

Undiagnosed Chronic Kidney Disease, Outcomes, and Finerenone in Heart Failure with Preserved Ejection Fraction

Background

- Chronic kidney disease (CKD) impacts nearly 800 million persons globally and is a leading cause of death and disability.
- However, CKD is substantially underdiagnosed, and uncertainty around the yield of CKD screening and the prognostic importance of undiagnosed CKD – which may be perceived to be low-risk – may contribute to these gaps

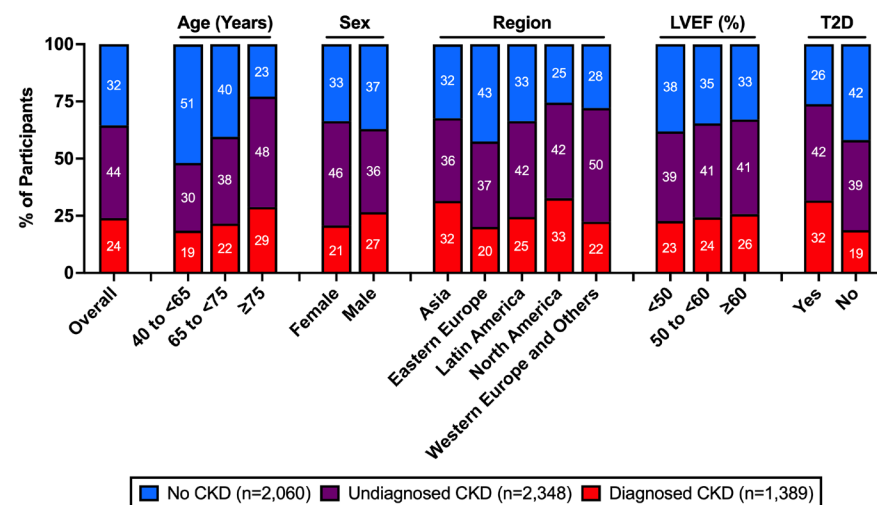
Study Aims

- In this FINEARTS-HF analysis, we examined:
 - Prevalence of undiagnosed CKD
 - Association between undiagnosed CKD and adverse cardiovascular outcomes
 - Treatment effects of finerenone, by baseline CKD status

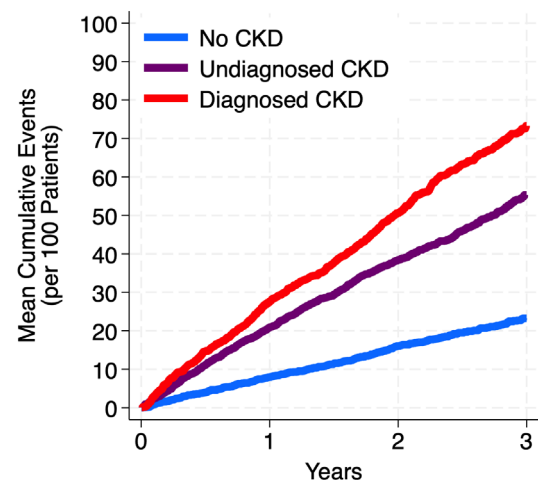
Methods

- FINEARTS-HF was a global, randomized trial that evaluated the efficacy of finerenone vs. placebo in persons with symptomatic HFmrEF/HFpEF
- Participants with available eGFR and UACR measurements at baseline were included (97%)
- Participants were categorized according to baseline CKD status:
 - Diagnosed CKD:** Investigator-reported history of CKD, chronic glomerulonephritis, or any nephropathy
 - Undiagnosed CKD:** eGFR <60 mL/min/1.73 m² (at screening and randomization) and/or UACR ≥30 mg/g, without CKD diagnosis
 - No CKD**
- Outcomes and treatment effects of finerenone were evaluated according to baseline CKD status

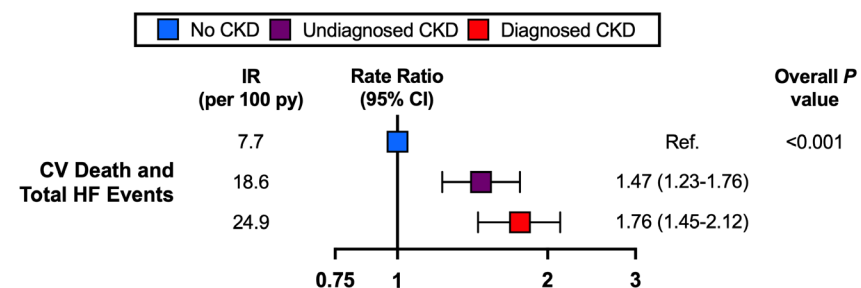
Prevalence of Diagnosed and Undiagnosed CKD, Overall and in Key Subgroups



Cumulative Incidence of CV Death and Total HF Events, by Baseline CKD Status

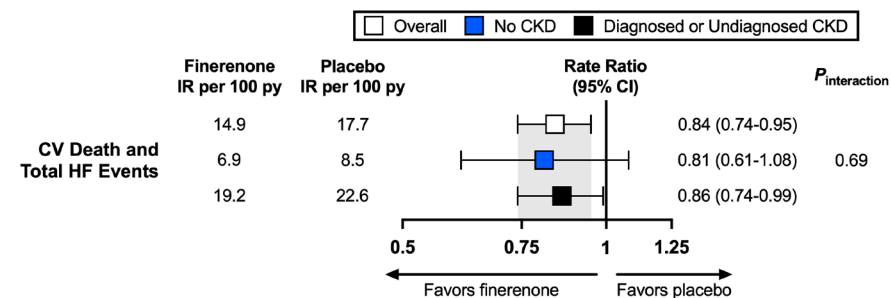


CV Death and Total HF Events, by Baseline CKD Status



Rate ratios (and 95% CI) estimated through a semiparametric proportional rates method (LWYY) adjusted for age, sex, geographic region, left ventricular ejection fraction, randomized treatment, smoking status, diabetes status, history of atherosclerotic cardiovascular disease, history of atrial fibrillation, history of chronic obstructive pulmonary disease, New York Heart Association functional class, body mass index, systolic blood pressure, glycated hemoglobin, log-transformed N-terminal pro-hormone of B-type natriuretic peptide, and baseline sodium-glucose co-transporter 2 inhibitor use. Abbreviations: CKD = chronic kidney disease; CV = cardiovascular; HF = heart failure hospitalization

Treatment Effects of Finerenone vs. Placebo on CV Death and Total HF Events, by CKD Status



Rate ratios (and 95% CI) estimated through a semiparametric proportional rates method (LWYY) stratified by geographic region and baseline left ventricular ejection fraction (<60%; ≥60%). Abbreviations: CKD = chronic kidney disease; CV = cardiovascular; HF = heart failure hospitalization

Key Findings

In this analysis of the global FINEARTS-HF trial, undiagnosed CKD was observed in more than half of participants without diagnosed CKD

After multivariable adjustment, older age, female sex, and a history of diabetes were associated with a higher prevalence of undiagnosed CKD

Undiagnosed CKD was associated with a markedly higher rate of adverse cardiovascular outcomes compared with no CKD

Relative treatment benefits of finerenone were consistent irrespective of baseline CKD status; absolute benefits appeared greater among participants with CKD

Key limitations include 1) investigator-reported history of CKD; 2) use of single-timepoint UACR measurements; 3) and potential CKD underestimation due to the kidney-related FINEARTS-HF eligibility criteria

Funding

FINEARTS-HF was sponsored by Bayer AG.

These findings amplify support for systematic CKD screening efforts inclusive of eGFR and UACR in HF.