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ASX Announcement

Publication supporting broader role for CXCR4 in lung fibrosis

MELBOURNE Australia, 30 September 2020: AdAlta Limited (ASX:1AD), a clinical stage biopharmaceutical discovery and development company using i-body technology to address challenging drug targets, announces the publication of research supporting a broader role for CXCR4 in lung fibrosis than previously supposed.

CXCR4 is a member of the G-protein coupled receptor (GPCR) family of drug targets that are a focus for AdAlta's i-body technology. This receptor is the target of AdAlta's lead asset AD-214 that is now in Phase I clinical trials and being developed as a therapeutic for Idiopathic Pulmonary Fibrosis (IPF). CXCR4 has previously been shown to be a therapeutic target in a range of fibrotic diseases, including IPF. Expression of CXCR4 receptors is substantially increased in fibrotic tissue, and agents that block the action of CXCR4 have been shown to slow or halt progression of fibrosis in animal models.

In a new paper published in Respiratory Research, AdAlta Chief Scientific Officer Professor Michael Foley and colleagues at Monash University and The Alfred Hospital in Melbourne have further elucidated the role of CXCR4 in lung fibrosis. The research demonstrated increased CXCR4 expression not only in tissues from IPF patients, but also tissues from patients with other Interstitial Lung Diseases (ILDs) that are also known to have fibrotic components. Significantly, the research also showed that increased CXCR4 expression was due to increased expression on epithelial cells that line blood vessels and the surface of airways in the lungs as well as in the sites of fibrotic injury.

Professor Foley commented "This research suggests that CXCR4 has a much broader role in fibrosis than merely stimulating the migration of inflammatory cells and fibroblasts from the circulation. The identification of CXCR4 expressing epithelial cells within the lungs of IPF and ILD patients suggests that these cells may be driving fibrosis and this increases the potential importance of blocking CXCR4 in anti-fibrotic therapy. This work also lends support to a role for AD-214 in ILDs other than IPF."

The paper, J. Jaffar, K. Griffiths, S. Oveissi, M. Duan, M. Foley, I. Glaspole, K. Symons, L. Organ and G. Westall, "CXCR4+ cells are increased in lung tissue of patients with idiopathic pulmonary fibrosis", *Respiratory Research* (2020) 21:221 is available as an open access publication via the Company website at https://adalta.com.au/scientific-publications/.

Authorised for lodgement by:

Tim Oldham CEO and Managing Director September 2020



Notes to Editors About AdAlta

AdAlta Limited is a clinical stage drug development company headquartered in Melbourne, Australia. The Company is using its proprietary i-body technology platform to solve challenging drug targeting problems and generate a promising new class of single domain antibody protein therapeutics with the potential to treat some of today's most challenging medical conditions. The i-body technology mimics the shape and stability of a unique and versatile antigen-binding domain that was discovered initially in sharks and then developed as a human protein. The result is a range of unique proteins capable of interacting with high selectivity, specificity and affinity with previously difficult to access targets such as G-protein coupled receptors (GPCRs) that are implicated in many serious diseases. i-bodies are the first fully human single domain antibody scaffold and the first based on the shark motif to reach clinical trials.

AdAlta is conducting Phase 1 clinical studies for its lead i-body candidate, AD-214. AD-214 is being developed for the treatment of Idiopathic Pulmonary Fibrosis (IPF) and other human fibrotic diseases, for which current therapies are sub-optimal and there is a high unmet medical need.

The Company is also entering collaborative partnerships to advance the development of its i-body platform. It has an agreement with GE Healthcare to discover i-bodies as diagnostic imaging agents against Granzyme B, a biomarker of response to immuno-oncology drugs.

AdAlta's strategy is to maximise the products developed using its next generation i-body platform by internally discovering and developing selected i-body enabled product candidates against GPCRs implicated in fibrosis, inflammation and cancer and partnering with other biopharmaceutical companies to develop product candidates against other classes of receptor, in other indications, and in other product formats.

Further information can be found at: https://adalta.com.au

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