

New positive study results on diabetic nephropathy with Vicore Pharma's candidate drug C21

C21 combined with an angiotensin receptor blocker (ARB) provides improved treatment effect in type 2 diabetes animal model.

Vicore Pharma AB (ticker: VICO), a Swedish biotech company developing drugs that act through the AT2 receptor in the renin angiotensin system, today announced positive results from a preclinical study in which researchers in India have studied the effects of C21 in combination with an ARB on mechanisms of diabetic nephropathy in a type 2 diabetes animal model.

The results were published on May 1, 2017 in the scientific journal Biochemical and Biophysical Research Communications (BBRC).

The independent study, conducted by Anuradha Pandey and Anil Bhanudas Gaikwad at the Birla Institute of Technology & Science (BITS), Pilani, India, shows that C21 in combination with the ARB telmisartan reduced the glucose and lipid metabolic disorders, while also maintaining the renal function in rats with type 2 diabetes. Thus, C21 offered renal protection, demonstrated by i.a. maintained creatinine levels in plasma without affecting blood pressure. The combination with an ARB also enhanced the anti-inflammatory and anti-apoptotic effects.

About 30 percent of all patients with type 2 diabetes experience some type of kidney affection due to their disease. The most difficult cases can lead to either transplantation or dialysis, inducing high treatment costs for society. Furthermore, the risk of cardiovascular disease is significantly elevated, especially in elderly patients. The most common treatment in addition to glucose lowering therapy is different forms of anti-hypertensive drugs, primarily ARBs or ACE inhibitors. The results from the recent study show that the combination of C21 and an ARB can offer further kidney protection to this vulnerable group of patients

The researchers conclude in their study that this new therapeutic strategy should be further documented to develop the combination for the treatment of patients with diabetic nephropathy.

"We have previously seen strong results with C21 in studies on diabetic nephropathy, also in combination with ARB, from Castoldi et al in Monza, Italy, and Koulis et al from the Baker Institute in Melbourne, Australia. The extensive molecular biological studies conducted by the Birla Institute group, showing that the drugs act through different mechanisms and thereby complement each other, strengthen our conviction that C21 may play an important role in the treatment of diabetes-related kidney damage," commented Anders Ljunggren, B Pharm R & D Consultant at Vicore Pharma.

"We have for quite some time had an interest in diabetes as one of several indications for our drug substances that act through the AT2 receptor in the renin angiotensin system. The interest for C21



among researchers around the world is great, and it is currently included in studies for a variety of indications at about 40 universities," he continued.

Vicore Pharma is now planning for a clinical Phase IIa study on type 2 diabetic patients with renal complications, where C21 will be given in combination with an ARB. Study start is scheduled for the end of 2017.

To read the entire article: *A. Pandey, A.B. Gaikwad, Compound 21 and Telmisartan combination mitigates type 2 diabetic nephropathy through amelioration of caspase mediated apoptosis, Biochemical and Biophysical Research Communications (2017)*, please follow this link: <http://dx.doi.org/10.1016/j.bbrc.2017.04.134>

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About Vicore Pharma Holding

Vicore Pharma, a Nasdaq Stockholm First North listed holding-, and management company. Vicore Pharma develops drugs targeting stimulation of the AT2 Receptor (AT2R) in the Renin-Angiotensin-System (RAS). The company vision is to establish AT2-agonists as a new effective class of small molecule drugs. Our lead candidate, C21 will be focused on the indication idiopathic pulmonary fibrosis (IPF). For further information, please refer to www.vicorepharma.com

Vicore Pharma's share is listed on NASDAQ Stockholm, First North under the ticker VICO.

The company's Certified Adviser is Redeye AB.