ARGENICA THERAPEUTICS

INVESTOR PRESENTATION ASX: AGN

BIOSHARES BIOTECH SUMMIT
JULY 2023

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ARGENICA OVERVIEW

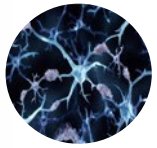
NOVEL NEUROPROTECTIVE TREATMENTS

STROKE	PHASE 2
SIS[1]	PHASE 2
HIE	PRE-CLINICAL
TBI	PRE-CLINICAL
ALZHEIMER'S	PRE-CLINICAL
CARDIAC ARREST	DISCOVERY

UNTAPPED COMMERCIAL OPPORTUNITY

URGENT & UNMET CLINICAL NEED

NO MARKETED DRUGS AVAILABLE



PLURI-FUNCTIONAL MECHANISM

INCREASING INTEREST FROM BIG PHARMA

SUCCESSFUL CLINICAL PROGRESS

- **SECURED MANUFACTURING**
- **COMPLETED PRE-CLINICAL STUDIES**
- **SUCCESSFUL PHASE 1**
- **BUILT CLINICAL & REGULATORY TEAM**

BUILDING COMPANY VALUE

90% SHARE PRICE INCREASE FROM IPO[2]

PROGRESSING MULTIPLE STUDIES FOR MULTIPLE INDICATIONS TO DRIVE VALUE

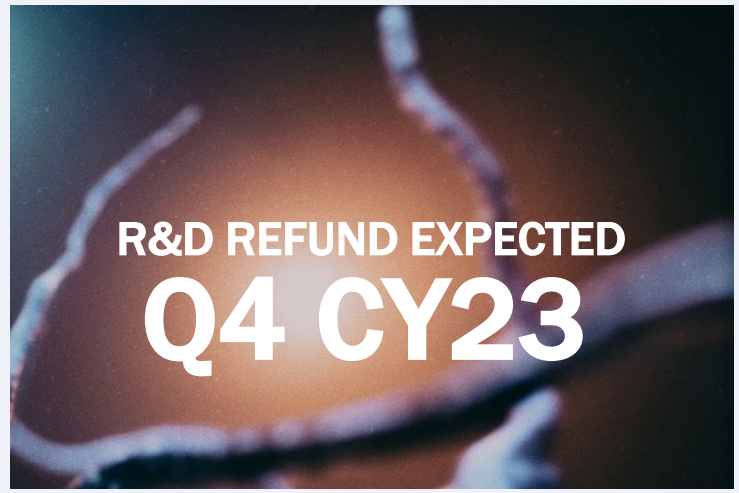
ENTERING PHASE 2 TRIAL TO SHOW SAFETY + EFFICACY

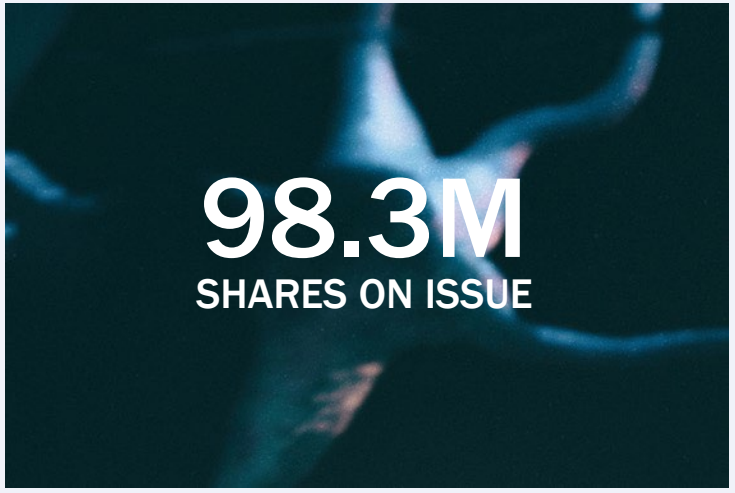
1. Data collected from the recent Phase 1 clinical trial could potentially be used to progress directly into surgically induced stroke (SIS) Phase 2 trials

2. Calculated based on $0.20 IPO and the closing share price of $0.38 @ 21st July 2023

Argenica's lead drug candidate ARG-007 is under development and subject to clinical validation

KEY COMPANY METRICS





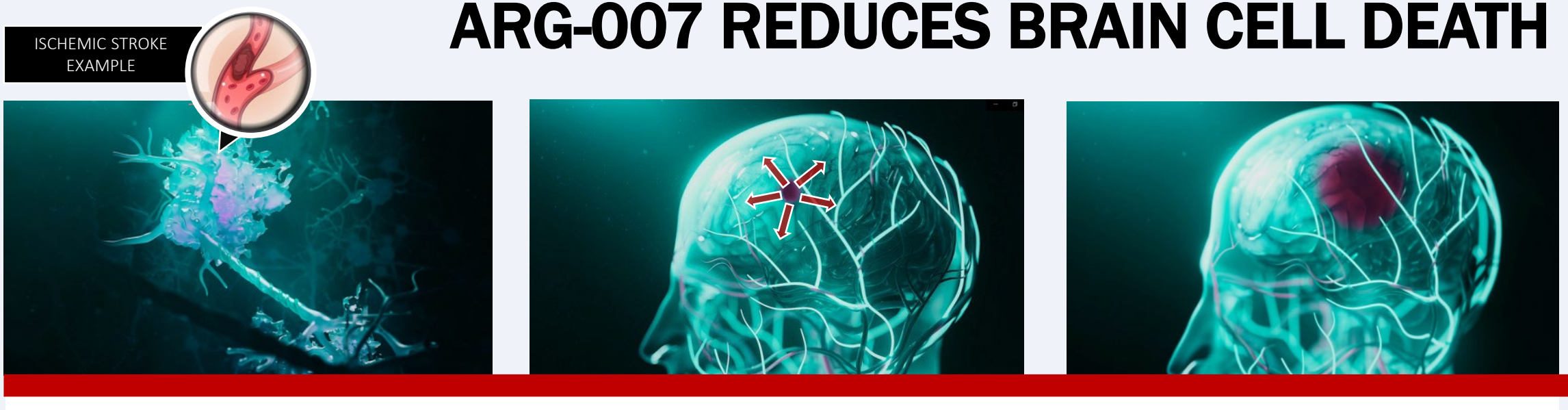
1. Cash balance as @ 30 June 2023
2. ASX Announcement titled 'Argenica Successfully Completes $4.0M Placement' dated 2 June 2023
3. Calculated with closing price on @ 24[t] July 2023 being $0.37

OUR LEAD DRUG CANDIDATE:

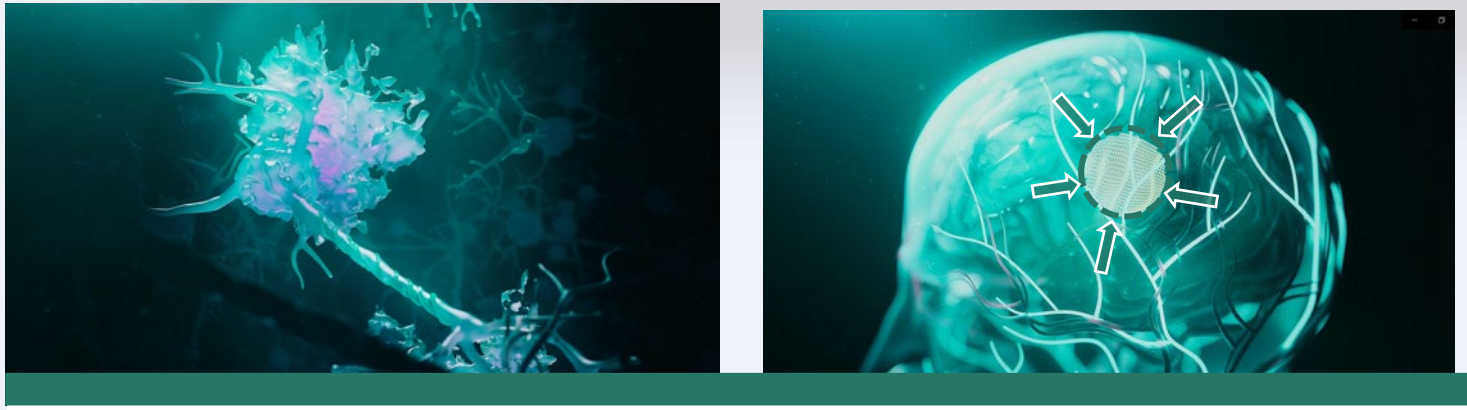
ARG-007

- CATIONIC POLY-ARGININE PEPTIDE
- MULTIPLE MECHANISMS OF ACTION
- GRANTED PATENTS & STRONG IP
- SIGNIFICANT PRE-CLINICAL EFFICACY
- 25+ PUBLISHED PEER REVIEWED PAPERS
- PROVEN SAFE FOR HEALTHY HUMANS
- WORLD LEADING PARTNERS

ARG-007 REDUCES BRAIN CELL DEATH



INITIAL INFARCTION SETS OFF A CASCADE OF CELL DEATH THAT **WILL CONTINUE SPREADING FROM LOCATION**



Without protection **1.9 million brain cells** die every minute

ARG-007 slows this brain cell death

Extends treatment window & provides neuroprotection prior to hospital

Improves recovery time and quality of life

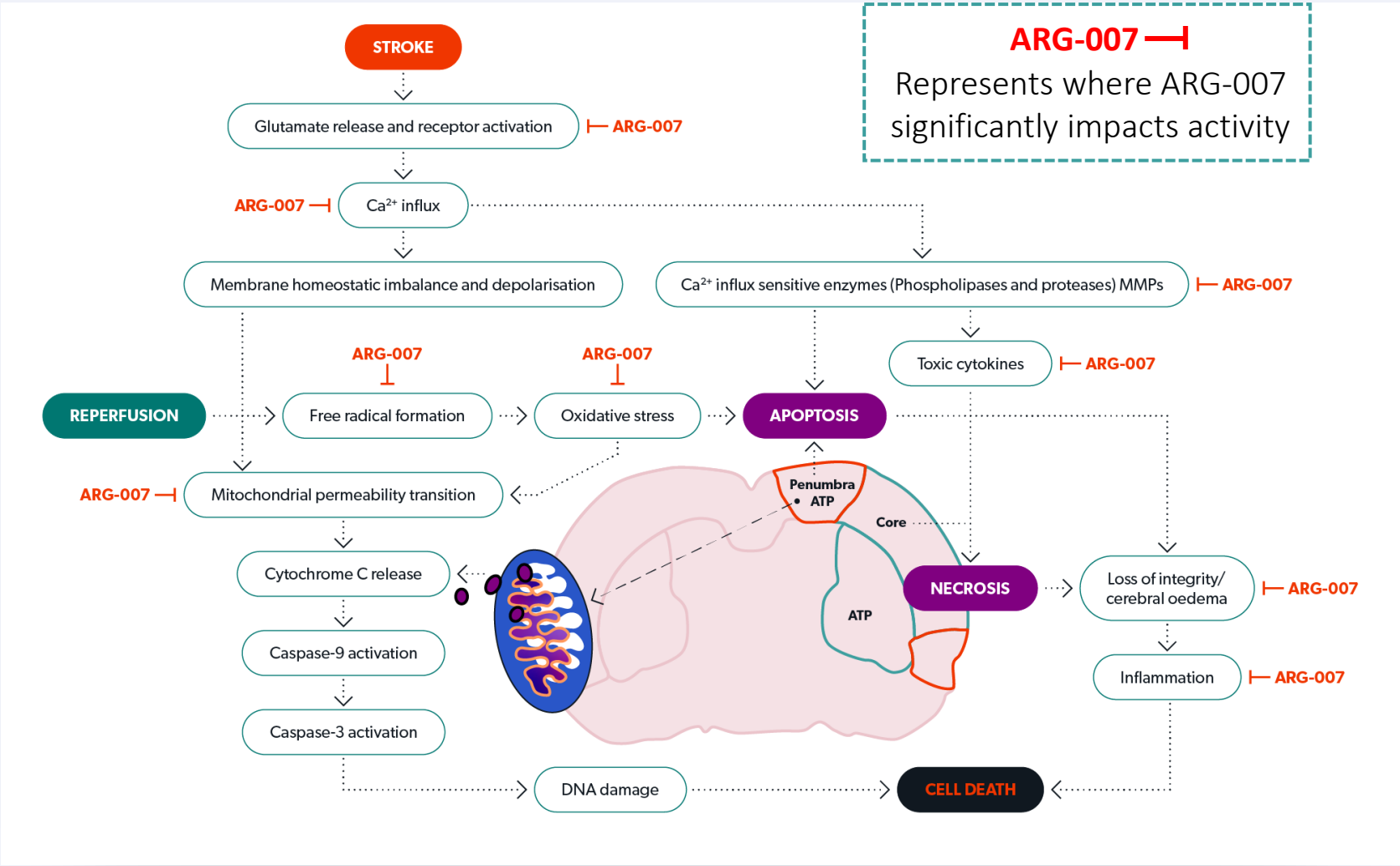
ARG-007 STOPS THE CASCADE OF CELL DEATH & PROVIDES A PROTECTION BARRIER AROUND ITHE INITIAL INFARCTION

ARG-007 is under development and subject to clinical validation.

MULTIPLE MECHANISMS OF ACTION IN STROKE

ARG-007 targets multiple pathways for effective stroke therapy:

- Reduces calcium influx
- Preserves mitochondrial membrane potential
- NMDA (NR2B) downregulation
- Reduces GFAP and IL-6 expression
- Reduces MMP9 levels



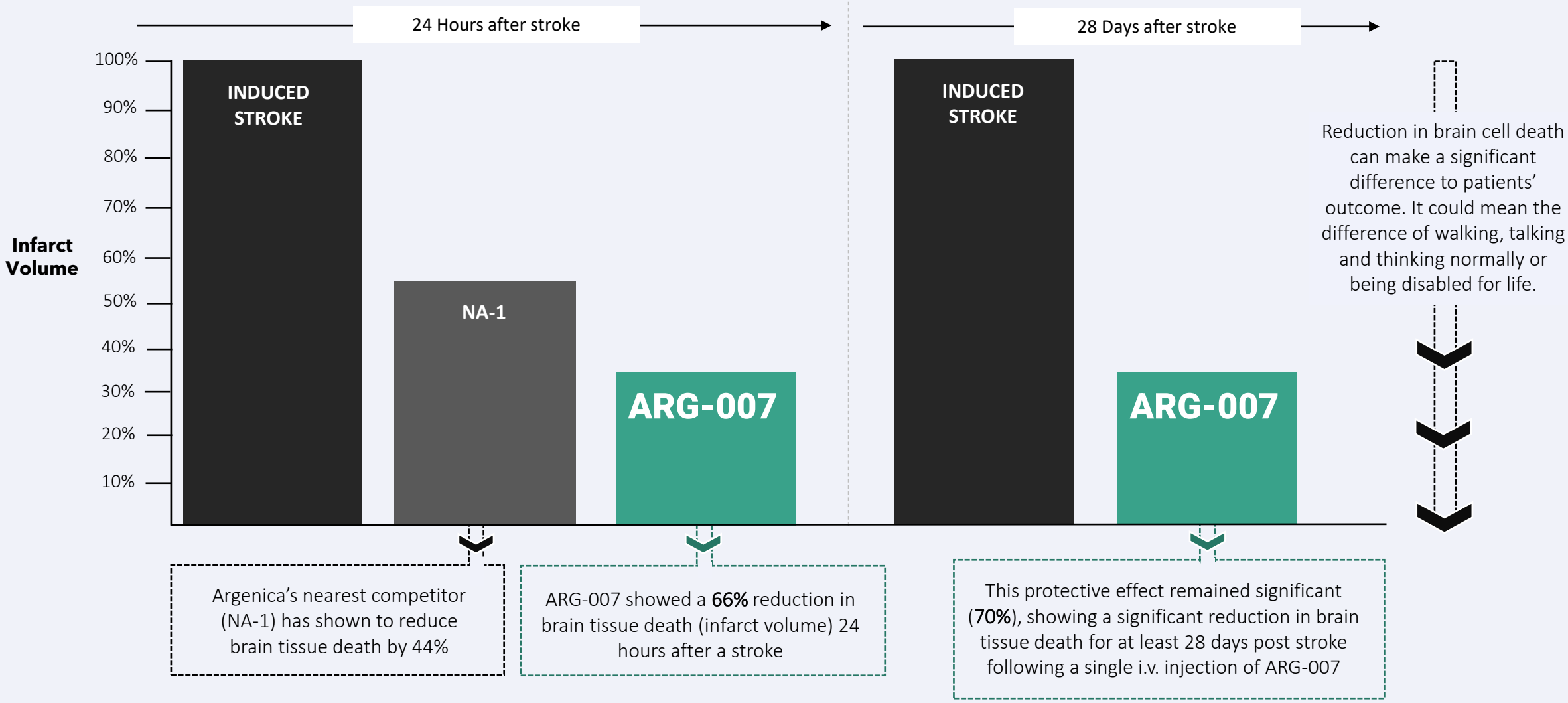
ARG-007 is under development and subject to clinical validation.

ANIMAL STROKE STUDIES

Date	Animal Model	Peptide(s) Analysed	MCAO Type	Induction	Dosing (nmol/kg)	Administration (post MCAO)	Assessment (post MCAO)
2016	Sprague-Dawley rat	R18; NA-1	Permanent	Surgical	100, 300, 1000	60mins	24Hrs
2016	Sprague-Dawley rat	R18; R12; R15	Permanent	Surgical	1000	30mins	24Hrs
2016	Sprague-Dawley rat	R18; NA-1	Transient (90mins)	Surgical	30, 100, 300, 1000	60mins	24Hrs
2017	Sprague-Dawley rat	R18; R12W8a	Permanent	Surgical	30	30mins	24Hrs
2017	Sprague-Dawley rat	R18 R18; NA-1 R18; NA-1	Permanent Transient (3Hrs) Transient (2Hrs)	Surgical	100 1000 100	2Hrs 2Hrs Immediate	24Hrs 24Hrs 24Hrs
2018	Wistar rat	R18; R18D	Permanent	Surgical	300	30mins	24Hrs
2019	Sprague-Dawley rat	R18; R18D; NA-1	Transient	Chemical	100, 300, 1000	60mins	56 days
2020	Male cynomolgus macaques	R18	Transient	Surgical	1000	60mins	24Hrs & 28 days
2021	Sprague-Dawley rat	R18; R18D	Permanent	Surgical	300, 1000	10mins	45-225mins

MORE EFFECTIVE THAN OUR NEAREST COMPETITOR

Percentage reduction of brain tissue death after stroke



Meloni, B. P. (2020) *Neurotherapeutics : the journal of the American Society for Experimental NeuroTherapeutics*, *17*(2), 627–634.

THE IDEAL STROKE THERAPEUTIC

PREVIOUS BARRIERS FOR NEUROPROTECTIVE DRUGS

- Do not fit into current **standard of care**
- Past drugs focused on targeting **singular** mechanisms of action and used ineffective models
- Single target treatments **have not** been effective in clinical trials
- Industry is seeking drugs that target **multiple pathways** for stroke[1]

WHAT SETS ARG-007 APART

- ARG-007 has **multi-functional** mechanisms of action
- Has shown **significant efficacy** in different animal models of ischaemic stroke
- **Cell penetrating peptide** can deliver therapeutic agent to the injured brain
- **Is not degraded** by current standard of care clot dissolving drugs[2]
- **Does not exacerbate bleeding**[3]

1. *Recommendations from the Stroke Treatment Academic Industry Roundtable (STAIR) urged a focus on plurifunctional agents that target multiple pathways for effective stroke therapy.*
2. *ASX Announcement 'Study shows arg-007 does not degrade when co-administered with ischemic stroke therapeutics' 12 July 2021*
3. Liddle, L. et al (2019). *PloS one*, *14*(11), e0224870.

THE STROKE OPPORTUNITY

ESTIMATED US$183 BILLION TO TREAT STROKE BY 2030[1]

~550-600K ADMISSIONS FOR ACUTE ISCHEMIC STROKE IN THE U.S. PER YEAR[2]

ARG-007 PRICE PER-DOSE EXPECTED TO BE USD$8k – $10K - SIMILAR TO tPA[3]

1. Gorelick PB. "The global burden of stroke: persistent and disabling". Lancet Neurol. 2019 May;18(5):417-418.

2. Calculation based on the CDC estimate of total US stroke incidence. A recent nationwide surveillance study estimated that there were 552k total hospital admissions for AIS in the US in 2019: Source: CDC.gov, accessed March 2022. Asaithambi, G. et al., Prehosp Emerg Care. 2022 May-Jun; 26(3): 326–332.; 3Ziaeian, B. et al., Stroke. 2022;53:3386–3393.; 4Ramphul K et al., Arch Med Sci Atheroscler Dis. 2021; 6: e132–e134. 5Akbik F et al., JAMA Neurol. 2020 Dec 1;77(12):1486-1495,

3. Argenica expects pricing per dose of ARG-007 to be similar to current prices for paid for tPA - a drug widely used to dissolve blood clots caused by stroke. tPA currently sells for USD8k - USD$10k per administration

***Cautionary Note:** Access to markets is subject to the Company being able to successfully develop and commercialise ARG-007. As with any entity seeking to enter into a global marketplace, any product developed by Argenica will have applications that are constrained by market segment, relevant regulations, industrial application, geographical barriers and intellectual property rights.*

ARG-007 CLINICAL MILESTONES ACHIEVED

- ARG-007 proved **safe and well-tolerated** in healthy human **Phase 1**
- Sterile Fill & Finish **GMP manufacturing** of ARG-007 initiated
- Stroke & Emergency Medicine **experts** to run Phase 2 trial
- Phase 2 trial site **principal investigator neurologists** engaged
- Phase 2 **ethics application submitted** to St Vincent Hospital Melbourne Human Research Ethics Committee (HREC)

PHASE 2 CLINICAL TRIAL IN STROKE

OVERVIEW

- Up to 10 Australian hospitals
- Double-blinded, randomised, placebo-controlled study
- ARG-007 will be given to patients that have suffered a diagnosed **acute ischemic stroke eligible for thrombectomy**
- Objectives;
  1. Safety
  2. Tolerability
  3. Pharmacokinetics
  4. Preliminary Efficacy

TIMELINE[1]

	Q3 CY23	Q4 CY23	Q1 CY24	Q2 CY24
Pre-IND FDA meeting	★			
Ethics approval[2]	★			
Hospital site start-up		★		
Manufacturing finalised		★		
AGR-007 arrives at sites		★		
First patient dosed			★	
First independent review of patient safety data				★

1. *Timeline subject to change. A detailed Phase 2 protocol and an overview of the Phase 2 timeline will be provided following HREC approval*
2. *Ethics approval is not guaranteed, and will be subject to HREC review*

PHASE 2 CLINICAL TRIAL TEAM

Prof. Graeme Hankey
National Coordinating Principal Investigator

As a neurologist-scientist, Professor Hankey has made an outstanding lifetime contribution to stroke research, with a special interest in epidemiological studies and clinical trials of interventions for the treatment and prevention of stroke. He is internationally recognised for his achievements and has led several pivotal studies in collaboration with leading researchers worldwide. He chairs 4 DSMBs for stroke trials and is a member of a further 6 DSMBs.

Dr David Blacker
Chairman – CAC / Supporting Principal Investigator

Acute stroke clinician/neurologist who has previous experience initiating neuroprotection clinical stroke trials in Western Australia and being the local Principal Investigator of a number of national and international acute and secondary prevention stroke studies. Prof Blacker is the Perron Institute Medical Director and consultant neurologist and stroke physician.

A/Prof Tina Soulis
Alithia Life Sciences, Founder and Director

A/Prof Soulis has over 27 years of working in the healthcare (pharmaceuticals and devices), biotechnology, academic research, clinical research, and management sectors in senior roles including: CEO of a Neuroscience Clinical Trials Research Organization, Director of a successful ASX200 company, VP of Clinical Strategy and Development with an innovative biotechnology company and now, Founder and Director of her own clinical consultancy company.

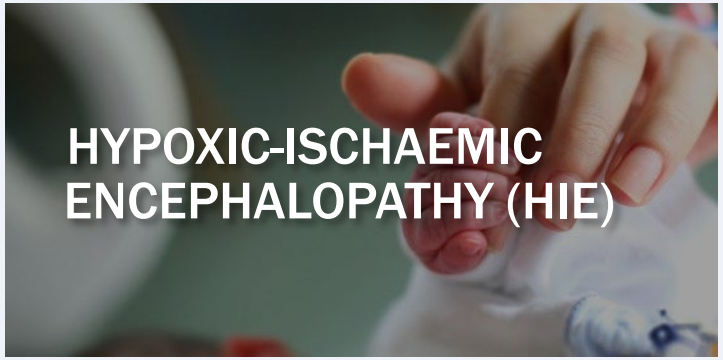
Jane Taylor
Phase 2 Project Lead

Project Lead for Argenica ARG-007 Phase 2 stroke study. Experienced Clinical Trial Project Lead with proven international experience in successful end-to-end trial management. Special interest in Neurology and imaging studies. Over 20 years' experience running clinical trials in both large global clinical research organisations including ICON Clinical Research and Syneos Health, as well as in Australian based companies.

PIPELINE OF ADDITIONAL INDICATIONS

- Estimated USD$18.6bn market size by 2031[1]
- ARG-007 has shown efficacy in pre-clinical studies[2]
- Awarded A$1.2m grant to advance pre-clinical studies[3]

- Alzheimer's therapeutics market USD$13bn by 2031[4]
- Preclinical data shows ARG-007 inhibits amyloid beta aggregation, a key cause of Alzheimer's[5]
- Awarded A$350,000 grant to advance pre-clinical studies[6]



- HIE occurs in 1.5 to 2.5 births per 1000[7]
- Orphan drug designation / rare paediatric disease
- Awarded A$2.5m grant to advance pre-clinical studies[9]

1. Traumatic brain injuries assessment market research, 2031 – Allied Market Research

2. ASX Announcement titled 'ARG-007 protects brain cells in moderate traumatic brain injury model' 22 June 2023

3. ASX Announcement titled 'Argenica awarded $1.2m grant for Traumatic brain injury project under the CRC-P program' dated 20 Jan 2023

4. Alzheimer's Therapeutics Market Global Opportunity Analysis 2021-2031 – Allied Market Research

5. Announcement titled 'Preclinical data shows arg-007 inhibits one of The main causes of alzheimer's disease' Dated 9 Feb 2023

6. ASX Announcement titled 'Non-dilutive funding received to progress Alzheimer's disease studies' dated 22 Feb 2023

7. Hypoxic Ischemic Encephalopathy: Pathophysiology and Experimental Treatments Kimberly A. Allen, MSN, RN and Debra H. Brandon, PhD, RN, CCNS, FAAN

8. Pre-clinical studies have shown ARG-007 provides neuroprotection in a term animal model of Perinatal Hypoxic Ischemic Encephalopathy (HIE) – ASX Announcement 29th September 2022.

9. ASX Announcement titled 'Significant non-dilutive funding to Complete preclinical hypoxic ischaemic Encephalopathy studies' dated 30 March 2023

CREDENTIALLED & EXPERIENCED TEAM

GEOFF POCOCK
NON-EXECUTIVE CHAIRMAN

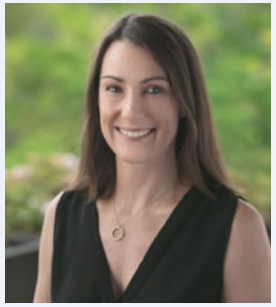
- 20 years' experience in commercialisation of emerging technologies and capital markets
- Non-Executive Director of EMVision (ASX:EMV)
- Co-Founder / Former Managing Director of Hazer Group (ASX: HZR)

DR SAMANTHA SOUTH
EXECUTIVE DIRECTOR

- Extensive background in CNS medical research at Weill Medical College at Cornell University (NY), The University of Queensland and The Garvan Institute
- 10 years of Director experience at multiple companies
- Over 13 years' experience in technology transfer in medtech / biotech sector, at UQ, QUT and UWA.

DR MEGHAN THOMAS
HEAD, CLINICAL DEVELOPMENT

- 15 years experience in basic research, clinical trial design and oversight, regulatory pathways, and product development.
- Previous role as VP Clinical Programs and Operations at Zelira Therapeutics (ASX: ZLD)
- Experience running centralised research ethics and governance system across a state-wide public health service



DR LIZ DALLIMORE
CEO

- Over 20 years' experience in R&D, technology commercialisation and management consulting, including at KPMG, EY and PWC
- Extensive background in stroke and spinal cord regeneration research at the Australian Neuromuscular Research Institute, UWA and Oxford University
- PhD in Neuroscience (UWA) and an MBA (AGSM)

LIDDY MCCALL
NON-EXECUTIVE DIRECTOR

- Over 25 years' experience of senior Board and Management roles + strong history of success with early-stage Biotechnology companies
- Co-founded 3 biotechnology companies successfully achieved 3 FDA drug registrations and 1 FDA/CE Mark medical device approval
- Co-founder of iCeutica Inc group (acquired in 2011 achieving a ten-fold uplift on the valuation) and Dimerix Limited (ASX:DXB)

TERRY BUDGE
NON-EXECUTIVE DIRECTOR

- 25 years with National Australia Bank in senior executive roles before serving as managing Director of Bankwest from 1997 to 2004
- Previously a member of the Fundraising Committee of the Perron Institute, and an independent director for Westoz Investment Company (ASX:WIC)

INVESTMENT HIGHLIGHTS

ARGENICA THERAPEUTICS

For further information please contact:

Dr Liz Dallimore
CEO & Managing Director
E: info@argenica.com.au