

Data Demonstrating Consistency of Cymerus™ MSCs Presented at Leading Stem Cell Research Conference

Melbourne, Australia; 16 November 2022: Cynata Therapeutics Limited (ASX: “CYP”, “Cynata”, or the “Company”), a clinical-stage biotechnology company specialising in cell therapeutics, has today announced the presentation of data from a study investigating the consistency of Cymerus™ mesenchymal stem cells (MSCs) and MSCs derived from various tissue sources. The data will be presented at the Biennial Australasian Society for Stem Cell Research (ASSCR) and Australasian Gene and Cell Therapy Society (AGCTS) Scientific Meeting in Melbourne.

The study involved comparing the consistency of multiple batches of MSCs, including Cymerus™ induced pluripotent stem cell (iPSC)-derived MSCs, as well as tissue-derived MSCs from bone marrow, adipose tissue and umbilical cord. A technique known as next generation single cell sequencing was used to profile the transcriptome (gene expression) of the different types of MSCs at the individual cell level. The investigation was conducted by a team of scientists at Monash University, led by Associate Professor Jess Frith.

The key findings included:

- Cymerus™ MSCs exhibit less batch-to-batch heterogeneity (variability) than tissue-derived MSCs
- Cymerus™ MSCs also exhibit significantly less variability within each batch
- Tissue source is the primary driver of MSC variability

Dr Kilian Kelly, Cynata’s Chief Operating Officer, said:

“The overall conclusion of the study is that Cymerus MSCs are highly consistent and that the Cymerus manufacturing process successfully bypasses much of the inherent variability that affects tissue-derived MSCs. Product consistency is a mandatory requirement of healthcare regulatory agencies such as the FDA and so the conclusions from this study further support the utility of the Cymerus platform. The study validates the potential of Cymerus MSCs as an off-the-shelf cell therapy and provides a better understanding of the sources of MSC variability, with a view to making clinical outcomes more predictable.”

-ENDS-

Authorised for release by Dr Ross Macdonald, Managing Director & CEO

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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. Planning for a Phase 2 clinical trial in GvHD under a cleared US FDA IND is presently underway. Clinical trials of Cymerus products in osteoarthritis (Phase 3), respiratory failure and diabetic foot ulcers (DFU) are currently ongoing. In addition, Cynata has demonstrated utility of its Cymerus technology in preclinical models of numerous diseases, including the clinical targets mentioned above, as well as critical limb ischaemia, idiopathic pulmonary fibrosis, asthma, heart attack, sepsis, acute respiratory distress syndrome (ARDS) and cytokine release syndrome.

Cynata Therapeutics encourages all current investors to go paperless by registering their details with the designated registry service provider, Automic Group.