Clinical Audit

Real-world utilization and clinical impact of finerenone in chronic kidney disease with cardiovascular disease: A 1-year multicentre audit across 12 units of Kauvery hospitals

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Abstract

Background: Finerenone, a novel nonsteroidal mineralocorticoid receptor antagonist, has emerged as an effective therapy for patients with chronic kidney disease (CKD) and coexisting cardiovascular disease (CVD). This 1-year retrospective multicentre audit evaluated real-world utilization across 12 units of Kauvery Hospitals. A total of 169 patients received 2,810 doses, predominantly 10 mg (93%). The majority of patients had coronary artery disease (41%) and combined CAD-CKD (30%), closely reflecting populations included in major clinical trials. The drug was well tolerated, with no major safety concerns observed. Despite robust clinical evidence, only 6 of 12 units actively utilized finerenone, indicating significant underuse. Additionally, advanced cardio renal therapies—including finerenone, SGLT2 inhibitors, and GLP-1 receptor agonists—were not routinely used in heart failure management, including heart failure with preserved ejection fraction (HFpEF). Expanding the adoption of finerenone in eligible patients may significantly improve cardio renal outcomes and bridge the gap between evidence and real-world practice

Keywords: Finerenone; Chronic Kidney Disease; Coronary Artery Disease; Cardio renal Syndrome; Real-World Evidence; Pharmacotherapy

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1. Introduction

Chronic kidney disease (CKD) is a major global health burden and is strongly associated with cardiovascular disease (CVD), contributing significantly to morbidity and mortality. Patients with CKD are at heightened risk of heart failure, accelerated atherosclerosis, and progression to end-stage renal disease. Notably, heart failure with preserved ejection fraction (HFpEF) is increasingly recognized in this population, representing a complex and heterogeneous syndrome with limited effective therapeutic options.

Aberrant activation of the mineralocorticoid receptor (MR) plays a central role in the pathophysiology of both CKD and HFpEF, driving inflammation, fibrosis, and adverse cardiovascular remodeling. Finerenone, a selective nonsteroidal mineralocorticoid receptor antagonist, offers enhanced receptor specificity along with potent anti-inflammatory

and anti-fibrotic effects, translating into improved cardio renal protection and a more favorable safety profile compared to traditional steroidal MRAs such as spironolactone.

Robust evidence from large randomized clinical trials has established the efficacy of finerenone in reducing kidney disease progression and cardiovascular events, with emerging data supporting its role in HFpEF and broader cardio renal syndromes. Despite this, real-world adoption remains suboptimal. In routine clinical practice, including our institutional setting, advanced therapies such as finerenone, SGLT2 inhibitors, and GLP-1 receptor agonists are not yet consistently integrated into heart failure management. This gap between evidence and implementation underscores the need for real-world evaluation. The present study aims to assess utilization patterns, patient characteristics, and implementation gaps of finerenone across multiple tertiary care units, with a focus on its role in contemporary cardio renal management.

2. Methods

Study Design

A retrospective observational audit was conducted over 12 months across 12 units of Kauvery Hospitals.

Data Collection

Data from 169 patients receiving finerenone were analyzed, including:

- Demographics (age, gender)
- Clinical diagnoses
- Presenting complaints
- Dose (10 mg or 20 mg)
- Care setting (outpatient, inpatient, walk-in)
- Unit-wise utilization

Statistical Analysis

Descriptive statistics were used. Results are presented as counts and percentages. Graphs were generated using Microsoft Excel.

3. Results

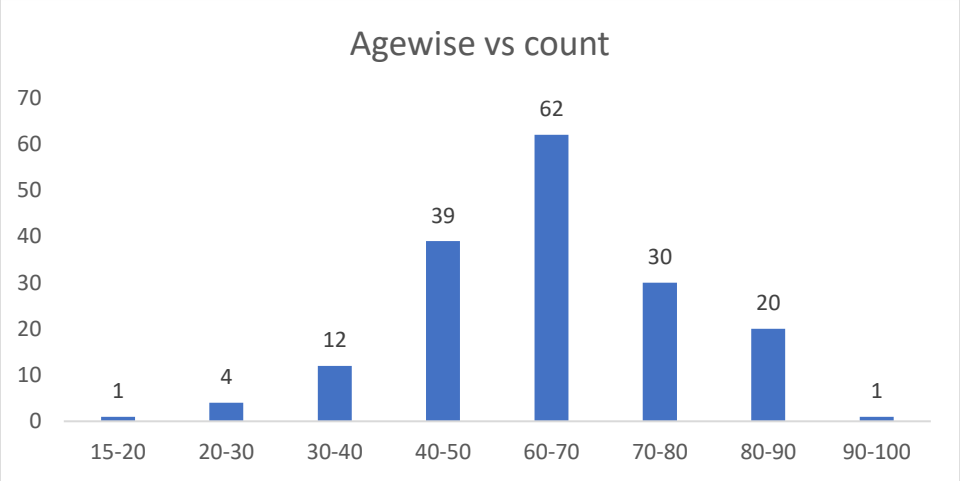

Fig (1): Age wise Distribution

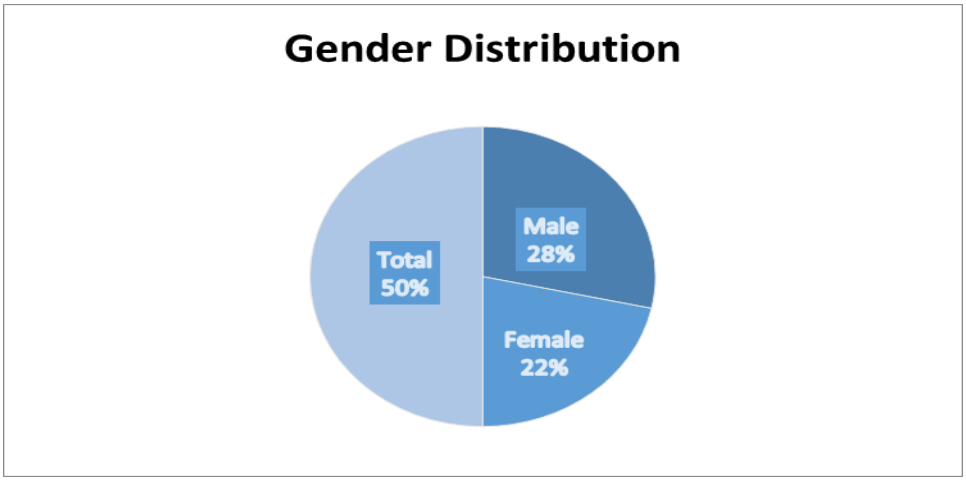

Fig (2): Gender wise Distribution

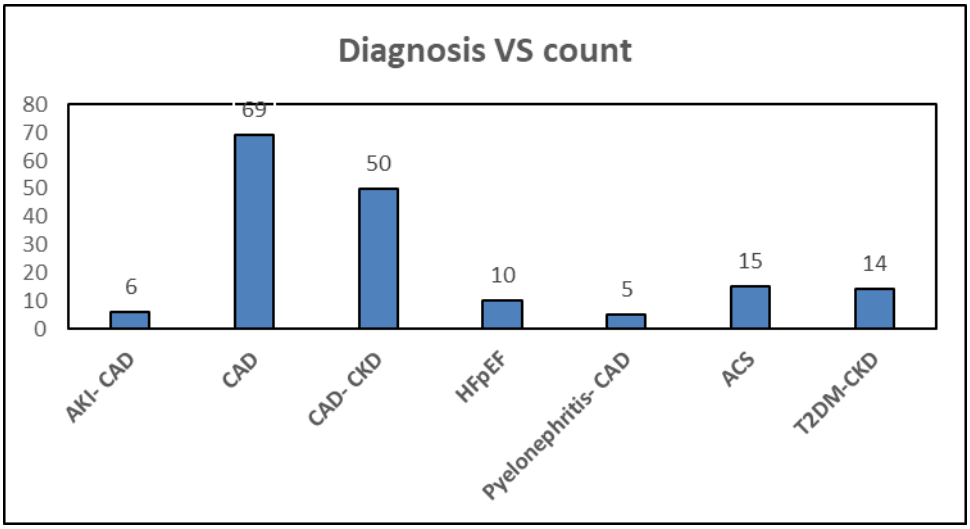

Fig (3): Diagnosis distribution

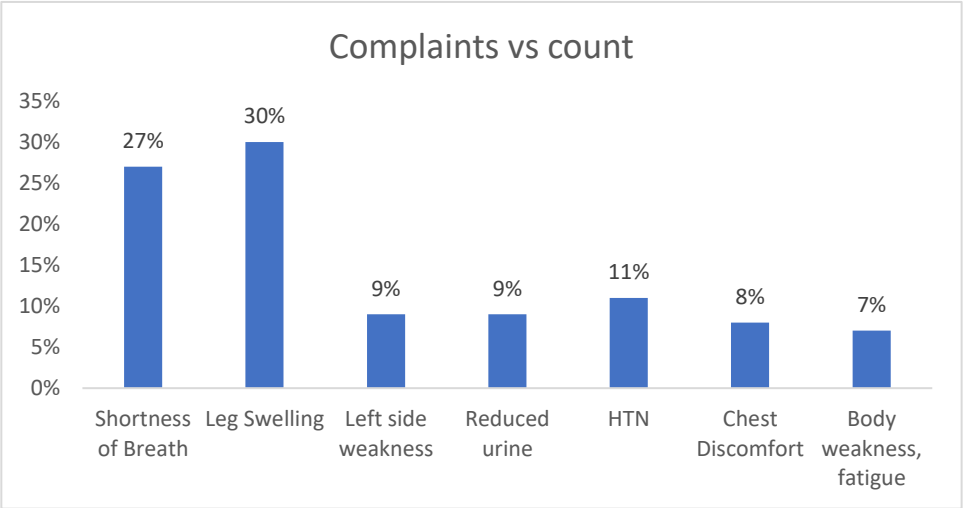

Fig (4): Chief Complaints

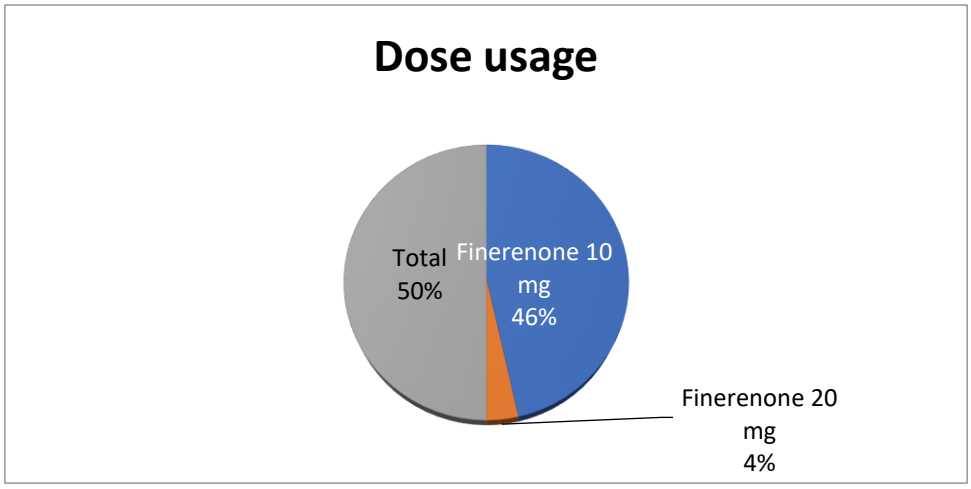

Fig (5): Dose utilization

Care Setting

- Outpatient: 73%
- Inpatient/Walk-in: 27%

Unit Utilization: Active units: 6 out of 12 (50%)

4. Clinical Evidence

Finerenone is supported by robust clinical trial data:

FIDELIO-DKD	18% reduction in kidney disease progression
FIGARO-DKD	13% reduction in cardiovascular events
FINEARTS-HF	Improved heart failure outcomes
FIND-CKD (2026)	Demonstrated benefits in non-diabetic CKD

These findings strongly align with the patient population observed in this audit.

- Early reduction in heart failure hospitalizations (within ~1 month)
- Cardiovascular benefits precede renal benefits
- Long-term therapy leads to greater cumulative kidney protection

Emerging HFpEF-focused evidence (Wang et al., 2025) shows:

- Strong mechanistic rationale via MR blockade
- Improvement in fibrosis, inflammation, and myocardial remodelling
- Potential synergy with SGLT2 inhibitors and GLP-1 receptor agonists
- Ongoing trials: REDEFINE-HF, CONFIRMATION-HF, FINALITY-HF

5. Benefits of Finerenone

- Slows progression of CKD
- Reduces cardiovascular morbidity
- Lowers risk of heart failure hospitalization
- Provides anti-inflammatory and anti-fibrotic effects
- Demonstrates a favourable safety profile with potassium monitoring
- Complements standard therapies (RAAS inhibitors, SGLT2 inhibitors)

6. Discussion

This multicentre audit demonstrates that Finerenone is being appropriately prescribed in high-risk CKD and CAD populations, with real-world usage closely aligning with evidence from major clinical trials. The predominance of 10 mg dosing reflects cautious initiation, particularly in patients with impaired renal function, while the high proportion of outpatient use underscores its role as a long-term disease-modifying therapy.

Importantly, no major safety concerns were observed, reinforcing the favorable tolerability profile of finerenone in routine clinical practice. These findings support its safe integration into standard care with appropriate monitoring. However, a critical finding of this study is the significant underutilization of finerenone, with only 50% of hospital units actively prescribed the drug. Given that a substantial proportion of patients meet eligibility criteria, this represents a major gap between evidence and implementation. The high prevalence of symptoms such as edema and dyspnea further reflects a considerable cardio renal burden, highlighting missed opportunities for early therapeutic intervention.

A notable insight is the emerging treatment gap in heart failure, particularly heart failure with preserved ejection fraction (HFpEF). Despite growing evidence supporting the role of mineralocorticoid receptor blockade in HFpEF, finerenone is not routinely used in heart failure management in current practice. Similarly, other evidence-based therapies such as SGLT2 inhibitors and GLP-1 receptor agonists remain underutilized. This is

clinically significant, as MR over activation plays a central role in HFpEF pathophysiology, and finerenone has demonstrated early reduction in heart failure hospitalizations, emphasizing the importance of timely initiation.

The observed underutilization likely reflects a combination of factors, including limited clinician awareness, therapeutic inertia, and the absence of standardized treatment protocols. Addressing these barriers through structured clinical pathways, targeted education, and multidisciplinary approaches—such as pharmacist-led monitoring—could significantly enhance adoption and optimize patient outcomes. Overall, bridging this evidence-to-practice gap is essential to fully realize the cardio renal benefits of finerenone in high-risk patient populations.

7. Limitations

This retrospective audit within a single hospital network may limit generalizability but reflects real-world practice. The absence of long-term outcomes and comparator data highlights the need for future prospective studies and standardized use of Finerenone.

8. Conclusion

Finerenone is a safe, effective, and evidence-based therapy for patients with chronic kidney disease and cardiovascular disease, with emerging benefits in heart failure with preserved ejection fraction (HFpEF). This real-world audit demonstrates appropriate but limited utilization, despite strong alignment with clinical trial evidence. The lack of routine use in heart failure management represents a significantly missed opportunity to improve outcomes in high-risk cardio renal populations. Expanding adoption—particularly in patients with CKD, CVD, and HFpEF—has the potential to substantially reduce disease progression, hospitalizations, and mortality.

Bridging this evidence-to-practice gap through improved awareness, standardized protocols, and multidisciplinary implementation strategies is essential to translate clinical benefits into meaningful real-world patient outcomes.

References

[1] Bakris GL, Agarwal R, Anker SD, et al. Finerenone in patients with chronic kidney disease and type 2 diabetes (FIDELIO-DKD). N Engl J Med. 2020;383:2219–2229. https://doi.org/10.1056/NEJMoa2025845

[2] Pitt B, Filippatos G, Agarwal R, et al. Cardiovascular events with finerenone in kidney disease and type 2 diabetes (FIGARO-DKD). N Engl J Med. 2021;385:2252–2263. https://doi.org/10.1056/NEJMoa2110956

[3] Solomon SD, McMurray JJV, Vaduganathan M, et al. Finerenone in heart failure with mildly reduced or preserved ejection fraction (FINEARTS-HF). N Engl J Med. 2024;391:1475–1485. https://doi.org/10.1056/NEJMoa2407107

[4] FIND-CKD Trial. ClinicalTrials.gov Identifier: NCT05047263

[5] Tian-Yu Wang, et al. Recent advances in mineralocorticoid receptor antagonists for HFpEF. Front Pharmacol. 2025. https://doi.org/10.3389/fphar.2025.1725782

[6] John W. Ostrominski, et al. Timing of cardiovascular and kidney benefits with finerenone. J Am Coll Cardiol. 2025. https://doi.org/10.1016/j.jacc.2025.10.060