SUCCESSFUL COMPLETION OF FINAL GLP GENOTOXICITY STUDIES

Highlights:

- *Two key genotoxicity studies have been successfully completed under Good Laboratory Practice (GLP) conditions and have provided key data supporting the safety and tolerability of ARG-007 for the upcoming Phase 1 Clinical Trial.*

- *Data from the genotoxicity studies show ARG-007 will not likely pose a genetic or carcinogenic risk to patients and does not cause any structural damage to chromosomes in mammalian cells.*

- *Regulatory bodies, such as the FDA, require data to be collected under GLP conditions, which are a set of principles to ensure quality assurance is achieved during pre-clinical studies.*

- *Protocols for all pre-clinical activities have now been finalised and the GLP pharmacokinetics, toxicology and safety studies have commenced, with results expected throughout Q1 and early Q2 CY22.*

- *A draft ethics submission has been prepared for review by Bellberry, the Human Research Ethics Committee, which includes all GLP study protocols to be completed and data compiled to date, including efficacy data and non-GLP data.*

Perth, Australia; 24 FEBRUARY 2022 - Argenica Therapeutics Limited (ASX: AGN) ("Argenica" or the "Company"), a biotechnology company developing novel therapeutics to reduce brain tissue death after brain injury, is pleased to announce results from the final Good Laboratory Practice (GLP) genotoxicity studies of ARG-007.

Argenica engaged preclinical Contract Research Organisation, Medicilon, to undertake two key *in vitro* genotoxicity studies on ARG-007. The first study, utilising the bacterial reverse mutation (otherwise known as the Ames) test, evaluated the mutagenicity and predicted the genetic risks and potential carcinogenic effects of ARG-007. All test results in this study were negative, meaning ARG-007 **does not** induce a mutagenic effect on mammalian DNA, and **will not pose a genetic or carcinogenic risk to patients**. This study was conducted under GLP conditions aligned with regulatory and ethics requirements.

The second study was a Chromosomal Aberration Test carried out under GLP conditions. The aim of this study was to determine whether ARG-007 causes structural chromosomal aberrations in cultured mammalian cells. A change to any of the chromosomes, in number and structure, may lead to chromosomal based disorders. The results from this study were **negative**, meaning ARG-007 **does not** cause any structural damage to chromosomes in mammalian cells.

This completes all GLP genotoxicity studies required for inclusion in Argenica's ethics submission for the Phase 1 clinical trial. These studies are also investigational new drug (IND) enabling, meaning they are required by the FDA when seeking approval to conduct later stage clinical trials of ARG-007 in the US.

Argenica's CEO, Dr Liz Dallimore said: "The results of these GLP genotoxicity studies are important for inclusion in our ethics submission to commence our Phase 1 clinical trial, clearly demonstrating that volunteers being administered ARG-007 will have no effect on their DNA or chromosomes or cause cancer in any manner. Further, GLP genotoxicity studies are required for the US's FDA regulatory approval for ARG-007, so it provides us with added confidence as we progress the clinical development of ARG-007."

NEXT STEPS

Protocols for all preclinical activities have now been finalised and the dosing for the GLP pharmacokinetics (PK) and toxicology studies has commenced. Data from the preclinical activities is expected throughout Q1 and early Q2 CY22. This data is required for ethics approval of the ARG-007 Phase 1 clinical trial in healthy human volunteers.

To expedite the ethics approval on completion of all preclinical activities, the Company has prepared a draft ethics submission for review and feedback by Bellberry, the organisation who will provide final ethics approval through their Human Research Ethics Committees. The Company will provide the draft submission to Bellberry imminently. This draft submission includes all data compiled to date, including efficacy data, non-GLP safety and toxicity data, GLP genotoxicity data, and the approved GLP study protocols. Providing a draft of the ethics submission to Bellberry allows the feedback process to commence whilst Argenica waits on the final preclinical GLP studies to be completed. Upon receiving the final GLP PK, toxicity and safety data, the Company will then be in a better position to immediately lodge its final ethics application to Bellberry. Argenica expects to submit its final ethics application in Q2 CY22.

FURTHER INFORMATION ABOUT THE GLP GENOTOXICITY STUDIES

A full evaluation of a potential drug's ability to induce the possible types of genetic damage involved in adverse human health outcomes includes tests that can detect gene mutation as well as chromosomal damage.

Gene mutation- Ames Study

The objective of the study, under GLP conditions, was to determine whether GMP grade ARG-007 can cause bacterial reverse mutation by performing the *Salmonella typhimurium* Reverse Mutation (Ames) Test and evaluating the mutagenicity and predicting the genetic risks and potential carcinogenic effects of ARG-007 on mammalian cells. The study observed the effect of ARG-007 on five different strains of *Salmonella typhimurium* following incubation at concentrations of 500, 200, 80, 32, 12.8 and 5.12 µg/plate. Simultaneously, negative controls (DMSO) and positive controls were set. The results showed, under GLP experimental conditions in the testing facility, that Argenica's clinical grade ARG-007 does not induce mutagenic effect in any of the five strains of *Salmonella typhimurium* and the result is negative.

Chromosomal Damage Study

The objective of this study, under GLP conditions, was to evaluate whether GMP grade ARG-007 could induce structural chromosomal aberrations (deletions and rearrangements) in cultured mammalian cells with or without ametabolic activation system (rat liver S9). The *In vitro* mammalian chromosome aberration test is recommended as a reliable method to evaluate the potential genotoxicity of agents by National Medical Products Administration (NMPA) Guideline and International Conference on Harmonization (ICH) Harmonized Tripartite Guideline. The study observed the effect of ARG-007 on cultured Chinese Hamster Lung Fibroblast (CHL) Cells at increasing concentrations from 0.1 to 500 µg/mL with and without metabolic activation (rat S9). The results showed, under GLP experimental conditions in the testing facility, GMP grade ARG-007, at any of the concentrations tested, does not cause chromosomal aberration of cultured mammalian cells, and the result is negative.

This announcement has been approved for release by the Board of Argenica.

For more information please contact: info@argenica.com.au

ABOUT ARGENICA

Argenica (ASX: AGN) is developing novel therapeutics to reduce brain tissue death after stroke and improve patient outcomes. Our lead neuroprotective peptide candidate, ARG-007 has been successfully demonstrated to improve outcomes in pre-clinical stroke models and is in the process of being verified for its safety and toxicity before commencing Phase 1 clinical trials in humans. The aim is for our therapeutic to be administered by first responders to protect brain tissue against damage during a stroke with further potential to enhance recovery once a stroke has taken place.