

LOKELMA® IN HEART FAILURE PATIENTS: SAFETY PROFILE AND TOLERABILITY — A REAL- WORLD RETROSPECTIVE COHORT STUDY

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Background and importance

Managing hyperkalemia in heart failure (HF) patients remains a clinical challenge, often limiting the use of renin-angiotensin-aldosterone system inhibitors (RAASi), essential for optimizing HF therapy. Hospital pharmacists play a crucial role in clinical outcomes and drug monitoring. Lokelma® (sodium zirconium cyclosilicate) has shown efficacy in controlled clinical trials; yet real-world evidence on safety and short-term outcomes is limited.

Aim and objectives

Assess the real-world effectiveness of Lokelma® in normalizing serum potassium in HF patients, monitor its effects on renal function and magnesium levels, and describe its tolerability profile.

Material and methods

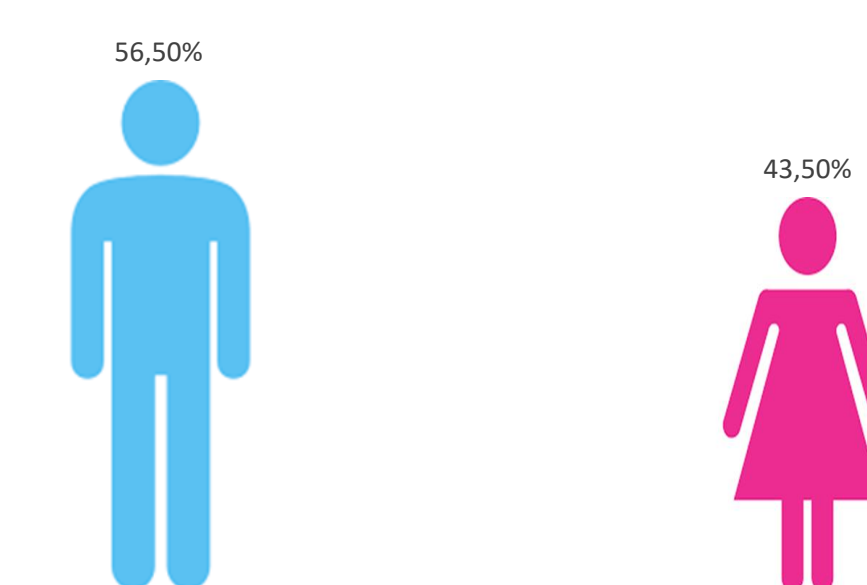
A retrospective, single-center cohort including 46 adult HF patients started Lokelma® therapy between January 2023 and September 2025. Demographic, laboratory, and dosing data were obtained from electronic medical records. The primary endpoint was the proportion of patients achieving serum potassium <5.0 mmol/L at 30 days. Secondary endpoints were changes in eGFR and serum magnesium. Pre- and post-treatment values were compared with paired t-tests; 95% confidence intervals (CI) were calculated, and adverse events were identified through active pharmacovigilance during clinical record monitoring.

Results

At 30 days, 43.5% achieved target potassium <5.0 mmol/L. Mean potassium decreased from 5.58 to 5.07 mmol/L. No significant change in renal function (mean eGFR: 39.5 vs. 41.1 mL/min at baseline and 30 days; $\Delta = +1.55$ mL/min; 95% CI: -1.84 to 4.93; $p = 0.36$) or serum magnesium (2.17 to 2.12 mg/dL) was observed. The safety profile was favorable: 3 patients (6.5%) had adverse events (two with mild gastrointestinal symptoms and one discontinuation due to intolerance, reported to the national system). No serious or fatal events occurred.

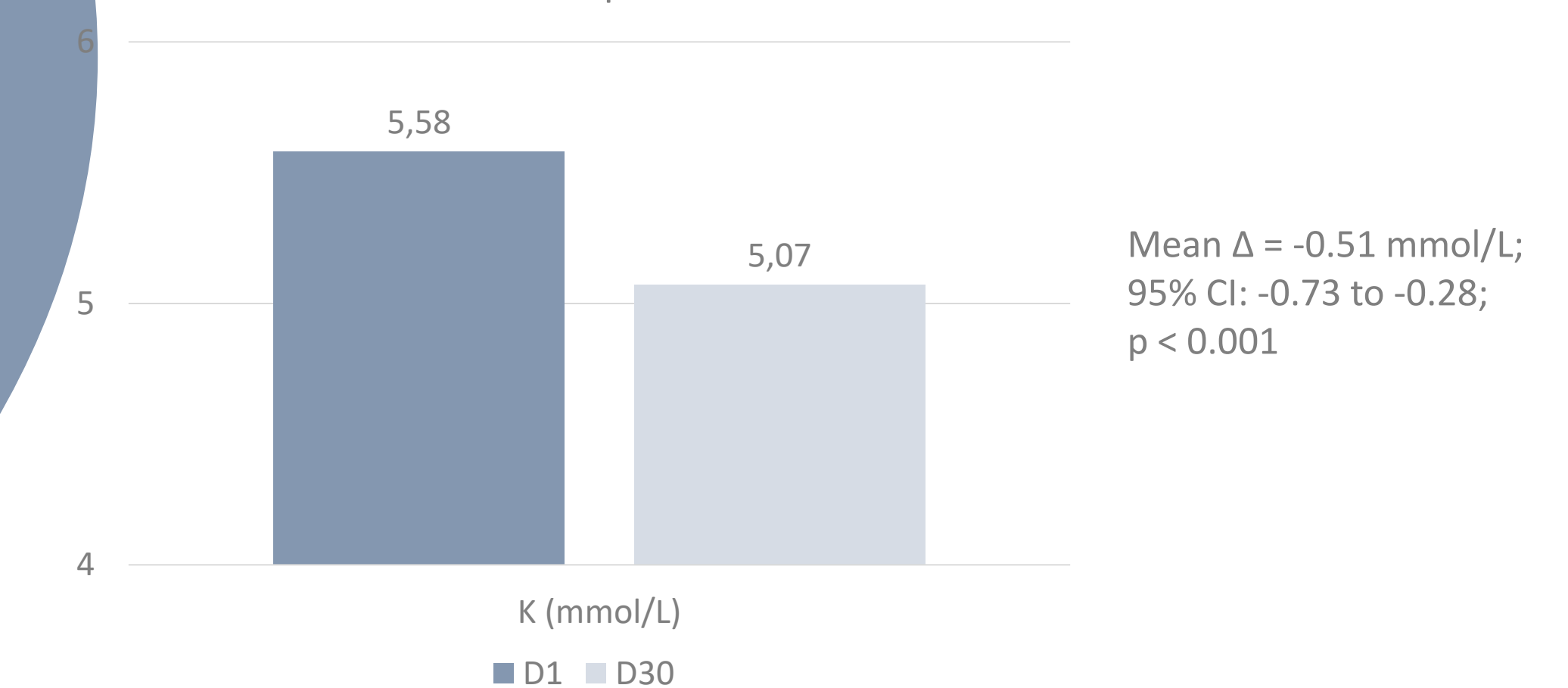
Conclusion and relevance

Lokelma® was safe and effective for hyperkalemia management in HF patients, with no renal toxicity or significant impact on magnesium homeostasis. Its low adverse event rate supports tolerability. Long-term data will clarify the clinical impact of RAASi titration and maintenance of foundational HF treatment.

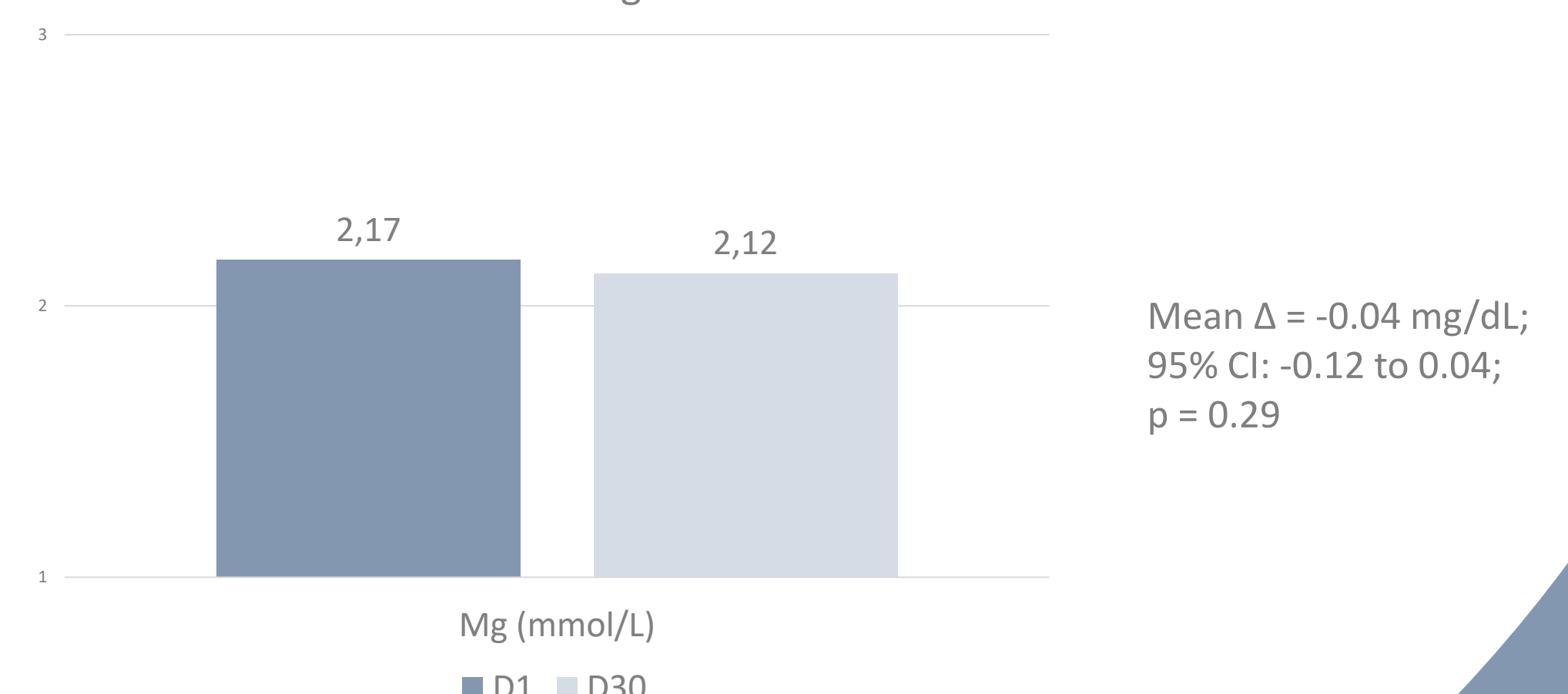


Mean age: 74.2 years

Serum mean potassium



Serum mean magnesium



Hypomagnesemia (<1.7 mg/dL) occurred in 11.6% of patients (two cases required supplementation).

