

Economic Evaluation of Sodium Zirconium Cyclosilicate Lokelma for Treating Hyperkalemia in Patients With Heart Failure and/or Chronic Kidney Disease in Egypt

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Objective

Compare the cost-effectiveness of Sodium Zirconium Cyclosilicate (SZC) versus the standard of care (short-term use of sodium polystyrene sulfonate [SPS], dietary modification, and RAASi down-titration) in the treatment of hyperkalaemia in patients with heart failure and/or chronic kidney disease from the Egyptian national payer perspective.

Methods

An individual patient simulation cost utility model was adapted to assess the costs and consequences over a time horizon of 20 years. SZC was evaluated against standard of care. Patients could experience acute hyperkalaemia, major adverse cardiovascular events (MACE), hospitalization, or modifications in RAASi therapy based on disease stage or class. K⁺ coefficients. The main outcomes were total costs, quality-adjusted life years (QALYs), and incremental cost-effectiveness ratio (ICER). Resource utilization in disease health states and acute events managements is gathered from the literature and validated from local clinical experts. Drug costs were collected from UPA while medical resources costs were estimated from the national payer perspective for the 2025 financial year. Both costs and outcomes were discounted at an annual rate of 3.5%,

Results

SZC demonstrated high cost-effectiveness in both heart failure (HF) patients and those with concomitant CKD and HF. In HF patients, SZC yielded an incremental QALY gain of 0.976 QALYs with an incremental total cost of 193,121

Conclusion

For CKD and HF patients with hyperkalaemia, SZC offers a cost-effective option from the Egyptian national payer perspective. Over a 20-year horizon, improved survival and reduced HK-related hospitalizations offset the acquisition cost.