SCOHIA PHARMA, Inc.
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Publication of a preclinical study: SCO-792, an enteropeptidase inhibitor, may be a new therapeutic agent for diabetic kidney disease

In a new report published in *Diabetes, Obesity and Metabolism*, researchers of SCOHIA PHARMA, Inc. have shown that SCO-792, an enteropeptidase inhibitor, is effective against diabetic kidney disease (DKD) through a preclinical study.

Research title
Enteropeptidase inhibition improves kidney function in a rat model of diabetic kidney disease
https://dom-pubs.onlinelibrary.wiley.com/doi/10.1111/dom.14190

Diabetic kidney disease (DKD) is a renal complication associated with diabetes and is one of the factors leading to end-stage renal failure. The current treatment for DKD is based on controlling blood glucose and blood pressure, and it is an area of highly unmet medical need because of limited treatment options. Enteropeptidase is an enzyme localized to the upper part of the intestinal tract and plays a major role in protein digestion and absorption. The effect of enteropeptidase inhibition on the kidney is largely unknown.

In this study, we have shown that SCO-792-mediated enteropeptidase inhibition is effective in a rat model of DKD, where SCO-792 rapidly reduced the urinary albumin-to-creatinine ratio (UACR), a marker of kidney damage. Experimental results suggest that reduction of UACR by SCO-792 was primarily achieved by inhibiting enteropeptidase and not by improving glycemic control. Additionally, SCO-792 normalized renal glomerular hyperfiltration and reduced markers of renal fibrosis and tubular damage. Furthermore, SCO-792 ameliorated impaired glomerular autophagy activity, which is considered to be one of the factors contributing to decreased kidney function in DKD. SCO-792 also effectively reduced the UACR in combination with irbesartan, a hypotensive drug. These results indicate that SCO-792, an enteropeptidase inhibitor, may be a new treatment strategy for DKD.

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