

New therapy to stop progression of fibrosis

February 14 2014

Scientists from the University of Sheffield have developed a novel antibody-based therapy which targets the progression of life threating kidney fibrosis.

The ground breaking therapy works by blocking the action of a key enzyme and the treatment should also work for lung, liver and heart <u>fibrosis</u>.

The pioneering biological discovery was made by a research team led by Professor Tim Johnson and Dr Phil Watson, from the University's Academic Nephrology Unit in the Department of Infection and Immunity.

The research, conducted in collaboration with MRC Technology, targets a key step in the progression of fibrosis, which has led to the development of a fibrosis therapy programme and exclusive <u>licensing</u> <u>agreement</u> by global biopharmaceutical company UCB.

There is currently no cure for fibrosis, a primary cause of major <u>organ</u> <u>failure</u>, and a complicating factor in chronic diseases such as diabetes and hypertension.

Professor Johnson said: "The development of these therapeutic antibodies is the culmination of 20 years work to identify the role of a key target in the tissue scarring process where it is possible to understand its mechanism of action and then develop a way to specifically target it.



"This is a fantastic example of how MRC Technology can assist in translating laboratory research to the patient. I am delighted that UCB have licensed the humanised antibodies as the company's expertise in antibody development will ensure patients benefit from this new treatment in the shortest time possible."

He added: "It is also extremely important to recognise that this work would not have been possible without support from charities such as Kidney Research UK, Diabetes UK and the Wellcome trust who have all supported this work."

UCB New Medicines Vice President and Head of Immunology, Dr Mark Bodmer, said: "The program focuses on a key area of unmet medical need and we are committed to bringing fibrosis treatment to patients.

"We are excited to be working with MRC Technology and University of Sheffield scientists to build on their work to date in generating and characterising promising therapeutic approaches with the potential for significant patient impact."

Michael Dalrymple, Director of Business Development at MRC Technology, said: "We are delighted to be able to partner this program with UCB and we look forward to working together to ensure the project's commercial success. This program has the potential to not only benefit fibrosis patients and help prevent organ failure, but also enables MRC Technology and its partners to help bring other new research to market."

Revenue made from the licensing agreement will be shared back with the University and will be reinvested to support other collaborative programs within its drug discovery labs.



Provided by University of Sheffield

Citation: New therapy to stop progression of fibrosis (2014, February 14) retrieved 4 May 2024 from <u>https://medicalxpress.com/news/2014-02-therapy-fibrosis.html</u>

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