

ASX ANNOUNCEMENT

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## Cynata Engineered MSC Study Interim Data Review Reveals Promising Results

**Melbourne, Australia; 5 February 2018:** Australian stem cell and regenerative medicine company, Cynata Therapeutics Limited (ASX: CYP) is pleased to announce that the first stage of its ongoing study evaluating the ability to genetically engineer Cymerus™ mesenchymal stem cells (MSCs) for the potential treatment of certain cancers has been completed, with very promising results.

### Key Highlights:

- **Cymerus MSCs successfully engineered to express diagnostic and therapeutic proteins**
- **Expression is stable, and persistence of cells in vivo is consistent with expectations**

This study, led by Dr Khalid Shah, Director of Center for Stem Cell Therapeutics and Imaging (CSTI) and Vice Chairman, Department of Neurosurgery, Brigham and Women's Hospital, Harvard Medical School is investigating the potential utility of genetically engineered Cynata's Cymerus MSCs, to express diagnostic and therapeutic proteins with applications in oncology.

The first stage of the study has shown that Cynata's Cymerus MSCs can be successfully engineered to express the diagnostic and therapeutic proteins using unique expression promoters developed by Dr Shah's team. Moreover, this expression is stable during continued culture (growth) of the modified MSCs in the lab, and the modified MSCs persist *in vivo* for a sufficient duration to facilitate a therapeutic effect.

Dr Shah said, "Cynata's unique MSCs have so far shown ideal properties required to progress the cells into different disease models. In particular, the modified Cynata cells behave in a very similar fashion to traditional MSCs."

Dr Kilian Kelly, Cynata's Vice President, Product Development, said, "Not only do these results give us cause for optimism about the potential applications in oncology, this type of cellular engineering opens up numerous potential additional applications of our platform manufacturing technology. We look forward to the completion of the final stage of the project, which will include *in vivo* studies to evaluate the efficacy of the engineered cells, and we expect to receive results by the middle of this year".

### 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 that is developing a therapeutic stem cell platform technology, Cymerus™, originating from the University of Wisconsin-Madison, a world leader in stem cell research. The proprietary Cymerus™ technology addresses a critical shortcoming in existing methods of production of mesenchymal stem cells (MSCs) for therapeutic use, which is the ability to achieve economic manufacture at commercial scale. Cymerus™ utilises induced pluripotent stem cells (iPSCs) to produce a particular type of MSC precursor, called a mesenchymoangioblast (MCA). Cymerus™ provides a source of MSCs that is independent of donor limitations and an “off-the-shelf” stem cell platform for therapeutic product use, with a pharmaceutical product business model and economies of scale. This has the potential to create a new standard in the emergent arena of stem cell therapeutics, and provides both a unique differentiator and an important competitive position.