

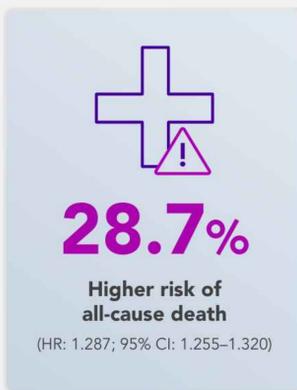
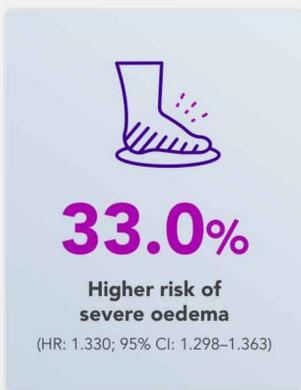
# IS YOUR CHOICE OF POTASSIUM (K<sup>+</sup>) BINDER IMPACTING PATIENT OUTCOMES?



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)<sup>1</sup>

## Results

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



All findings were statistically significant



Compared with Veltassa®, patients treated with SZC experienced **28 more all-cause deaths per 1,000 patient months**<sup>1</sup>



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



SEEK2 demonstrated a significant difference in outcomes between the two K<sup>+</sup> binders

## Study Design

SEEK2 used real-world evidence to compare the impact of K<sup>+</sup> binder choice on morbidity and mortality<sup>1</sup>



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**<sup>1</sup>

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<sup>+</sup> binders used for the management of hyperkalemia, but they differ in exchange ion – which may impact treatment outcomes<sup>1,2</sup>

**SODIUM ZIRCONIUM CYCLOSILICATE**  
Sodium (Na<sup>+</sup>) exchange<sup>1</sup>

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

**VELTASSA®**  
Calcium (Ca<sup>2+</sup>) exchange<sup>1,2</sup>

Intentionally-designed to use **sodium-free exchange** with low risk of hypercalcemia<sup>2</sup>

Increased sodium intake for patients may result in:<sup>1</sup>



fluid retention



oedema



increased risk of HF



A potassium binder that may offer a reduced risk of HF hospitalisation, oedema and mortality compared to SZC<sup>1</sup>

### 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.<sup>1</sup> 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.<sup>2</sup> The recommended starting dose of SZC in the maintenance phase differs between the countries. The starting dose in the US is 10 g once daily, whereas in the EU the starting dose is 5 g.<sup>3,5</sup>

### Abbreviations:

Ca<sup>2+</sup>, calcium; CI, confidence interval; CKD, chronic kidney disease; EHR, electronic health record; HF, heart failure; HR, hazard ratio; K<sup>+</sup>, potassium; Na<sup>+</sup>, 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/gdo/indicator-metadata-registry/imr-details/3082>. Accessed November 2024. 5. Lokelma US SmPC, 2018.

### Prescribing information:

