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**Effect of Renamezin® upon attenuation of renal function decline in pre-dialysis chronic kidney disease patients: 24-week prospective observational cohort study**

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**Objectives:** Renamezin® is a modified capsule-type oral spherical adsorptive carbon which lowers indoxyl sulfate levels in patients with advanced chronic kidney disease (CKD). This 24-week prospective observational cohort study was performed to evaluate the effect of Renamezin® upon attenuation of renal function decline.

**Methods:** A total of 1,149 adult patients with baseline serum creatinine 2.0-5.0 mg/dL were enrolled from 22 tertiary hospital in Korea from April 2016 to September 2018. Among them, a total of 686 patients completed the study and were included in the intention-to-treat analysis. A total of 1,061 patients were included in the safety analysis.

**Results:** The mean age was 63.5 years and male patients were predominant (63.6%). Most of the patients (76.8%) demonstrated high compliance with study drug (6g per day). After 24 week of treatment, serum creatinine was increased from 2.86±0.72 mg/dL to 3.06±1.15 mg/dL (p<0.001). However, estimated glomerular filtration rate was not changed significantly during observation period (22.3±6.8 mL/min/1.73m<sup>2</sup> to 22.1±9.1 mL/min/1.73m<sup>2</sup>, p=0.243). Patients with age over 65 years old and those under good systolic blood pressure control <130 mmHg were most likely to get benefit from Renamezin® treatment to preserve renal function. A total of 98 (9.2%) patients out of 1,061 safety population experienced 134 adverse events, of which gastrointestinal disorders were the most common. There were no serious treatment-related adverse events.

**Conclusions:** Renamezin® can be used safely to attenuate renal function decline in moderately advanced CKD patients.