

## ***Cynata to Investigate Cell Therapy for Cancer in Major New Collaboration***

- Collaboration with Dr Khalid Shah of Massachusetts General Hospital/Harvard Medical School
- Process involves modifying stem cells to target cancer, building on other clinical uses of unmodified stem cells
- Cell therapy for cancer is a rapidly expanding area

**Melbourne, Australia; 14 October 2015:** Stem cell and regenerative medicine company, Cynata Therapeutics Ltd (ASX: CYP), announced today that it has commenced a program to develop modified mesenchymal stem cells (MSCs) to treat cancer, using its proprietary Cymerus™ platform technology. This new program will be complementary to ongoing commercial partnership discussions and the development of the Company's lead product, CYP-001, which continue to progress well.

As part of this new development program, the Company has entered into a collaborative agreement with Massachusetts General Hospital (MGH) in Boston, Massachusetts, USA, which is the original and largest teaching hospital of Harvard Medical School to access leading-edge cell-modification technology developed under the direction of Dr Khalid Shah. Dr Shah leads the Molecular Neurotherapy and Imaging Laboratory and is Director of the Stem Cell Therapeutics and Imaging Program at MGH. He is also an Associate Professor in Radiology and Neurology at Harvard Medical School, and a principal faculty member at the Harvard Stem Cell Institute.

Dr Shah's team in a very recent study reported establishing a process to modify stem cells in the laboratory so that they secrete cancer-killing toxins. Importantly, they have also devised a process to engineer the stem cells so that they themselves resist being killed by the toxins. The research team is now studying whether modified stem cells could facilitate delivery of purified cancer-killing toxins directly to the site of a tumour to more effectively treat cancers while minimising side effects.

Dr Shah has previously led studies in which stem cells modified in this way were tested in a clinically relevant animal model of glioblastoma – the most common and aggressive type of brain tumour in adult humans – which found that the treatment killed cancer cells and prolonged survival in pre-clinical studies. Dr Shah's group will now investigate similar modification of Cymerus™ MSCs "We are excited to work collaboratively with Cynata," said Dr Shah.

"Cynata's Cymerus technology is perfectly suited to the manufacturing requirements of cell-based therapies given the fact that it produces a consistent and reliable product, which we can manufacture economically at scale. This new collaboration with one of the most prestigious and important medical centres in the world is a logical extension of our product development plans," said Cynata Managing Director and Chief Executive Officer, Dr Ross Macdonald.



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

Cynata Therapeutics Ltd (ASX: CYP) is an Australian 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™ does so through the production of a particular type of MSC precursor, called a mesenchymoangioblast (MCA). The Cymerus™ MCA platform provides a source of MSCs that is independent of donor limitations and provides a potential “off-the-shelf” stem cell platform for therapeutic product use, with a pharmaceutical 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.