

Karus Therapeutics Extends Drug Discovery Programme to Target HDAC-6

Chilworth, UK - 18 February 2010 Karus Therapeutics Ltd, a company engaged in the discovery and development of molecular-targeted drugs to treat inflammation and cancer, announced today it had extended its HDAC drug discovery programme to include small molecules that selectively inhibit HDAC-6, a target of emerging importance in the treatment of immune-inflammatory disorders.

Karus has recently designed and developed a novel series of highly potent and selective HDAC-6 inhibitors which display excellent anti-inflammatory activity, notably in preclinical models of Rheumatoid Arthritis, and which have additional potential across a wide range of immune-inflammatory disorders.

Until recently, the development of HDAC inhibitors has been focused mainly on the treatment of cancer. However, there is a growing body of evidence from preclinical *in vitro* and *in vivo* models that the inhibition of HDAC-6 leads to increased expression of the FOXP3 transcription factor, a protein which plays a key role in the development and immunosuppressive function of regulatory T-cells in the context of chronic diseases such as Rheumatoid Arthritis, Psoriasis, Multiple Sclerosis, Lupus and Organ Transplant Rejection.

“There is a significant opportunity for the development of an important new class of anti-inflammatory drugs which selectively target HDAC-6.” said Karus Therapeutics CEO Simon Kerry “While HDAC inhibitors have been predominantly developed for use in oncology, our selective inhibitors of HDAC-6 have important anti-inflammatory and immunosuppressive qualities, which should translate into the effective treatment of a wide number of inflammatory indications and post-transplantation procedures.”

CSO Stephen Shuttleworth said: “The discovery and development of HDAC inhibitors with high levels of HDAC-6 selectivity has historically proven to be extremely challenging; there is currently a dearth of drug-like isoform-specific inhibitors and, therefore, a great demand for such molecules. We believe that the subtype-selective inhibitors developed at Karus represent a truly unique series of small molecule therapeutics with great potential in the treatment of chronic inflammatory diseases.”

HDAC-6 has also recently emerged as an important drug target in neurodegenerative disorders, including Alzheimer's Disease (AD), as well as stroke and spinal cord injury, and selective HDAC-6 inhibitors are expected to show promise as neuroprotectants in AD and related neurodegenerative diseases. Karus is currently undertaking additional proof-of-concept studies to assess the potential of its new class of HDAC-6 selective inhibitors in this clinical setting.

Karus Therapeutics focuses on the discovery and development of proprietary drugs with best-in-class potential by targeting epigenetic mechanisms and lipid kinase signalling. Its most advanced programme, KAR2261, is an HDAC inhibitor being developed for the treatment of cancer and is expected to enter clinical development in the coming months. Karus is also developing KAR2581, an HDAC inhibitor for the treatment of inflammatory-immune disease, which will enter the clinic in 2011. Karus anticipates commencing clinical activities for its HDAC-6 inhibitor programme in mid-2011.

Notes to Editors

About Karus Therapeutics

Karus Therapeutics commenced operations in 2006 and is focused on the discovery, development and partnering of innovative, molecular-targeted, small-molecule drugs to treat cancer and inflammation. The Company's primary focus is the development of proprietary drugs that have best-in-class potential to treat inflammatory disease and cancer by targeting epigenetic mechanisms and lipid kinase signalling. Karus's development programs include gold-standard HDAC inhibitors and innovative, isoform-selective PI3-Kinase inhibitors. Karus is a private company located on the Southampton Science Park, UK.