Veltassa® patiromer for oral suspension

IS YOUR CHOICE OF POTASSIUM (K^+) BINDER IMPACTING PATIENT OUTCOMES?

Real-world evidence from a retrospective cohort study demonstrated that Veltassa® was associated with a lower risk of morbidity and mortality than sodium zirconium cyclosilicate (SZC)[1]

Results

In SEEK2, SZC was associated with a significantly higher risk of heart failure (HF) hospitalisation, oedema and death than Veltassa®[1]

37.3%
Higher risk of hospitalisation for HF
(HR: 1.373; 95% CI: 1.337–1.410)

33.0%
Higher risk of severe oedema
(HR: 1.330; 95% CI: 1.298–1.363)

28.7%
Higher risk of all-cause death
(HR: 1.287; 95% CI: 1.255–1.320)

All findings were statistically significant

Compared with Veltassa®, patients treated with SZC experienced **28 more all-cause deaths per 1,000 patient months**[1]

Even in **patients without prior HF**, the risk of HF hospitalisation, oedema and death was increased with SZC compared to Veltassa®[1]

SEEK2 demonstrated a significant difference in outcomes between the two K^+ binders

Study Design

SEEK2 used real-world evidence to compare the impact of K^+ binder choice on morbidity and mortality[1]

Retrospective analysis

US electronic health record (EHR) data

9,929 Veltassa® patients

19,849 SZC patients

Propensity matched 1:2

SEEK2 included a **large and representative patient population in the US**[1]

Patients were matched based on a **wide range of characteristics** including age, sex, history of HF, stage 3–5 chronic kidney disease (CKD) and use of renin-angiotensin-aldosterone system inhibitors (RAASi):

50% of patients had CKD

34% of patients had a history of HF

50% of patients were prescribed RAASi

Background

Veltassa® and SZC are two K^+ binders used for the management of hyperkalemia, but they differ in exchange ion – which may impact treatment outcomes[1,2]

SODIUM ZIRCONIUM CYCLOSILICATE
Sodium (Na^+) exchange[1]

Na^+ → ← K^+

Each dose contains ~400–800 mg sodium, equivalent to **20–40% of the World Health Organization (WHO) recommended maximum daily intake**[3,4]

VELTASSA®
Calcium (Ca^{2+}) exchange[1,2]

Ca^{2+} → ← K^+

Intentionally-designed to use **sodium-free exchange** with low risk of hypercalcemia[1]

Increased sodium intake for patients may result in:[1]

fluid retention

oedema

increased risk of HF

Veltassa®

A potassium binder that may offer a reduced risk of HF hospitalisation, oedema and mortality compared to SZC[1]

Study limitations:
This study may have selection bias, as it only included individuals seeking care in a healthcare setting. It did not compare modern binders to sodium polystyrene sulfonate (SPS), which has a more intermittent real-world use pattern making such comparisons difficult. It also did not directly assess duration of drug exposure. The study was also not designed to compare efficacy between Veltassa® and SZC. Additionally, there is a possibility for misclassification of outcomes. This study relies on prescribed medication data, which may not fully represent patients' actual medication usage. Death was assessed based on EHR data; as a result, any deaths which occurred outside of the network would not be captured. Despite the use of propensity score matching, there remains the potential for residual confounding.[1] Lastly, there is no data in the study on the daily dosage used by patients, meaning up or down titrations are unknown.

Additional information:
Please note, the study does not specify the dosages of Veltassa® and SZC. The recommended starting dose for Veltassa® is 8.4 g once daily for adults.[2] The recommended starting dose of SZC in the maintenance phase differs between countries. The starting dose in the US is 10 g once daily, whereas in the EU the starting dose is 5 g.[3,5]

Abbreviations:
Ca^{2+}, calcium; **CI**, confidence interval; **CKD**, chronic kidney disease; **EHR**, electronic health record; **HF**, heart failure; **HR**, hazard ratio; **K^+**, potassium; **Na^+**, sodium; **RAASi**, renin-angiotensin-aldosterone system inhibitors; **SPS**, sodium polystyrene sulfonate; **SZC**, sodium zirconium cyclosilicate; **US**, United States; **WHO**, World Health Organisation.

References: 1. Desai NR, et al. *Kidney360*. 2024. Online ahead of print. doi: 10.34067/KID.0000000586. **2.** Veltassa® EU SmPC, 2024. **3.** Lokelma EU SmPC, 2024. **4.** World Health Organization. Salt intake. Available at: https://www.who.int/data/gho/indicator-metadata-registry/imr-details/3082. Accessed November 2024. **5.** Lokelma US SmPC, 2018.

Prescribing information: