to 2044
- MAIA-003, Multiple Tumor Types, exclusivity to 2044

# SIGNIFICANT MARKET OPPORTUNITY



## Developing agents for the top tumor types markets globally

**NSCLC (#1 WW)**
- **Mortality:** 1.7M
- **Sales:** $34B

**Hepatocellular Carcinoma**
- **Mortality:** 0.8M
- **Sales:** $3.8B

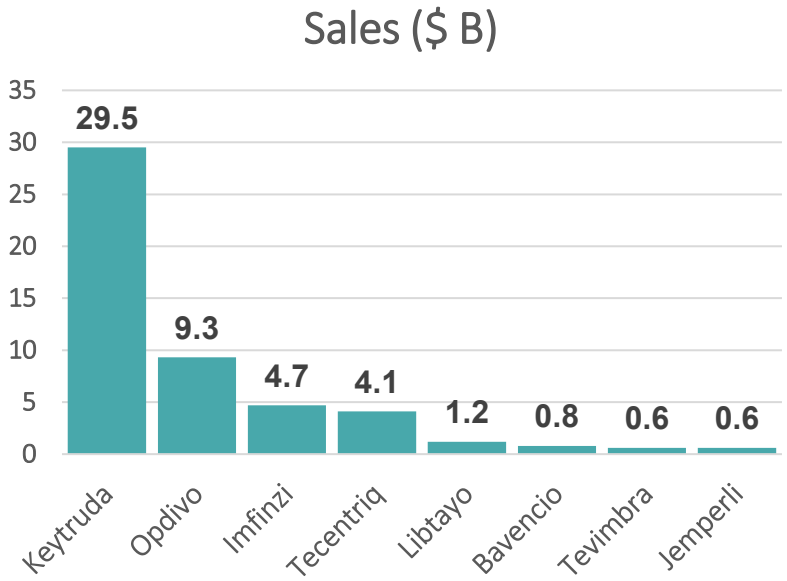
**Colorectal Cancer (#2 WW)**
- **Mortality:** 1.0M
- **Sales:** $20B

**Small Cell Lung Cancer**
- **Mortality:** 0.3M
- **Sales:** $2.8B

## $50B CPIs Group (2024 Sales)

- 5 CPIs approved for NSCLC:
  > 30% of NSCLC drug sales
  > 40% of total CPI sales
- Keytruda®: NSCLC ~30% of $29.6B total

## Checkpoint Inhibitors Market




- Keytruda® expected to hit $35B in 2027, biosimilars expected by 2028

# THANK YOU

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