



Shaping Tomorrow's Nephrology: Insight-Driven Kidney Care

KSN SEOUL, KOREA
2026

The 46th Annual Meeting of the Korean Society of Nephrology



Jun 11 (Thu) – 14 (Sun), 2026

COEX, Seoul, Korea

Abstract Type : Poster exhibition

Abstract Submission No.: A-0529

Abstract Topic : Dialysis

Clinical Outcomes Associated with Off-Label Use of Sacubitril/Valsartan in Patients with Heart Failure and End-Stage Kidney Disease: A Real-World Analysis

Ho Sik Shin¹, Sung Il Im², Ye Na Kim¹, Yeonsoon Jung¹, Hark Rim¹

¹Department of Internal Medicine-Nephrology, Kosin University Gospel Hospital, Korea, Republic of

²Department of Internal Medicine-Cardiology, Kosin University Gospel Hospital, Korea, Republic of

Objectives : Sacubitril/valsartan is a cornerstone therapy for chronic heart failure with reduced ejection fraction (HFrEF). However, in patients with end-stage kidney disease (ESKD), dose selection in real-world clinical practice is often inconsistent because physicians frequently adjust dosing based on renal function. This study aimed to evaluate the impact of real-world off-label dosing of sacubitril/valsartan on long-term clinical outcomes in patients with heart failure and ESKD.

Methods : We analyzed a database of heart failure patients with ESKD treated between 2015 and 2025. Clinical data, including laboratory results, echocardiography, electrocardiography (ECG), and outcomes, were collected. Eligible participants were HF patients with ESKD receiving sacubitril/valsartan therapy. Clinical outcomes—including arrhythmic events, rehospitalization, and cardiovascular events—were compared according to changes in left ventricular ejection fraction (LVEF) during treatment with real-world off-label dosing.

Results : A total of 379 patients with HF and ESKD (mean age 75.1 ± 11.9 years) were included. Among them, 240 patients (63.5%) demonstrated improvement in LVEF following sacubitril/valsartan therapy. Baseline characteristics were comparable between groups. During a median follow-up of 24 months, there were no significant differences in arrhythmic events, rehospitalization, or cardiovascular outcomes according to off-label dosing of sacubitril/valsartan ($P = 0.609$). In multivariate analysis, a lower premature ventricular complex (PVC) burden was independently associated with LVEF improvement (OR 0.950; 95% CI 0.908–0.983; $P = 0.032$). A PVC burden >2866.5 beats/24 hours predicted decreased LVEF (AUC = 0.752; $P = 0.005$).

Conclusions : Real-world off-label dosing of sacubitril/valsartan was not associated with differences in major clinical outcomes. Instead, a high PVC burden may serve as an independent predictor of worsening cardiac function in HF patients with ESKD.