# **CAUMBIOSCIENCES** Precision. By design.

September 2023

## AUM Overview

AUM is a global clinical-stage oncology company focused on advancing a pipeline of precision therapeutics designed to deploy multi-faceted inhibition strategies to reverse cancer resistance. The management team has an extensive track record of developing distinctive early-stage assets with successful exits in virtual biotech models, including several currently marketed treatments with annual peak sales up to \$3B.

#### Below are key pipeline updates:

- Tinodasertib (mRNA translation inhibitor targeting MNK 1/2): enrolling patients in a global Phase II in colorectal cancer with Merck's Keytruda.
- Boditrectinib (Pan-TRK inhibitor): Phase 2 Ready; Awarded an Orphan Drug Designation for NTRK-related cancers.AUM302 (PIM/PI3K/mTOR inhibitor): IND submission expected in 2023; Awarded an Orphan Drug Designation for neuroblastoma, and the FDA granted rare paediatric disease designation for future PRV eligibility (valued at ~110M USD).
- Raised \$31M since inception including \$27M Series A (2021) led by Everstone Capital (\$6B AUM) and multiple strategic investors.
  - Available cash or cash equivalents of ~\$18M driving major milestones through 2023 (including access to \$15m drawdown facility backed against the R&D rebate in Australia).
- Management team has a strong track record of >50 INDs, >150 clinical programs, commercialization track record of drugs over \$3bn in sales, and successful exits (e.g. \$2.1B sale of Corvidia to Novo Nordisk, \$1.9B Sirtex sale to China Grand).
- Expected to receive up to \$25M in non-dilutive funds over the next 36-48 Months from the Australian Tax Office as we have received an approval for an overseas finding for Tinodasertib and Boditrectinib
- Clinical trial collaboration agreements with Merck and Roche to conduct global clinical trials for its Lead asset.
- Through China out-licensing partnership of Tinodasertib, AUM003 and AUM302 with Newsoara (backed by Qiming Ventures and Sequoia), up to \$135M in potential milestones.

### **Focused on Reversing Cancer Resistance**

Drawback to many of the current cancer therapies is that they target surface pathways which over a period of time develop resistance

AUM Biosciences targets intracellular pathways to overcome such resistance In most cases, a chain of reactions transmits signals from the cell surface to a variety of intracellular targets

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Intracellular signalling pathways thus connect the cell surface to the nucleus, leading to changes in gene expression in response to extracellular stimuli Small molecule therapies present a UNIQUE opportunity, both standalone and in combination with other therapies targeting surface proteins

### AUM's Business Model – "Sweet Spot" of Investment



 Typical investment horizon of 3 – 5 years

#### OAUMBIOSCIENCES

oncology therapeutics

## **Global Pipeline Designed to Reverse Resistance**

|   | INDICATION                                | DISCOVERY | PRECLINICAL   | PHASE 1 | PHASE 2 | RIGHTS |
|---|---|-----------|---------------|---------|---------|--------|
| Tinodasertib +Keytruda<br>mRNA translation inhibitor<br>Target: MNK1/2    | MSS<br>Colorectal Cancer                  |           |               |         | MERCK   | Global |
| Tinodasertib +Tecentriq<br>mRNA translation inhibitor<br>Target: MNK1/2   | NSCLC,<br>Urothelial Cancer               | Roche     | collaboration |         |         | Global |
| Boditrectinib Pan-<br>specific kinase inhibitor<br>Target: pan TRK        | NTRK Naïve and resistant mutation cancers |           |               |         |         | Global |
| AUM302<br>Macrocyclic multi-kinase<br>inhibitor<br>Target: PIM/PI3K/mTOR  | Neuroblastoma,<br>PIK3CA Mutant<br>cancer |           |               |         |         | Global |
| AUM003<br>BBB penetrating mRNA<br>translation inhibitor Target:<br>MNK1/2 | Glioblastoma,<br>Sarcoma                  |           |               |         |         | Global |
|   |   |           |               |         |         |        |

### Journey to Date



# Journey to a Complete Clinical Stage Portfolio

With the completion of this round, AUM will be able to complete key value inflection points in our existing portfolio to become a "fully clinical stage portfolio" by December 2024. This will give some meaningful exit options which can be materialised in Q4 2024.

| AUM001: MNK Inhibition AUM601: Pan-TRK                                      |   | 1: Pan-TRK Inhibi | AUM302:Macrocyclic<br>Multi-kinase Inhibitor   |  | M302:Macrocyclic<br>ti-kinase Inhibitor | AUM003: BBB Penetrating<br>MNK Inhibitor               |         |                    |  |
|---|---|-------------------|--|--|---|--|---------|--------------------|--|
| Q4 2022   | US IND & AUS CTN                              | Q4 2022           | Orphan Drug Design   | ation  | Q4 2022                                 | Orphan Drug Designation*                               | Q3 2024 | US FDA IND         |  |
| Q2 2023   | First Patient Dosed<br>in Phase 2 for MSS CRC | Q4 2023           | (ODD)*<br>US FDA and China IND   |  | Q4 2022<br>Q4 2023                      | Paediatric Rare Disease<br>Designation**<br>US FDA IND | Q4 2025 | Phase 1 Completion |  |
| Q4 2023   | Early Top Line Data<br>from Module 1          | Q1 2024           | First Patient Dosed  | (  | Q1 2024                                 | Anticipated First Patient<br>Dosed                     |         |                    |  |
| Q4 2024   | Module 2 Enrolment                            | Q1 2024           | POC on ~50 Patients  |  | Q4 2024                                 | Phase 1 Completion                                     |         |                    |  |
| *Granted 11-Aug-2022 for treatment<br>of solid tumors with NTRK fusion gene |   |                   | nt of Neuroblastoma<br>"Granted 08-Nov-2022 for treatment of Neuroblastoma "Granted 05-Jan-2023 for treatment of Neuroblastoma |  |   |  |         |                    |  |
| Exit optio  | ons   |                   | Prec   | cedent   |   |  |         |                    |  |
| Strategic buy-out 'trade sale" \$4.1B Buye                                  |   |                   | 3 Buyout   | uyout of Turning Point Tx by BMS   |   |  |         |                    |  |
| IPO Comparable  |   |                   | parable v  | ble with current market cap: Zentalis (\$1.8B), Revolution (\$3.1B), Ideaya (\$1.4B) |   |  |         |                    |  |
| Larger Series B round Up  |   |                   | Uptic  | Uptick in current valuation  |   |  |         |                    |  |
| Out-License "A" portfolio candidate Average dea                             |   |                   | age deal   | al value in oncology at Phase II is projected to be a \$1.5-2B                       |   |  |         |                    |  |



### (AUM001) Tinodasertib: Key Highlights



### AUM001: Tinodasertib

#### PROPOSED MECHANISM OF ACTION



eIF4E overexpression is associated with cellular transformation, tumorigenesis and metastatic progression

MNK phosphorylates eIF4E, which facilitates the translation of mRNAs of specific growth signal and oncoproteins

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MNK inhibition targets eIF4E to block key oncogenic and resistance mechanisms



Glossary: MNK - Mitogen-activated protein kinase (MAPK) interacting protein kinases; mRNA – Messenger ribonucleic Acid (responsible for protein synthesis); eIF4E – critical component of translation machinery

# AUM001: Tinodasertib Two Phase 1 Trials Completed

#### TRIAL DESIGN

#### **KEY CONCLUSIONS**



### AUM001: Tinodasertib Global Phase 2 in MSS CRC





### (AUM601) Boditrectinib: Key Highlights





#### DIFFERENTIATED FROM CURRENT TREATMENT OPTIONS

- Orphan Drug Designation granted
- No neurotoxicity observed to date
- Once daily dosing
- Highly selective and potent against TRK (281 Kinases)
- Potential superiority to larotrectinib, selitrectinib, entrectinib & repotrectinib

#### TARGETING FUSIONS AND MUTATIONS

- Inhibits TRKA/B/C fusion, and solvent front, gatekeeper and xDFG mutations of TRKs
- Robust activity in preclinical models at well-tolerated doses

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#### OPTIMIZED PK PROFILE -PRECLINICAL

- 22X higher concentration of drug in tumors as compared to plasma.
   Higher tumor exposure in vivo(1)
- Superior PK compared to Larotrectinib(1)
- Favorable AE profile (no DLTs)
- Established dose dependency

## (AUM601) Boditrectinib

#### PROPOSED MECHANISM OF ACTION



with tumorigenesis

TRK fusions are strongly associated



AUM601 is believed to selectively inhibits both fusion and resistance mutations



Glossary: MNK - Mitogen-activated protein kinase (MAPK) interacting protein kinases; mRNA – Messenger ribonucleic Acid (responsible for protein synthesis); eIF4E – critical component of translation machinery

### (AUM601) Boditrectinib : Addressing Current Challenges

#### Larotrectinib

- Long treatment duration
- Potential neurotoxicity concerns
- 32% of patients in larotrectinib clinical trials acquired resistance with treatment<sup>(1)</sup>

#### Selitrectinib

- 65% patients in Selitrectinib program were observed with more CNS related side effects including dizziness<sup>(2)</sup>
- Some patients may have tolerability issues with Selitrectinib, which can contribute to clinical trial drop out

#### Repotrectinib

- 65% patients in Selitrectinib program were observed with more CNS related side effects including dizziness<sup>(2)</sup>
- Some patients may have tolerability issues with Selitrectinib, which can contribute to clinical trial drop out

#### (AUM601) Boditrectinib

Improved safety and PK profiles expected from ongoing clinical studies Favourable adverse effects profile (lack of brain penetration = lack of neurological toxicity) observed to date Expected to be used in patients that have acquired resistance with TRK fusionpositive cancer after using larotrectinib

Potentially better dosage regime and therapeutic index

**CAUM**BIOSCIENCES (1) Via Drilon A, et al. Efficacy of Larotrectinib in TRK Fusion-Positive Cancers in Adults and Children. N Engl J Med. 2018 Feb 22;378(8):731-739. (2) Via Hyman D, Kummar S, Farago A, et al. Abstract CT127: Phase I and expanded access experience of LOXO-195 (BAY 2731954), a selective next-generation TRK inhibitor (TRKi). Cancer Res. 2019;79:CT127; Lim JSJ, Tan DSP. TRK inhibitors: managing on-target toxicities. Ann Oncol. 2020 Sep;31(9):1109-1111.

### (AUM601) Boditrectinib : Comparison of Activity Versus Larotrectinib & Selitrectinib(1)

#### **TPM3-NTRK1** Fusion



#### NTRK Gatekeeper Mutation



#### **ETV-NTRK3** Fusion



#### **NTRK Solvent Front Mutation**



### (AUM601) Boditrectinib : Phase 2 Plan

#### Phase 1 Completed

- Long treatment duration
- Potential neurotoxicity concerns
- 32% of patients in larotrectinib clinical trials acquired resistance with treatment<sup>(1)</sup>



#### Phase 2

- First patient to enroll in 2023
- TRK fusion and mutation patients
- Basket trial
- Multinational trial in ~25 sites
- 1<sup>st</sup> line ex US and EU
- 2<sup>nd</sup> line in US and EU
- Orphan designation Q3 2022\*
- CN and US IND 2023

\* Granted 08/11/2022 for treatment of solid tumors with NTRK fusion gene



### AUM302: Key Highlights



#### POTENTIALLY DIFFERENTIATED FROM CURRENT TREATMENT OPTIONS

- Potential first-in-class small molecule targeting PIM, PI3K and mTOR
- US FDA Orphan Drug Designation (ODD) granted for treatment of neuroblastoma
- Low nanomolar IC50s in breast cancer (0.03-10) & neuroblastoma (0.01-.8)(1)



#### TARGETING SOLID TUMORS

- ~100x Sensitivity in lung cancer compared to Alpelisib in in-vitro studies(1)
- ~80% TGI in breast cancer(1)

#### PROPRIETATRY MACROCYCLIC CHEMISTRY

PATENTED

 A unique and patented macrocyclic structure combining 3 key pharmacophores

#### FIRST-TO-MARKET REGISTRATION STRATEGY

- Opportunity to be the FIRST multi- kinase inhibitor class of drug in Neuroblastoma
- Superiority to Alpelisib, if proven, may open opens a huge breast cancer opportunity
- Strong data supporting NSCLC development

# (AUM302) Macrocyclic Multi-Kinase

#### PROPOSED MECHANISM OF ACTION



PI3K, PIM and mTOR are key oncogenic drivers



PIM kinases amplify oncogenic transformation through substrates shared with the PI3K & mTOR pathways



Activation of PIM offers a bypass mechanism for cancers treated with PI3K & mTOR inhibitors

A macrocyclic multi-kinase inhibitor that interferes with key overlapping oncogenic and resistance mechanisms



### (AUM302) In-Vitro Evidence Suggests More Durable Anti-Tumor Responses<sup>(1)</sup>



HER2+, PIK3CA Mutant

- Mean TGI was 79% with AUM302 treatment
- No body weight changes



- Significant inhibition of tumor growth
  with AUM302 and cisplatin combined in sub therapeutic doses
- No body weight changes



Patient Derived Lung Cancer Data

| IC <sub>50</sub> | Cell Line         | AUM302     | Paclitaxel | Cisplatin  | Alpelisib  |
|------------------|-------------------|------------|------------|------------|------------|
|                  | AMB-LC-0007T      | 2.942.E-07 | 1.120.E-12 | 1.035.E-04 | 7.938.E-06 |
|                  | AMB-LC-<br>00015T | 2.706.E-08 | N/A        | 3.665.E-09 | 9.853.E-07 |

**CAUM**BIOSCIENCES (1) Based on AUM pre-clinical results (2) Via Mohlin, S: Hansson, K: Radke

CAUM BIOSCIENCES (2) Via Mohlin, S; Hansson, K; Radke, K, et al. Anti-tumor effects of PIM/PI3K/mTOR triple kinase inhibitor IBL-302 in neuroblastoma. EMBO Mol Med (2019)11:e10058 https://doi.org/10.15252/emmm.201810058



### AUM003: BBB Penetrating mRNA Key Highlights



DIFFERENTIATED APPROACH FROM CURRENT TREATMENT OPTIONS

- BBB-penetrating
- Potentially superior cytotoxicity with current MNK inhibitors
- Monotherapy in glioblastoma with low nM IC50
- Potentially strong synergistic effects with temozolomide

#### POTENTIALLY APPLICABLE AS COMBINATION THERAPHY

- A targeted approach for >65% of glioblastoma (GBM) patients with limited response to temozolomide
- Synergy with MCL1 inhibitor in LPS cell line

### AUM Has Build a Resilient Company

- Asset Lite organisation with low overheads
- Founder track record of existing virtual biotech models
- Strong board governance driving the capital efficiency fabric of the business
- Strong CRO relationships and track record
- Run a capital efficient business with the following characteristics:
  - Existing investors have shown continued support
  - CRO contracts negotiated with *low burn rate but high in milestone* achievements
  - Operational overheads managed strictly to reduce burn rate
  - Leveraged Aus R&D rebates of 48.5c to \$1 in cash. (Received \$5M since 2018). We have an approval from the ATO to received 48.5c to a \$1 for Tinodasertib and Boditrectinib

### **Experiences Leadership**

#### Management



Vishal Doshi, MSC Chairman & Chief Executive Officer Founding member | Board of Directors WØRLD ECONOMIC FORUM 



Sunil Peter, CPA VP, Finance and Shared Services

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Harish Dave, MB, ChB, MBA Chief Medical Officer Founding member | Board of Directors

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Scott Jordan, MBA Head, Corporate Development Salarius STINGRAY THERAPEUTICS



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# **THANK YOU**