

## **Cynata Awarded Australian Government Grant to Progress Development of Stem Cell Therapies for Coronary Artery Disease**

**Melbourne, Australia; 28 October 2019:** Australian stem cell and regenerative medicine company, Cynata Therapeutics Limited (ASX: CYP or “the Company”), announced today that it has been awarded an Innovation Connections grant to advance the development of therapies based on its Cymerus™ technology platform for the treatment of coronary artery disease (CAD).

CAD, which is the narrowing or blockage of the arteries in the heart, causes the majority of heart attacks and approximately one-third of all deaths in people over the age of 35 in developed countries.<sup>1</sup>

The Innovation Connections grant of \$50,000, which will be matched by the Company, is supported by the Australian Government’s Department of Industry Innovation and Science.

The funds will be used to support the continuation of research at UNSW Sydney under the leadership of Associate Professor Kristopher Kilian, ARC Future Fellow at the UNSW School of Chemistry and School of Materials Science and Engineering.

The further research leads on from a collaborative project with this group, which commenced in 2018. The initial project identified optimal cell culture matrices (the material on which the cells are grown), which prime Cymerus mesenchymal stem cells (MSCs) to secrete factors that stimulate growth of new blood vessels, i.e. angiogenesis. The positive effects were demonstrated in a well-established *in vitro* assay and were maintained after the cells were frozen and then thawed, which is of significant importance from a commercialisation perspective.

The additional project, which is expected to complete by the end of 2020, seeks to build on the previous findings by profiling the pro-angiogenic factors released from the primed MSCs, establish the ability of primed cells to promote new blood vessel formation *in vivo*, followed by *in vivo* safety and efficacy in a preclinical model.

Dr Kilian Kelly, Cynata’s Chief Operating Officer, said, “We are very pleased to receive this non-dilutive funding, which enables us to further our research into the development of customised MSCs that address CAD before a heart attack occurs. Associate Professor Kristopher Kilian and his team have already demonstrated the potential value of this approach, and we now look forward to generating further data in support of a future clinical trial.”

**-ENDS-**

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### **About Cynata Therapeutics (ASX: CYP)**

Cynata Therapeutics Limited (ASX: CYP) is an Australian clinical-stage stem cell and regenerative medicine company focused on the development of therapies based on Cymerus™, a proprietary therapeutic stem cell platform technology. Cymerus overcomes the challenges of other production methods by using induced pluripotent stem cells (iPSCs) and a precursor cell known as mesenchymoangioblast (MCA) to achieve economic



manufacture of cell therapy products, including mesenchymal stem cells (MSCs), at commercial scale without the limitation of multiple donors.

Cynata's lead product candidate CYP-001 met all clinical endpoints and demonstrated positive safety and efficacy data for the treatment of steroid-resistant acute graft-versus-host disease (GvHD) in a Phase 1 trial. Cynata plans to advance its Cymerus™ MSCs into Phase 2 trials for GvHD, critical limb ischemia and osteoarthritis. In addition, Cynata has demonstrated utility of its Cymerus MSC technology in preclinical models of asthma, diabetic wounds, heart attack and cytokine release syndrome, a life-threatening condition stemming from cancer immunotherapy.

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<sup>1</sup> Sanchis-Gomar F, Perez-Quilis C, Leischik R, Lucia A. Epidemiology of coronary heart disease and acute coronary syndrome. *Ann Transl Med.* 2016;4(13):256